

International Assistance: Sharing the Load or Muddying the

Waters?

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ABSTRACT

Despite a significant decline in major ship-sourced oil spills worldwide, these incidents continue to pose significant challenges for affected countries, impacting livelihoods and coastal ecosystems. Effective spill response is crucial to mitigate environmental and economic impacts, but this can be difficult to achieve during large-scale incidents, particularly where there is limited preparedness. International collaboration and assistance from governments and intergovernmental organisations can be critical to support response efforts, particularly in the early stages.

This paper draws upon recent case studies, including the SOLOMON TRADER in the Solomon Islands in 2019, the WAKASHIO spill in Mauritius (2020), X-PRESS PEARL in Sri Lanka (2021), the Callao spill in Peru (2022), and the PRINCESS EMPRESS incident in the Philippines (2023), to analyse the benefits and challenges of government-to-government support in large-scale ship-sourced oil spills. It highlights the importance of situational awareness and effective communication from the outset to facilitate strategic support and proposes a common approach to the coordination of assistance to increase efficiency and reduce duplication of effort and resources.



This paper also tackles the challenge of aligning guidance from multiple sources of expertise to reduce the risk of conflicting technical advice and resulting confusion. By providing insights from a diverse range of interviewed stakeholders, along with the ITOPF response team, this paper aims to contribute to a better understanding of the wideranging benefits and common challenges of international collaboration in spill response and provides recommendations for enhancing the effectiveness of future response efforts.

INTRODUCTION

Marine pollution incidents pose a significant threat to the environment and economies of coastal nations, particularly in situations where spill preparedness and response systems are underdeveloped. In response to such events, international assistance plays a pivotal role in mitigating the far-reaching consequences of ship-sourced pollution when the affected country may require external resources to augment national response capacity. The spectrum of international assistance encompasses diverse activities, from resource sharing and expertise exchange to information dissemination and financial assistance. While a broader context of assistance includes prevention and preparedness measures such as setting standards for contingency plans, training exercises, and waste disposal, this paper focuses on the international assistance that unfolds during and immediately following a spill.

Large-scale incidents such as the PRESTIGE spill in Spain in 2002 and the DEEPWATER HORIZON (DWH) [Macondo] incident in the USA in 2010 emphasised the crucial role of international stakeholders in generously offering assistance to affected countries. This



aid addressed gaps in equipment, resources, and technical expertise. However, these events also underscored the necessity for guidelines and standardised procedures when requesting and providing technical assistance. The DWH incident in particular prompted the International Maritime Organization (IMO) to develop the **Guidelines on International** Offers of Assistance in Response to a Marine Oil Pollution Incident in 2014, aiming to enhance assistance and coordination among countries in responding to pollution incidents. Despite these efforts, recent incidents such as the SOLOMON TRADER in the Solomon Islands in 2019, the WAKASHIO spill in Mauritius in 2020, the fire and subsequent spill involving the containership X-PRESS PEARL in Sri Lanka in 2021, the Callao spill in Peru in 2022, and the PRINCESS EMPRESS spill in the Philippines in 2023, highlight challenges in utilising international assistance to its maximum effect. Anecdotal evidence from multiple organisations involved in these responses, including ITOPF, suggests that a lack of coordination persists, with communication identified as a key area for improvement. However, due to the multitude of participating stakeholders, obtaining a comprehensive overview of areas needing further attention remains challenging. A series of complexities have already been identified in the existing literature. ITOPF explored the European context during IOSC in 1991 and Interspill in 2004 (Nichols & Moller, 1991; O'Brien et al., 2004). The 1991 paper detailed successful cases of both ad hoc (ARAGON, 1989, Portugal) and formal (VOLGONEFT 263, 1990, Sweden) international assistance. The former's success lay in a combination of technical expertise, notably the European Economic Community Task Force, and funding from the vessel's P&I insurer. In contrast, the latter exemplified the efficacy of regular cooperation outlined in the Helsinki Convention, incorporating peacetime exercises, information



sharing, and provisions for emergency assistance. In 2004, O'Brien *et al.* addressed challenges in international assistance efforts in Europe despite robust spill response capabilities in the region. The paper emphasised that resource availability and mobilisation alone do not guarantee a successful international response. Recognising varied strategies for establishing response systems across Europe alongside the region's cultural and linguistic diversity, the paper highlights the significance of collaborative efforts at both sub-regional and regional levels.

