THE IMPACT OF MEDIA ON SPILL RESPONSE EFFECTIVENESS

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ABSTRACT

Over recent years, there have been numerous studies and papers on media coverage and subsequent politics of oil spills. However, there has been limited focus on how media can impact the effectiveness of a spill response. Using ITOPF's case study database, spanning 50 years of incidents, it has been consistently observed that, regardless of the quality of the clean-up strategy put in place, the media may affect the response both positively and negatively on the effectiveness of the clean-up response. This paper presents a framework, supported by case studies, for assessing the media impact on three aspects of a response: (1) the strategy; (2) the logistics; and (3) the claims/ damage assessment.

The media's influence on response strategy is visible throughout the preparedness, clean-up, and post spill phases of the incident. Impacts on logistics are focussed primarily on the involvement of the public in the clean-up itself, with some effects positively supporting the response, while others cause disruption; potentially impacting the safety of responders. As for claims and damage assessment aspects of a response, the impact of media can often be observed long after the initial reporting. This contrasts with the relatively immediate media effects on strategy and logistics. While it is sometimes too late to counteract perceptions of damage or claim inflation due to media coverage, numerous case studies have also demonstrated how

pressure from the media increases the accountability of the stakeholders involved in the response and the level of awareness of compensation available to claimants.

The objective of this paper is to provide a framework that is useful for responders to understand and prepare for the potential media influence on the effectiveness of a response.

INTRODUCTION

The main objectives of an oil spill response are the protection of human life, health and livelihood, the environment, and property. The ability to meet these objectives are influenced by three factors: technical, financial and socio-political. If one of these factors is dominant over the others, it will generally be at the detriment of the other two and the response objectives are less likely to be successfully achieved.

Topics covered by media during a spill can be wide ranging, from liability issues to distressing images of oiled wildlife. The appeal for alarming articles can often be seen in the choice of vocabulary chosen in media. For example, the number of hits in Googlenews for “oil spill incident” versus “oil spill disaster” is almost a ratio of 1 to 8, thus demonstrating the preference of using inherently negative language when describing an oil spill event (A. G. Anderson, 2002).

While it is the job of a media consultant to advise and to support the command centre or the responsible party on how to communicate to non-technical groups such as the media, public or politicians, the focus of this paper is to understand how the media coverage can influence or prompt the deployment of response resources or affect the efficiency of the response. ITOPF's case study database is used to provide evidence for this framework, but it is illustrative and not necessarily definitive. Using this database, which spans 50 years and

includes over 800 incidents, we observed that regardless of the strategy in place to deal with the media, responders will often face pressure from the media on three main aspects of an incident: the strategy, the operations and the claims in the post-spill phase, through pressure groups. To illustrate the process of how the media can affect each aspect of the response, diagrams have been included after each case study.

DISCUSSION

The paper will discuss the following positive, neutral and negative media impacts on the effectiveness of the response, through three workstreams: strategy, operations and claims (Table 1).

Table 1 – Impact on the effectiveness of the response

	Impact on the effectiveness of the response		
	Positive	**Neutral**	**Negative**
Strategy		• Report of oiling • Post-spill monitoring CSL VIRGINIA (France, 2018)	• Preparedness CSL VIRGINIA (France, 2018) • Clean-up actions PACIFIC ADVENTURER (Australia, 2014) • End points (Canada, 2015)
Operations	• Mobilisation of people (Japan, 2018)	• Volunteers HEBEI SPIRIT (Republic of Korea, 2007)	• Safety BENITA (Mauritius, 2016)

Claims and Damage	• Accountability • Improvement of national plans and preparedness	• Awareness of compensation regime IMO	• Claim generation including fishery claims (India, 2017)

Strategy

The strategy of the response is devised and revised in the Command Centre. The media can affect the main units of this command centre, namely the Planning [preparedness], Operations [clean-up actions] and the Environmental units [end points/Shoreline Clean-up and Assessment Techniques (SCAT)].

The impact of media at the planning level was apparent during the CSL VIRGINIA incident. This case had an important media profile at the local, as well as at the national level, with one of the main factors being the high amenity value of the affected area (Côte d'Azur, Golfe de St Tropez, France) from both an economic and environmental standpoint. On 7th October 2018, approximately 13 nm from the northern tip of Corsica in France, a collision occurred between the containership CSL VIRGINIA and the Ro-Ro ferry ULYSSE. CSL VIRGINIA spilled approximately 500 MT of MFO 380. The oil headed north towards Italy and South-East of France and a significant at-sea operation was mounted by the two national authorities. The main effort of the at sea-response lasted two weeks with regular updates of the situation issued by the media department of the French Navy (at-sea authority), using traditional platforms such as press releases, but also utilising social media platforms such as Twitter to provide regular updates. The French Navy communicated openly on their response efforts at sea and their message focussed on reassurance and demonstration of their expertise rather than emphasising on the challenges and operational difficulties (for example, weather

conditions) met by the responders. This strategy was chosen after backlashes from the public following the communication and media coverage by the French Navy following the ERIKA (1999) and PRESTIGE (2002) spills. Therefore, a large media presence was planned for by the authorities. Nevertheless, this strategy also included the communication of inaccurate information. The authorities were determined to communicate on the amount of oil remaining at sea, rather than focussing on the amount of oil recovered or remaining in the vessel, which would have been a more tangible and measurable volume. Indeed, due to a combination of factors (weathering, sea conditions, oil type etc), it is extremely difficult to accurately predict the amount of oil remaining at sea after a spill. Ten days after the initial release, the at sea-authorities issued an unsubstantiated statement that approximately 90% of the oil released at sea had been recovered (Préfecture Maritime Méditerrannée, 14 October 2018, CSL VIRGINIA, press release #10) - a very impressive number rarely observed in spills. The official numbers stated that 2% of the volume spilled (500 MT) remained, equivalent to the capacity of a small van. The strategy followed the advice provided by Robin Perry and Steve Panton in their 2011 IOSC paper (R. Perry and S. Panton. 2011): “If you suggest it’s only a small spill, it sounds as though you’re being dismissive of the problems it’s causing. If possible, try to find some comparison from everyday life that puts the size of the spill into context. It’s not 50 tonnes spilt, it’s the same amount that an average road tanker is carrying”. The issue was that the focus was not on the known volume of oil spilled or known recovered/contained oil but on what was remaining at sea with little explanation for the public of the weathering process and where this number was coming from. The statement led to certain expectations from municipalities, in charge of shoreline clean-up, along the French mainland coastlines (120 nm away from the collision point) on the limited amount of oil that would potentially reach their shore and consequently resulting in a reduced level of preparedness.

In addition, at this time of the year, a huge amount of floating debris (mainly driftwood) and protected seagrass (*Posidonia oceanica*) are carried by the Liguria current from Italy and strand on the beaches of the South East of France. During spring and summer, the beaches are frequently cleaned until the end of the tourist season, after which the natural debris are left *in situ*. The predictions of the drift trajectory models sent daily to the Command Centre proved accurate, with oil from CSL VIRGINIA, as well as oiled debris, impacting the shoreline over a large geographical area. The first observations of the fragmented oil arriving on the shoreline revealed that the volume of oil stranding on the shore was far exceeding the expectation set by the at-sea authorities. The fact that some municipalities were not expecting large volumes of oil meant that the first municipalities hit by the pollution did not prepare their shorelines for the arrival of oil and, in particular, did not remove the debris off the beach to facilitate the clean-up as well as reducing the amount of waste. This resulted in a significant operation to remove, segregate, transport and dispose of the oiled debris, with more than 60% of waste collected (in m^3) consisting of oiled wood and seagrass (Table 2). Other municipalities located further westward and affected later, aware of the large arrival on the first days, removed large volume of seagrass off their shorelines, facilitating the clean-up.

Table 2 - Waste collected from CSL VIRGINIA (data collected from the clean-up contractor Le Floch Depollution)

Total oil recovered	Total oiled wood	Total oiled seagrass	Total macro waste and oily sand
100 m3	180 m3	150m3	120m3
TOTAL			550 m3

During the course of the clean-up response, which lasted over six months, the local media regularly interviewed the contractor in charge of the clean-up, and factually reported on the progress of the response. As this directly involved the contractor, and thereby placing focus

on their reputation and professionalism, the media added pressure on those involved to ensure an effective job was completed. This accountability safeguarded the public against false promises and kept it on track of the cleaning (Figure 1).