The challenges of cross-border logistics were emphasised in 2007 by the Association of Oil, Gas and Renewable Energy Companies of Latin America and the Caribbean (ARPEL) and later in 2011 at IOSC by Oil Spill Response Ltd. (OSRL) (ARPEL, 2007; Njoto, 2011). ARPEL noted that frequent pre-spill engagement and similar legal systems do not necessarily result in effective cooperation between nations. Both ARPEL and OSRL advocated for cooperation agreements to be highly detailed and consider customs, immigration, insurance, and security, necessitating the development of pre-established forms and special emergency procedures. Additionally, ARPEL stressed the significance of addressing language barriers to facilitate effective communication, highlighting the importance of interpretation services.

The United States Coast Guard (USCG) presented a paper at Interspill in 2012 and a joint paper with ITOPF and OSRL at IOSC in 2014, both focusing on the need for guidelines for managing international assistance during major pollution incidents (Pond & Parker, 2012; Parker et al., 2014). The papers identified the main challenges, such as managing the logistics of resource requests, and funding, as demonstrated during the DWH incident.



Later, at IOSC in 2017, the Global Initiative for West, Central and Southern Africa (GI WACAF) and the IMO addressed the regional challenges encountered in West, Central, and Southern Africa to implement the existing cooperation frameworks (Chazot & Rhodes, 2017). The paper discussed how heterogeneity in the levels of preparedness between countries can lead to the perception of cooperation as one-sided rather than mutually beneficial. Similarly, the multiplicity of stakeholders and cooperation initiatives in a single region was identified as a significant obstacle, noting that agreements may not always align or be compatible with each other.

However, to date, there is limited literature amalgamating recent perspectives and experiences across diverse stakeholders, spanning both those extending and seeking assistance. This paper attempts to address the gap by consolidating insights from reputable organisations actively engaged in providing assistance, including the United States National Oceanic and Atmospheric Administration (NOAA), the IMO, and Cedre, along with ITOPF's 55 years of first-hand experience of over 840 oil spills in 100 countries. Additionally, and critically, we incorporate perspectives from entities that have received international assistance in recent incidents. Our analysis explores the tangible advantages derived from collaborative endeavours while simultaneously examining the challenges encountered by those seeking and offering assistance.

METHODS

The insights presented in this paper are derived from extensive experience in spill response, primarily taking a deep dive into ITOPF's first-hand experience of major spills that involved international support, including SOLOMON TRADER (Solomon Islands,



2019), WAKASHIO (Mauritius, 2020), NEW DIAMOND (Sri Lanka, 2020), X-PRESS PEARL (Sri Lanka, 2021), Callao Oil Spill (Peru, 2022), and PRINCESS EMPRESS (Philippines, 2023).

Complementing these insights, opinions were sought from key international organisations regularly involved in providing assistance. A standardised questionnaire was utilised and a series of interviews were held to garner diverse perspectives on the perceived benefits and challenges of existing international assistance mechanisms. Valuable input was obtained from the Australian Maritime Safety Agency (AMSA), Cedre, the UK Centre for Environment, Fisheries and Aquaculture Science (Cefas), the IMO, NOAA and Research Planning Inc. (RPI).

Additionally, the study aims to comprehend the challenges faced by countries receiving international assistance. A separate standardised questionnaire was developed for this purpose and one receiving party agreed to participate in the study with feedback provided by Captain Xerxes Fernandez, Deputy Chief of Coast Guard Staff for Marine Environmental Protection (MEP) of the Philippine Coast Guard (PCG).

Our aspiration is that this paper stimulates a broader engagement from receiving countries, fostering discussions on the intricacies of international assistance, with a means to improving the efficacy of the process.