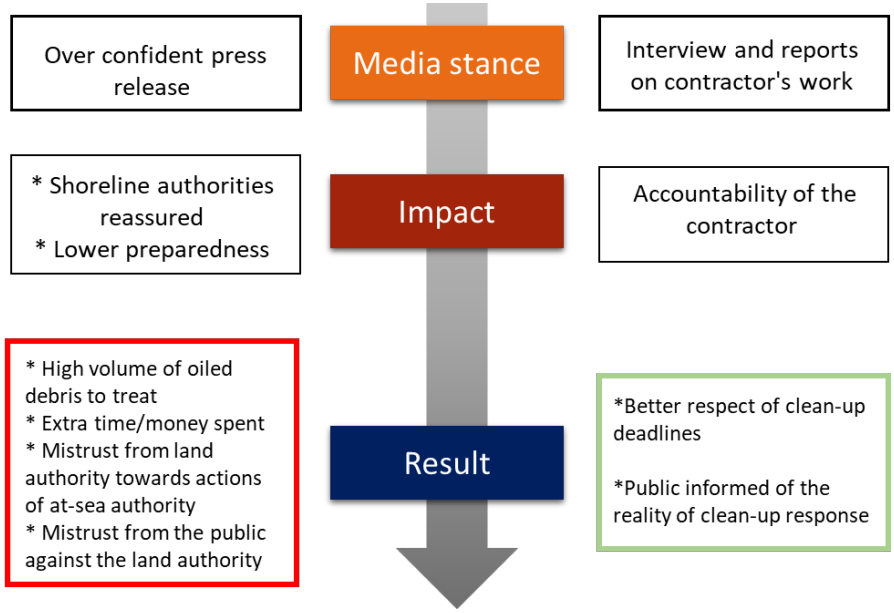

Figure 1- Impact of the media on the effectiveness of the response during the strategy phase of CSL VIRGINIA

The media can often influence the effectiveness of the clean-up operations, as demonstrated during the incident involving the PACIFIC ADVENTURE, a general cargo ship, which ran aground in March 2009, off Moreton Island, South Queensland in Australia following rough seas and high winds due to Cyclone 'Hamish', spilling an estimated 270 MT HFO (AMSA, 2011). The response was closely monitored by politicians and media as the Queensland State election was to be held ten days after the spill happened. There was an intense pressure on Maritime Safety Queensland Incident Commander (MSQ IC) as well as other senior technical advisers to focus on political/media/public relations during the early stages of the response. Consequently, some key decisions were delayed, or postponed by the MSQ IC, leaving the Sunshine Coast Regional Council in charge of making decisions for the first phase of the shoreline clean-up. The Sunshine Coast Regional Council was under significant

economic pressure from the tourism industry which prevailed over environmental considerations. Therefore, instead of a slower, but more efficient and selective manual clean-up preferred by the technical experts in the Command Centre, mechanical means were chosen by the Sunshine Coast Regional Council in the bulk removal phase (Figure 2). The choice of the technique was publicly debated at the mayoral and Ministerial level, casting aside technical considerations. This decision led to the generation of enormous quantities of unnecessary waste, with collection of more than 342.86 tonnes/ kilometre (t/km) in the Sunshine Coast, versus 15.71 t/km collected in Bribie Island where tourism and thus economic pressure was lower, with proportional consequence on the erosion of the shoreline). Interestingly, following the event, the Sunshine Coast Regional Council received significant criticism for removing large quantities of sand from the shoreline from the same public and media bodies who had previously pressured them to make such decisions.

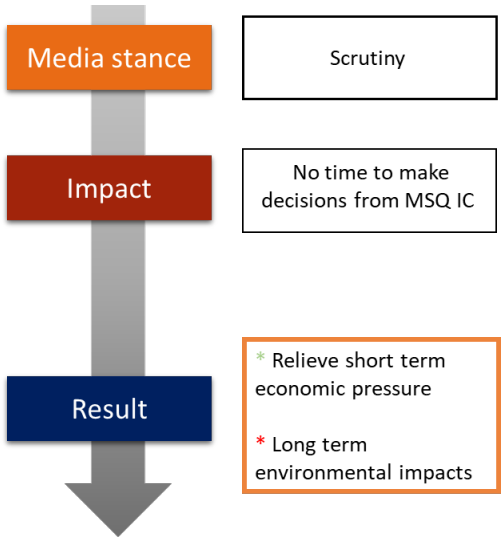

Figure 2 - Some impacts of the media in the PACIFIC ADVENTURER case.