INTERNATIONAL ASSISTANCE: CURRENT LANDSCAPE

The current landscape is significantly influenced by the IMO *Guidelines on International*Offers of Assistance. These guidelines function as a versatile framework for coordinating and managing assistance requests and offers. They emphasise the critical importance of



diplomatic channels for effective communication and highlight the indispensable role played by technical specialists from both the offering and receiving sides. This dual emphasis aims to ensure that offers are not only relevant and specific but also timely, addressing the dynamic challenges inherent in such incidents. Similarly, situational awareness is identified as central to the effectiveness of international assistance so that the parties offering support can effectively tailor it to the needs of the response. The guidelines stress the importance of the in-country lead authority reviewing and evaluating offers of assistance before assets are deployed from overseas. This approach aims to reduce the risk of unsuitable or duplicated resources arriving in the affected country, and mitigates logistical challenges. Furthermore, the guidelines contribute to clarity and consistency by providing a common lexicon for equipment and personnel, supported by standard forms for requesting, offering, and accepting assistance. Hence, the guidelines provide a framework for international offers of assistance. However, their successful implementation relies upon uniform awareness and acceptance of this framework. The level of preparedness at the national level, and extent of cooperation at the regional level will also have an important role. Nations with less well developed spill response systems are among the most likely to seek international assistance when faced with a major spill. However, such nations are also among the least likely to have detailed awareness of international guidelines and the capability to adopt the recommended protocols due to the requirement for significant pre-spill planning and a proficient pool of in-country technical experts. At the regional level, bi/multilateral agreements are fundamental in promoting trust and cooperation, and for tailoring international assistance mechanisms to specific geographical scopes. Nevertheless,



there has been variable progress and success in developing, adopting, and implementing regional frameworks due to geographical, cultural, socio-economic, and political diversity between regions.

Noteworthy examples of regional agreements include the Bonn Agreement in the North Sea, the Anglo-French joint contingency plan for the English Channel (Mancheplan), and the Helsinki Convention in the Baltic Sea, all of which have proven effective in their respective regions. For instance, the Mancheplan allowed for a coordinated joint response to incidents such as the TRICOLOR in 2002 and MSC NAPOLI in 2007, and the frequent aerial surveillance flights mandated under the Bonn Agreement foster trust-building and effective communication outside of active spill response. In line with this, the French state-approved research, response and training organisation, Cedre, acknowledges that its role as an assisting agency at the European level is contingent upon regular training exercises. These drills allow Cedre to fine-tune its systems and procedures, ensuring excellent reactivity and reinforcing the effectiveness of its response actions when an incident occurs.

Some of these regional agreements have resulted in context-specific guidelines for international assistance, bringing cooperation a step closer to a successful implementation. This is the case of the <u>Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic</u> (MOSPA agreement) and the <u>Mediterranean Guide on Cooperation and Mutual Assistance in Responding to Marine Pollution Incidents</u>. Both documents provide the region-specific legal and institutional frameworks whilst aligning with the IMO guidelines by emphasising crucial aspects of effective international cooperation. These include the provision of standard forms, the

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information portals and appointed teams, and the need to update requests as

importance of specificity and clarity in requests, situational awareness through

operational needs change. Additionally, the guidelines recommend establishing

dedicated working groups to coordinate offers of assistance, including technical experts

in the assessment of offers, and designating liaison officers to connect offering and

requesting parties. Language barriers and the availability of translation services are

addressed in the MOSPA agreement, emphasising the importance of clear

communication during international assistance. All these measures, combined with joint

exercises and training, aim at ensuring effective coordination and integration of

resources into the response operations.

From our perspective, three overarching, interconnected elements stand out from these

guidelines: situational awareness, the quality of requests, and communication. Early and

continuous establishment of situational awareness is crucial, ensuring clear

understanding of technical needs and facilitating the timely identification of necessary

resources. This, in turn, contributes to the formulation of high-quality requests that

precisely articulate the type of resources required and the reasons behind them,

accurately reflecting the evolving operations on-site. Furthermore, these requests should

follow appropriate communication channels to involve relevant diplomatic and technical

personnel, ensuring proper acknowledgment of communications. Similarly, all offering

countries or parties should be apprised of the requesting country's requests to other

parties and the offerings made by these parties.

UNLOCKING SUCCESS: BENEFITS OF INTERNATIONAL ASSISTANCE

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International assistance provides crucial support to affected countries during marine pollution incidents by offering access to additional resources, such as specialised equipment, personnel, and technologies, which may be lacking domestically. There was a general agreement among interviewees that this augmentation of resources is vital for mounting effective responses to large-scale pollution incidents. As stated by the IMO, collaboration with international experts fosters the exchange of technical expertise and best practices, thereby enriching the affected country's knowledge and capacity to navigate complex pollution incidents, contributing to long-term preparedness.