Finally, one of the most difficult and sensitive phases of any clean-up is the completion of response operations and sign-off. In particular, there are challenges for all stakeholders in reaching an agreement on "how clean is clean?". An unnamed incident in Canada during 2015

provides a good example of the media's influence on this aspect of the response. The amount of oil spilled was relatively small, less than 2.5 MT of IFO380. However, it occurred in the English Bay of Vancouver and impacted very notable and visible landmark sites in the city, including Stanley Park (SOPF, 2016-2017)]. The level of public concern over the incident was very high and the wider socio-political context was particularly important at the time. Indeed, due to the perceived environmental impacts of the oil industry, the public, particularly the First Nations groups, supported by environmental activists in British Columbia, were at the time legally challenging the proposal to extend the Trans Mountain Pipeline by Kinder Morgan in British Colombia. The Canadian Coastguard and the media consultants appointed by the shipowner worked well together, providing regular factual statements on the oil spill, aimed at explaining the properties of the oil and the response actions that were being undertaken. As defined in the National Contingency Plan, the Unified Command also included local authorities and First Nations representatives. However, in this case, both the local authorities and the First Nations group disagreed extensively with the State and the Federal Authorities. Accusatory and inflammatory statements from First Nations-appointed scientists/representatives were released to the press outside of the Unified Command media process which criticised both the shipowner and the perceived inadequacy of the federal government's level of preparedness. Despite the very limited level of shoreline contamination and following the completion of the initial SCAT (Shoreline Clean up Assessment Technique) team's work, there was a resistance from the local authorities to accept the end-points, based largely on non-technical concerns (John Butler, 2015). Consequently, a second SCAT Team was directed by the local authorities and First Nations to repeat the shoreline assessment, leading to an extended assessment process and shoreline clean-up duration. While the shoreline response time was initially anticipated to last three weeks, the actual clean-up and assessment period lasted eleven weeks. This development impacted both the functioning of the Unified Command as well as the financial

aspects of the response as only a third of the response costs claimed covered response activities formally approved by the Incident Command (Figure 3).

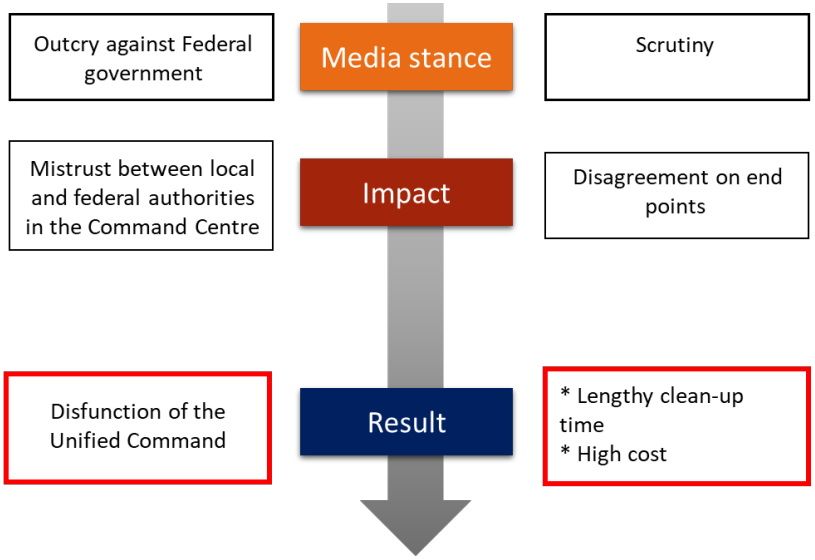

Figure 3: Some impacts of the media in the Canadian case.

Issues related to end points are not uncommon in a response. This leads to the last phase of a spill, the post spill monitoring. A particular issue that can arise is the presence of old oil. Like in many other cases worldwide, the CSL VIRGINIA case introduced earlier is a good example of the fact that, after an oil spill, the public is more observant, scrutinising any trace of oil on the shoreline. This can lead to the rediscovery of historic oil from old spills (Figure 4). During the response, the public, who had little experience of distinction between fresh, weathered and old oil, communicated to the responders the locations of observed oil that had not been cleaned, often via social media or by contacting the local authorities. This is often the case in spills contaminating remote places. This led to an increased pressure to collect additional samples for fingerprinting, as local authorities felt compelled to ascertain the origin of oil reported, despite the certainty of origin determined by the technical experts. In addition, due to the changing acceptability of the public to old oil deposits, this additional pressure increased the level of monitoring for stranded oil on the shoreline and, in this particular case,

this resulted in the national park and municipality authorities removing large (over 1 cubic metre) patches of old oil that had been stranded on the shore for over 28 years from the Haven incident in 1991 (ITOPF, Haven Case study)

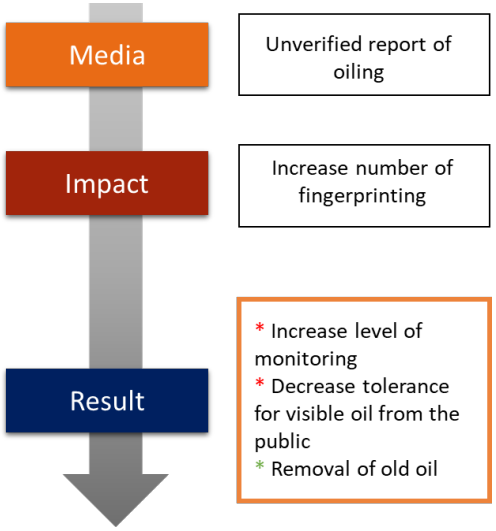

Figure 4 – Impact of the media on the tolerance of the presence of old oil on the shoreline

Operations

Operations involve the various logistical aspects of the response. The influence of media is more balanced between positive and negative impacts in the operational unit. Negatively speaking, media can draw people on the shorelines, blocking access to the site for responders and filling car parks. Furthermore, the media can involuntarily encourage looting with the disclosure of details of the cargo manifest, while failing to highlight the potential presence of harmful and toxic chemicals being contained in containers. Conversely, the media also can play an important role in supporting the operational phase of the response when acting as a vector for effective mobilisation of volunteers and assets, which is illustrated in the next two examples.

In 2017 in the Ryukyu Islands, Japan, local media was used for recruiting local labour and volunteers to participate in the clean-up efforts following a spill. Here, more than 100 kilometres of shoreline were impacted, with an elevated risk of buried oil due to the dynamic

shore and weather conditions. A quick response action was required, but due to the challenging shoreline access, mechanical support was limited, and its use would have slowed the response due to challenging logistics. Therefore, a call for local labour through local media channels was issued and resulted in several thousand volunteers joining the response. The affected areas were subsequently cleaned within days. Not only was the organisation of the volunteers impressive, but the thousands of people that joined the clean-up operations saved weeks of work by preventing the burial of oil, likely saving millions of dollars (Figure 5).

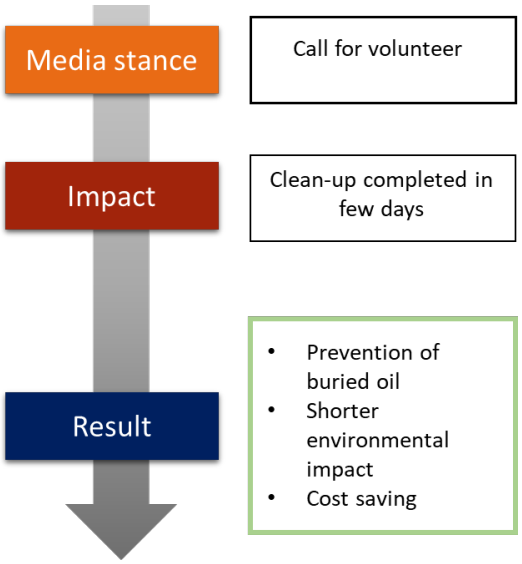

Figure 5- Impact of the media on the Japanese case.