In addition to resource and knowledge enhancement, international assistance can facilitate information sharing and the establishment of relationships with stakeholders capable of offering post-spill support, a view shared by Cefas and the IMO. This collaborative approach not only addresses immediate challenges but also contributes to building the affected country's capacity for response to future incidents, including development of effective response plans, training of local responders, and overall enhancement of preparedness. Notably, collaborative responses to pollution incidents play a significant role in fostering mutual trust and strengthening diplomatic ties among nations, underlining the importance of international cooperation in addressing the multifaceted challenges posed by marine pollution. International assistance can also serve as a catalyst for future bilateral and multilateral agreements, as highlighted by the IMO.

There was a consensus among interviewees that nations with limited preparedness and resources and/or lacking regional agreements – or where these agreements are not effective or active – can particularly benefit from international assistance. This was



emphasised by the IMO and NOAA, who noted that their neutral political standing is received positively by authorities in receiving countries, particularly when experience of marine pollution incidents is limited.

A series of case studies serves to exemplify the benefits described above, such as the **SOLOMON TRADER** spill in the Solomon Islands in 2019. The challenges posed by the incident's remote location highlighted the substantial gains achievable through international support, especially considering the constraints in availability of vessels, equipment, consumables, personnel, and technology. In response to the incident, aid was requested by the Solomon Islands authorities through the Pacific Marine Pollution Preparedness and Response Regional Activity Network (PACPLAN). Support from the Australian Maritime Safety Authority (AMSA) and Maritime New Zealand (MNZ) was instrumental in to assist a very remote location in a country with limited preparedness and resources. The aid encompassed technical support and equipment from an operational base in the capital, Honiara. AMSA offered advice on response techniques and salvage operations, providing reassurance to the government of the Solomon Islands that actions were appropriate and commensurate with the scale of the incident. This reassurance was crucial given the authorities' limited awareness of spill response issues, response strategies, and a lack of large incident experience. AMSA's on-site presence for approximately two months provided consistent support to the authorities, and facilitated technical exchanges between ITOPF, who were present on-site at Rennell Island, and AMSA, who were situated alongside the government authorities in Honiara.

Similarly, international assistance provided invaluable benefits during the **WAKASHIO** spill in Mauritius in 2020, where the Mauritian government sought support through



diplomatic channels. This collaborative effort involved various entities, notably the Indian Coast Guard (ICG), which was already present in the country due to officers seconded to the National Coast Guard (NCG) of Mauritius. The ICG contributed to day-to-day coordination and responded with a vessel and offshore response equipment. The United Nations (UN) played a crucial role, with agencies like the IMO, UN Development programme (UNDP), and the UN Office for the Coordination of Humanitarian Affairs (UNOCHA) providing diverse inputs. The alignment of advice from organisations like the IMO and ITOPF on oil spill response contributed to the Mauritian government's confidence in the response plan, thus fostering trust building.

Concerning offering nations, UK Aid, working through Cefas, actively supported the Mauritian government in developing an integrated post-spill environmental monitoring program. Collaboration between Cefas and ITOPF on site demonstrated the advantage of standardised guidelines for monitoring, ensuring consistent recommendations. France responded with assets based at nearby Reunion and deployed experts from Cedre and Centre d'expertises pratiques antipollution (CEPPOL). CEPPOL advised on salvage operations and at-sea response activities, whereas Cedre advised on clean-up plans and joined site sign-off surveys, aligning their recommendations with ITOPF's on residual oiling in sensitive habitats. Japan also contributed significantly, with Japan Coast Guard (JCG) offering advice and sharing satellite imagery, and the Japan International Cooperation Agency (JICA) providing specialists in mangrove and coral reef ecology. JICA's surveys, discussions with ITOPF, and input on adaptation of clean-up techniques in the mangroves demonstrated the collaborative effort's multifaceted impact,



showcasing the comprehensive benefits of international assistance in addressing marine pollution incidents.

The benefits of international assistance were also evident during the **X-PRESS PEARL** incident in Sri Lanka in 2021, wherein the request for aid was initiated through diplomatic channels. Namely, the South Asian Cooperative Environment Programme (SACEP), complementing the agreement signed with India in 2018 for cooperation on oil spill response. Responding to the request, ICG played a role in fire-fighting efforts and conducted seabed surveys to identify sunken debris. Effective coordination between ICG and SMIT was evident, building on successful collaboration during the fire onboard the Very Large Crude Carrier **NEW DIAMOND** in 2020, where joint efforts prevented a major spill. This latter case serves as an excellent example of international assistance working effectively to mitigate the potential damage of what could have been a major incident involving up to 277,000 MT of crude oil.

In terms of assisting nations, the UK provided support through the Foreign and Commonwealth Development Office (FCDO). Similar to the WAKASHIO incident, Cefas was mobilised to site, benefiting from their previously established relations through the Blue Planet Fund. Cefas offered valuable advice on monitoring and provided analytical services through their laboratory. The engagement was further strengthened via the UK Maritime and Coastguard Agency (MCA) who liaised with SMIT to discuss potential resource contributions. ITOPF facilitated the connection between the MCA and SMIT, contributing to effective collaboration in addressing the incident. The IMO also organised a joint taskforce of UN Environment Programme (UNEP), Cedre, and the Italian institute ISPRA (Istituto Superiore per la Protezione e la Ricerca Ambientale) on site for two weeks.



In addition to the technical support provided on site, Cedre offered analytical capabilities through their laboratory in Brest.

International assistance also played a crucial role in enhancing the overall response to the Callao spill in 2022, an incident involving a refinery terminal managed by Repsol off the central coast of Peru. Assistance was particularly significant in this case, given Peru's lack of bi/multilateral agreements on oil pollution. The Peruvian government initiated the request for aid through diplomatic channels with the USA and through intergovernmental mechanisms involving the IMO and UNEP/OCHA Joint Environment Unit (JEU). The US expert team comprised personnel from NOAA, the USCG, and the US Agency for International Development (USAID). The IMO deployed one expert for a two week period, complementing the UNEP/OCHA expert team, which included members from Cedre (France), ISPRA (Italy), the Norwegian Coastal Administration (NCA), and Sociedad de Salvamento y Seguridad Marítima (SASEMAR, Spain). ITOPF remained on-site for over three months, serving as technical advisers to the Peruvian Navy. Coordinated technical advice from various experts helped instil confidence to both environmental and maritime authorities regarding the appropriateness of shoreline clean-up techniques and the overall strategy. Scepticism from local stakeholders regarding techniques such as surf washing gradually decreased with the continuous consensus and persuasion of technical specialists from different organisations. Similarly, collaborative efforts to establish clean-up endpoints involved contributions from USCG, NOAA, and ITOPF, along with international experts appointed by Repsol, including Owens Coastal Consultants (OCC) and OSRL. The Peruvian Coast Guard promoted coordination among technical specialists, facilitating joint aerial and shoreline surveys with ITOPF, NOAA, USCG, OSRL,



and the JEU expert team. This helped align situational awareness across a range of stakeholders, although there were occasional misalignments in risk perception posed by oil, especially linked to local environmental authorities.

During the **PRINCESS EMPRESS** incident in the Philippines in 2023, international assistance involved organisations from the US, France, Korea, and Japan, whose advice enhanced the overall response from the perspective of the receiving government agency, the Philippine Coast Guard (PCG). The US expert team, comprising personnel from NOAA, USCG, and the US Navy, played pivotal roles by offering valuable advice on the response strategy. NOAA conducted joint aerial and shoreline surveys in coordination with the PCG and ITOPF, and provided technical advice that aligned with ITOPF's. This alignment helped foster trust from the authorities towards international experts. NOAA extended their assistance to the Philippines Department of Health (DoH), providing guidance on appropriate Personal Protective Equipment (PPE) requirements for workers under challenging local conditions, with ambient temperatures exceeding 30°C. The USCG contributed significantly by providing guidance on clean-up techniques, including shoreline protection, and advising on the Incident Command System (ICS) setup at the PCG command centre. Additionally, the US Navy supported local authorities with technology, deploying an ROV to survey the sinking location for enhanced situational awareness. The US involvement went beyond technical expertise, with donations of PPE and sorbent materials. Moreover, the Japan Coast Guard (JCG) and Korea Coast Guard (KCG) were also present, conducting aerial overflights, shoreline surveys, and offering advice during their brief on-site attendance. Personnel from Cedre were also mobilised to site, and provided key advice on containment and recovery operations.