On the other hand, during the HEBEI SPIRIT incident in Republic of Korea in December 2007, the arrival of vast numbers number of volunteers to the contaminated shorelines following public appeal did not achieve such success (IOPC Fund, HEBEI SPIRIT). While the level of mobilisation was high, with more than 600,000 volunteers in the first month of the response, the effectiveness of the response was impeded due to the lack of coordination. Organisation is key to an effective response and achieving a coordinated effort with that amount on untrained responders is seldom achieved or successful. Once involved, it is difficult for any authorities to turn volunteers away. This led to unreasonable actions due to lack of

trained supervision, such as the extensive use of sorbent pads as a primary response technique, and unnecessary numbers of people working on the clean-up (ITOPF, HEBEI SPIRIT case study). For example, it was not uncommon to observe more than 18 people undertaking flushing operations where only three people would typically do the task. This naturally led to an unnecessary use of resources and increasing amount of waste due to the excessive use of provisions (e.g. PPE, food supplies, toilets etc) (Figure 6).

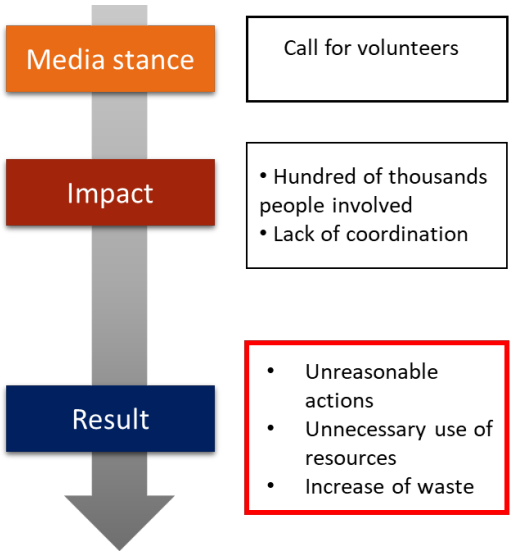

Figure 6- Impact of media during HEBEI SPIRIT

The safety of responders can also be impacted because of media coverage and the accessibility of the incident site. This was illustrated during an incident in Mauritius in 2016, when the bulk carrier, BENITA, ran aground on rocky reef off Le Bouchon, located less than five kilometres from the international airport. The use of helicopters was required during the salvage operations for the personal and salvage equipment to access the vessel and also to evacuate the bunker fuel. Helicopters were also used for the response clean-up to setup the equipment on the reef and remove the waste generated during operations. However, during the response, responders became aware of a video circulating on the media platform YouTube, of

a drone footage on top of the vessel, captured by a member of the public and receiving multiple views online (Youtube, Sunrise at the Benita Shipwreck). This triggered heightened risk assessment and raised concern on the security of the aerial operations, subsequently prompting the authorities to reinforce their national aviation law and increase the level of authorisations required to fly over the area.

Claims and damage

Once the urgency of a response has settled down and, often during the management phase, the financial aspects start to be more prominent. It is widely recognised that public pressure, supported by the media, has played a key role in the evolution of the shipping industry and have been the driving force behind the creation, implementation and the ratification of compensation conventions, either internationally through the International Maritime Organisation (IMO) or through national bodies. The development of national legislations to implement provisions of the IMO Conventions specifically related to marine pollution is an iterative process wherein suitable legislation, guidelines and compensation mechanisms have all been developed and evolved as a mean to avoid re-occurrence in Member States, and to meet maritime issues as they become evident.

The first element (pre-IMO) of multiple countries coming together to reach agreement in this way was post Titanic, with the Safety of Life at Sea (SOLAS) Convention which specifies minimum standards for the construction, equipment and operation of ships, compatible with their safety. Following the TORREY CANYON incident in 1967 in the United Kingdom, the 1969 Civil Liability Convention and MARPOL have been developed which aims to prevent the operational or accidental pollution of the marine environment by ships, as well as offering the first international agreement on liability and compensation.

Similarly, public pressure following the lack of response preparedness, resources and expertise observed during the EXXON VALDEZ (Alaska, 1989) incident led to the establishment of the Oil Pollution Act 1990 in the USA, but also to the International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990 (OPRC), and later the OPRC-HNS Convention. In the meantime, the amount of compensation available for oil spill incident showed its limitation, resulting in two additional conventions, known as the 1992 Civil Liability Convention (revision of the 1969 Civil Liability Convention) and the 1992 Fund Convention being adopted at the IMO (IMO, History). More recently, the incidents ERIKA (France, 1999) and PRESTIGE (Spain, 2002), led to the creation of an additional layer of compensation for Member States, known as the Supplementary Fund Protocol (IOPC Funds, About us).