All six of these recent case studies illustrate how international assistance can, when well-coordinated, provide vital response assets and expertise to countries affected by major maritime incidents, and facilitate the overall response effort.

CONFRONTING OBSTACLES: CHALLENGES IN INTERNATIONAL ASSISTANCE

Despite clear benefits of international assistance during marine pollution incidents, particularly for nations with less well developed response systems, interviewees consistently identified significant challenges with the effective coordination of personnel and equipment, aligning with ITOPF's own experience. Notably, both the IMO and NOAA highlighted that their assistance has not consistently reached its maximum potential. In our view, the identified challenges can be categorised into four key themes: communications, situational awareness, receiving countries' expectations, and absence of pre-existing relationships.

Across all interviewed stakeholders, addressing communication challenges emerged as a priority, with a key focus on early dialogue to organise the deployment of resources and expertise. There is also a call to clarify the roles of embassies and consulates in major incidents, ideally utilising these diplomatic entities as facilitators for direct interaction between international experts and government authorities or organisations in need of assistance. By employing the strengths of embassies and consulates in opening communication channels, direct communication between experts and those on-site could be facilitated, enhancing situational awareness, and allowing for properly tailored advice. This approach not only ensures that governments seeking assistance receive advice directly from experts, but also bypasses diplomatic channels that may convey



incorrect information and introduce confusion. For instance, NOAA emphasised the challenges inherent in providing effective remote assistance, such as trajectory modelling, via diplomatic channels. Ambiguity often arises as to whether the support has effectively reached relevant local experts and seamlessly integrated into the overarching response strategy, an experience shared by ITOPF. As an assisting agency, NOAA notes that feedback following the provision of technical input via diplomatic channels is typically limited to a formal acknowledgment. Such frameworks inadequately facilitate nuanced expert-to-expert exchanges, thus hindering the efficacy of remote assistance. Similarly, all stakeholders questioned observed that the exchange of information among responders, experts, and authorities remains a complex puzzle. In the current paradigm, it is noted that offering parties often work in silos, unaware of the broader context and actions taken by others involved in the response efforts. This approach can have the unintended consequence of duplicated effort and reduced efficiency of technical support to government authorities. There is also an increased risk of disjointed and inconsistent advice from international experts resulting in confusion and delays to critical response decision-making.

For instance, conflicting advice was provided to the PCG by international teams regarding the efficacy of dispersant application and mechanical dispersion by 'prop washing' on the heavy fuel oil spilled from the PRINCESS EMPRESS. The PCG highlighted this inconsistency as a significant challenge during the response.

Where international advisers have coordinated with each other early in their involvement, conducting site surveys jointly, sharing information and discussing ideas and proposed recommendations openly, we have found this leads to greater consistency of technical



advice, with a consensus grounded in first-hand observations and experience. Such collaboration can benefit from existing relationships between attending experts, such as on the WAKASHIO.

Notably, coordination of advice often relies on the personal or professional relationships that exist among international experts offering the assistance rather than robust local efforts. Remotely this has typically occurred via personal communications, and on site was highlighted during incidents occurring during the Covid pandemic, like the WAKASHIO and X-PRESS PEARL, where multiple agencies were staying in the same quarantine hotels. The significance of such coordination issues is illustrated by the multiple guidelines on international assistance emphasising the importance of appointing liaison teams to foster communication and coordination among experts and the receiving government agencies. Such liaison teams can help to prevent duplication and misalignment in advice, and ensure that incoming experts are familiar with the local context, including operational, environmental, socio-economic, and cultural aspects. The importance of having liaison officers for this express purpose was highlighted by both Cedre and Cefas from recent experience.

However, it is acknowledged that this strategy faces challenges, most notably in the very countries that are most likely to request international assistance, since they often lack established liaison mechanisms. This challenge is evident in the case studies examined above, where the appointment of liaison teams was not observed. An exception to this trend was highlighted by NOAA during the response to the SOUTHERN STAR 7 spill in the Bangladeshi part of the Sundarbans mangrove forest in 2014. In this incident, a small tanker sank, spilling ~350 tonnes of furnace oil into the Shela River, Bengal Delta. The



Government of Bangladesh sought technical assistance from the UN through UNDP for spill response and impact assessment. Offering nations included France, the US, and the UK. NOAA noted that effective coordination occurred due to the presence of a designated person overseeing the entire operation, facilitating transparency and enabling a manageable focus on specific aspects of the mission with clear endpoints. The key factor identified in achieving transparency and coordination was the oversight and support provided by the UN, with a designated person empowered to make decisions regarding the entire program. Consequently, this incident stands out in NOAA's experience as the only international case where there was a clear and transparent view of resources provided by other countries or organisations. Similarly, the IMO stressed the challenge of understanding early contributions from other nations during the initial days or weeks of a spill, highlighting the importance of mitigating duplication of effort and resources. From a situational awareness perspective, the IMO, ITOPF, and NOAA concur that the initial assessment of a situation is frequently inaccurate. This divergence becomes apparent as requesting countries issue requests that may not precisely articulate the onsite resource needs, or lack the clarity and specificity required for targeted assistance. Offering agencies agree that requests for assistance are often extremely comprehensive, covering expertise, equipment, technology, and various other aspects. According to Cedre, requests have included carrying out pollution assessments, drawing up a list of technical recommendations, organising and monitoring clean-up operations, and integrating a crisis management structure. Requests may also cover assessments of the environmental, social, and economic damage caused by the pollution, with a view to obtaining compensation for the loss suffered at a later date. However, a lack of clarity on



whether requests genuinely need to be fulfilled, especially at a high-level (e.g., embassy), remains a challenge.

A lack of clarity on which resources are required has resulted in the provision of duplicative or mismatched equipment, for example large offshore inflatable boom and skimmers arriving in Mauritius during the response to the WAKASHIO, where oil was carried by prevailing wind and currents into a very shallow lagoon with strong tidal currents of up to six knots, preventing the meaningful deployment of such assets. Similarly in the PRINCESS EMPRESS, aid was offered prior to a technical request being made from the field resulting in multiple international agencies simultaneously offering technical support and providing sorbent materials. This created duplication in some areas and shortfalls in others.

Typically, offering agencies become involved only after their support has been requested, as is the case with AMSA, Cedre, the IMO, and NOAA. Alternately, some governments offer support following news of the declaration of a state of emergency. In both cases, an absence of detailed resource requirements to complement the existing response is often missing, leaving the offering parties with limited information with which to tailor their support. Even after expert teams arrive onsite, the exact requirements may not be immediately clear, presenting challenges to the coordination and provision of optimal assistance.

With regard to the timeframe for assistance, offering agencies generally expressed satisfaction with the typical duration of missions – averaging around two weeks – since their primary focus is usually on clean-up efforts and the development of an overall response strategy. However, a notable observation is that receiving countries often adopt



a longer-term perspective, expecting international experts to contribute to contingency planning or environmental damage assessment. The former may not address the spill-specific issues faced by the affected country, while the latter demands prolonged engagement and meticulous quality control in various aspects such as sampling, sample analysis, and interpretation of results.

Concerning deployment time, NOAA assesses that the time taken to have personnel deployed on-site is generally acceptable, albeit highlighting logistical challenges associated with international travel. Organisations offering assistance may encounter obstacles such as arranging vaccinations, visas, and accommodation, particularly when not pre-arranged. However, it is acknowledged that remote support tends to be consistently more timely due to its inherent flexibility and reduced reliance on logistical arrangements. On this subject, the IMO shared the view that there can be several factors contributing to potential delays in deployment, including the challenge of identifying a suitable expert at short notice, optimism bias, where governments may not realise the need for support, along with the inherent complexities of political decision-making. Finally, the absence of pre-existing relationships emerged as a significant challenge, since effective collaboration in international incidents relies on established connections, trust, and knowledge. In contrast to domestic spills, where the response may benefit from longstanding relationships, international incidents face a substantial trust hurdle due to the frequent lack of this foundational element. Further, a lack of pre-existing relationships may be problematic not only between a receiving country and the offering agencies, but also between the different supporting parties, especially if no common platform exists for discussing observations. This can exacerbate the problem of different



assisting organisations working in silos, thereby increasing the risk of duplicated effort and inconsistent or conflicting advice.