After an incident, media will also maintain pressure to determine the lessons learnt and highlight potential issues with the national or regional contingency plans and push to improve preparedness. This pressure is generally a driver for better legislation and higher safety standards (Figure 7). In addition to enable the accountability of stakeholders involved in the incident to provide suitable compensation, the media may also allow the public to have a better understanding of the compensation regime and increase the level of awareness of the amounts of compensation potentially available. In the USA, for example, the creation of a claim office is compulsory and is advertised through various media streams. During the CSL VIRGINIA case, with specific reference to claims, there was a keen interest from the outset in relation to compensation matters, with the media approaching the parties responsible for paying compensation to claimants on a regular basis. Following notification of the establishment of a local claim office to the media by the P&I insurers, the media conducted regular interviews with this claims office and published several press articles in relation to the compensation of claims.

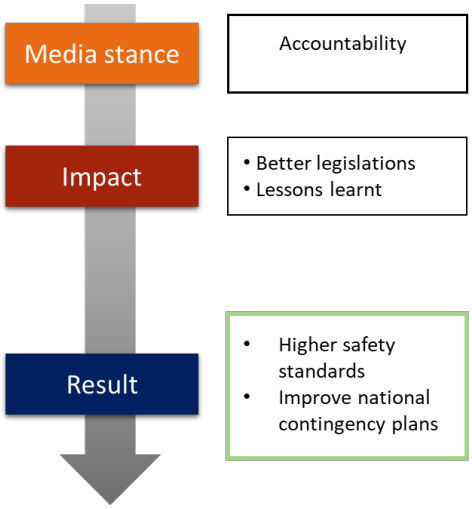

Figure 7 – impact on media on preparedness

It should however be noted that, at times, the media can relay erroneous information in relation to these matters which could be due to a number of factors, including a lack of full understanding of such legal matters which can be quite complex in nature, the objectivity and reputation of the media concerned or the tendency of the media to fall into sensationalism. This can lead to the generation of non-genuine claims. The proportion of these claims can be particularly high in the case of fishery claims for example. The last example to illustrate this point is a case in India at the end of January 2017. After a collision, a few nautical miles from port, a vessel sustained significant hull damage resulting in a release of 200 MT of Intermediate Fuel Oil 180 (Indian Coast Guard, 31.01.2017). Over 35 km of shoreline consisting of sandy beaches, rip rap and port structures were impacted to various degrees and the clean-up operations lasted approximately two and a half months. However, media reports were excessive and blatantly misleading the public on the impact of oil spill with titles such as "A ton of oil may have spilled, turtles and fish float dead" (TheNEWSMinute, 30.01.2017) or "as Petroleum chokes the coast, no one wants to buy fish"(Scroll.in, Feb 02, 2017). While no fishing ban was put in place by the government, and no tainting was proven to the fish in the market through extensive sampling campaigns, the region was hit by a loss of market confidence. While the

extent of contamination was relatively contained, more than 120,000 fishermen reported losses of earnings due to loss of market confidence, even some hundred kilometres away from the location of the incident. Although preliminary investigations revealed a loss of earning for some categories of fishermen, the totality of the claimants did not suffer the same proportion of loss. In accordance with the international principles governing the admissibility of claims for pollution damage established by the IOPC Funds, specifically the difference of physical damage or oiled property (oiled nets or boats), claims for pure economic loss require a link of causation to be established between the alleged damage and the spill, which might be difficult to prove. At the time of the incident, the local government was facing election which prompted the authorities to voluntarily and unilaterally (without consultation with the liable parties) award interim compensation to all fishermen, even before the submission of all claims or their investigation, and informing through the media that the liable parties would reimburse the government for such sums, as well as paying all claims in full. It is worth bearing in mind that compensation of a claim can take some time to be awarded following its submission, as typically the merits of the claim are thoroughly investigated, often resulting in delays as experts appointed by the relevant liable parties review the submission. In addition, there should be due consideration of all claims to ensure fair compensation of all genuine claimants with the amounts available. In some cases where the funds available do not cover the full amount of claims submitted, prorating needs to be taken into account for the settlement of claims. This can only be achieved once all claims have been submitted. In the case mentioned above, the government informed the public via the media that compensation would be awarded within weeks; this proved to be unpractical and unfeasible from the outset (The Times of India, 06.03.2017). This resulted in unrealistic expectations to pay this large amount of fishery claims within a short timeframe adding an immense amount of pressure on the shipowners (Figure 8). The ‘fast-tracked’ review of the claims by appointed experts revealed that the majority of the

alleged losses were not substantiated with a significant lack of evidence, and therefore failed to satisfy the international criteria on the admissibility of claims in accordance with the international conventions governing compensation for oil pollution damage that India has ratified.