The absence of established relationships accentuates the importance of initiating a continuum of engagement between countries on the theme of international cooperation, despite its associated costs, as it is deemed essential for successful collaboration.

CONCLUSION: ENHANCING STRATEGIES FOR INTERNATIONAL ASSISTANCE

The challenges identified by ITOPF and stakeholder interviewees suggest that more effective international assistance during major spills requires improved coordination of offers and requests of assistance, greater integration of stakeholders overall, and more effective capacity building pre- and post-spill to develop trusting relationships and strengthen national preparedness in countries with limited experience of handling such incidents.

Possible solutions would ideally address additional issues emphasised by some interviewees. The IMO, for example, highlighted the loss of critical experience amongst the response community as a large pool of responders who gained experience during the relatively numerous large-scale ship-sourced spills that occurred between the 70's and early 2000's approach retirement. This demographic shift has also resulted in a smaller pool of expertise, making it more challenging to identify suitable individuals for deployment at short notice under international assistance mechanisms. Identifying experts presents varying challenges across regions, taking into account factors such as expertise and language skills; Latin America, for instance, is notable in this regard. Additionally, with statistics consistently indicating fewer marine pollution incidents,



opportunities for gaining experience are limited. This decline in incidents has led to the absence of a key forum for international preparedness discussions, as the former Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances (OPRC-HNS) Technical Group no longer exists. Meetings of this Technical Group were acknowledged by key international stakeholders as a valuable space for harmonising best practices and organically discussing lessons learned.

Harmonising best practices is one of the issues identified by NOAA, emphasising that advice remains beneficial as long as it does not contradict guidance from other experts. In instances of misalignment, determining which advice to follow can be challenging for the receiving country. The issue becomes particularly evident in cases like bioremediation, where divergent advice exists. When there is a lack of alignment, open discussions among experts may not contribute effectively to the decision-making process for authorities. Such discrepancies can also hinder trust-building efforts and create uncertainties in the response strategy.

Similarly, language barriers have been identified as posing challenges when working internationally, impacting the effectiveness of international teams to integrate into local operations. A notable issue is the lack of provided interpreters or translators. While the use of translators is effective, it can be costly, making it a scarcely employed approach during the response to spills. Notably, MOSPA and ARPEL guidelines are distinctive in addressing this challenge, in that they recommend the use of translators during missions, where possible.



All interviewed organisations agreed with the principle that a single coordinating mechanism for international support during spills would be beneficial. Initiatives to establish a uniform mechanism for coordinating international assistance have been pursued through existing guidelines. However, it is important to note that adherence to such guidelines demands substantial pre-spill planning, a requirement that might be lacking in countries with less developed response systems, thereby increasing their propensity to seek assistance.

It is noteworthy to observe that international assistance is seldom integrated into capacity-building programs. The absence of effective regional guidelines and support organisations, such as regional partners, often results in limited training in this particular aspect.

A potential solution lies in the establishment of a new forum for experts, fostering the exchange of experiences, key lessons learned, and recommendations from recent spills involving international assistance. This forum could serve as an opportunity for both receiving and assisting countries to conduct a 'hot wash' on the most recent incidents, providing valuable feedback from diverse perspectives. The aim would be to foster relationships and trust among key stakeholders, addressing a key challenge in effective communication, collaboration, and coordination: a lack of existing relationships and trust. For optimum effectiveness, such a forum should be multidisciplinary, multiagency, international, and neutral, recognising the significant diplomatic factor alongside the technical aspects in trust-building. Managing such a forum would be a challenging role, necessitating the involvement of more than one organisation due to the diverse processes involved and potential language barriers.



Stakeholder interviewees emphasise that the receiving country is best positioned to coordinate international assistance, preferably with backing from a dedicated organisation such as the proposed forum. In cases where the requesting country faces resources or expertise limitations, the engagement of an intergovernmental organisation, akin to the UN, is proposed as a viable alternative for effective coordination, particularly considering potential political complexities.

Such a forum would bring world experts together under a single umbrella, providing a bank of experts for deployment. Expertise would ideally expand beyond oil spills and encompass a broader spectrum, such as alternative fuel oils, lithium-ion battery incidents, plastics, and HNS.

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