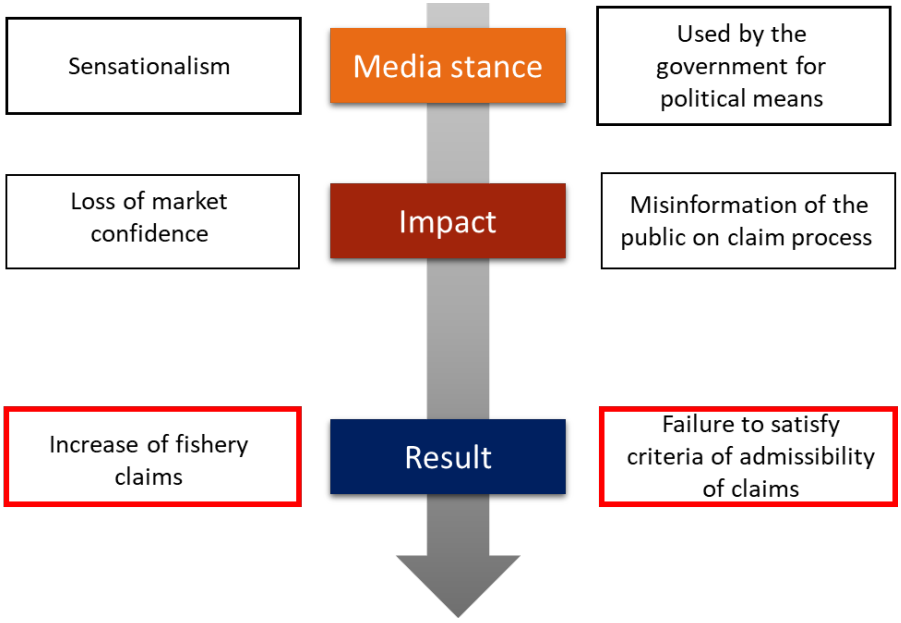

Figure 8- Impact on the media on the post-spill phase of an Indian incident.

CONCLUSIONS

These examples have demonstrated that irrespective of whether a well-defined or poor media strategy was in place, media can have huge impact throughout the incident, influencing the many different facets of oil spill response. At the beginning of a response, the impact is more direct and immediate on strategy and operational aspects and the media has a responsibility to relay facts and highlights societal issues. From this, increase of accountability from the stakeholders involved of the response is a major positive impact on the effectiveness of the response. As the response moves to a project management phase and the media interest starts to decrease. However, the negative reporting of the impact of the oil on the human health,

on socio-economic field together with the environment means that it is often too late to counteract some perception of damage which may lead to inflated or non-genuine claims.

Obviously, there is not one news medium but a multitude of media and each of them have different aims (AMPERA, 2007). The recent rise of social media has allowed the public to be more engaged with the potential impact of a spill by posting online and share raw data with its social network but often has no detailed understanding of an oil spill response (Jeannette N. Sutton, 2010). Local media plays also a very important role and has a more direct relationship with the response team as it tends to focus on the implication in term of environment and local economy such as tourism and fisheries (B.L. Chilvers *et al*, 2016). Finally, the national press is often linked to policy pressure and national policymakers, hence been often the vector driven the accountability.

As for emergency responders, the next step might be to increase our awareness on the ways the different type of media influences the response in order to ensure truthful information can be shared and positively influence the response effectiveness.

This topic also asked the question on how to communicate technical messages in a political environment. While the need of factual communication is still a requisite, the availability of information in a short timeframe appears to be even more important. Therefore, an aspect of preparedness for the emergency responders should be focused on the preparation of technical information, suitable for different media and readily available as to adapt to the pace and demand of each media.

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