Exploring differences in perceptions of risk, and its management, amongst personnel directly associated with the operation of ships

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Executive Summary

This report explores differences in perceptions of risk and risk management amongst employees of ship operators. It considers the views of personnel at sea and in shore-based offices in a range of positions from Ordinary Seafarer (OS) to company Vice President. The report is based upon case studies of five companies and it builds upon the results of a large scale questionnaire conducted as part of the same study and reported in separate accounts published in 2006 and 2007 respectively.

The case study companies

Of the five companies included in the research two were relatively large and three could be characterised as medium/small concerns. The companies were engaged in different trades. Two were operating in the tanker trade, two in the container sector, and one in bulk aggregates.

Company stance and message

The two larger companies (Vizla and Boxline) were similar in having a clearly documented stance with regard to health and safety to which staff were able to readily relate. Their stated position was to be fully committed to safety and to risk management. They addressed these issues at the higher levels of corporate management (in one case at Board Level) and had separate departments concerned with the protection of health and safety and the environment.

Like these larger companies, one small tanker owner/operator (Roberts) had also established mechanisms for ensuring that concerns about health and safety remained highly visible in the day to day management of the company ashore. This company had monthly safety meetings attended by various managers and additionally held quarterly meetings concerning safety which were attended by the same personnel alongside the Managing Director.

Two of the smaller companies exhibited more diffuse approaches to safety management in relation to their organisation ashore. However, as with their larger counterparts they all operated with safety management systems and all had procedures for recording and reporting incidents as well as for the conduct of regular safety meetings aboard ship.

Of the five companies it was Roberts, one of the smallest, which most effectively convinced employees in all ranks that safety was a genuine priority. In relation to the two largest companies safety was seen as an area of activity for the company but ultimately the prevailing view was that for these companies commercial concerns took precedence. At Wyvern and Hardacre, staff were divided with regard to their perception of the company stance vis a vis safety with some thinking safety was a company concern and others feeling that it wasn’t.
Means of Communication about safety and risk

All five companies had similar strategies for communicating messages about safety to sea-staff. Essentially they relied upon a mixture of bulletins and circulars, videos, and posters. In line with safety management systems they also ensured that safety committee meetings were held on board vessels on a monthly basis.

In three of the case study companies safety committee meetings operated as conduits for ‘top down’ messages about safety but were not very effective in communicating messages from the ‘bottom up’. This was largely a result of a combination of factors including the hierarchical nature of the organisation of employees on board, the vulnerability of the workforce (to instant dismissal and poor prospects of re-hire), a perception of racism on board, the nature of appraisal systems and the predominant occupational culture.

In most of the companies there were instances when items raised by the safety committee were not acted upon or were not acted upon in a timely fashion. At Roberts however, there was an overwhelming perception that anything raised at a safety committee received proper attention from shore-side managers. This reinforced the perception amongst staff that Roberts was genuinely committed to safety management rather than simply to ‘safety rhetoric’.

Undermining the safety message

It became apparent that seafarers took a very holistic view of companies in relation to the judgements they arrived at in relation to corporate commitment to safety. Thus in one company (Vizla) seafarers were clear that concerns with environmental protection were far greater than concerns with seafarer safety because of the company position with regard to the budgets for each area. They were also clear that this company was keen to present itself to clients as safety conscious. However, they came to disbelieve the company rhetoric as a result of the ways in which the company dealt with fatigue and fatigue management. In relation to fatigue seafarers felt that this company disregarded their concerns and that any attempts to follow procedures laid down in the company’s safety management system (such as taking the vessel to anchor to allow for adequate rest) would lead to, and had led to, seafarer dismissal. Thus the company was understood by many of its sea-staff not to mean what it ‘said’. At a second company (Boxline) safety messages were similarly undermined but in this case as a consequence of cost cutting and budgetary restraint. Seafarers here saw the company as ‘penny pinching’ often at a cost with regard to proper risk and safety management. Finally the Human Resource management strategies of companies could also serve to undermine the safety message which companies tried to transmit. Thus where crews were replaced by cheaper crews with poor English, seafarers often interpreted this as a signal that the company’s real concern was cost and not safe operation. Equally, where companies displayed disdain, or a lack of care, for their existing workers in relation to broader issues of welfare (failing to provide proper food and rest when joining or leaving a
vessel for example) employees found it difficult to regard their stated concern for worker safety seriously. The one company where seafarers believed that management were genuine about safety (Roberts) was a family concern where managers at the highest level took a personal interest in seafarers, listened to their views, spoke with all ranks on vessel visits, and acted swiftly to remedy any problems raised by seafarers at safety meetings. The sea-staff here was long-serving and stable. When seafarers were sick or injured they were extremely well-looked after by management and they had considerable respect for the company as a result of this approach and also as a result of regular company practices with regard to fatigue. When seafarers were fatigued the company (Roberts) approved of Captains’ decisions to take vessels to anchor and did not penalise vessels or individuals when such actions were taken.

**Hierarchy and awareness of the company message**

The results of the large-scale questionnaire previously reported on as part of this study suggested a stronger correlation between the views of senior sea-staff and shore-side management than was identified between lower ranking sea-staff and shore-based management. In the course of the case studies it became evident that in all the companies considered, communication was largely channelled from the office to senior sea-staff and back. There was very little communication (written, telephone, face to face, seminar-based) between more junior ranking seafarers and office based managers. This is likely to be the major explanatory factor relating to this previously identified correlation.

**Conclusions**

- The effort made by some companies to document and identify their safety strategies does not necessarily produce a view amongst sea-staff that the companies they work for are committed to safety or risk management.
- Shore-staff and sea-staff readily distinguish between statements of genuine intent and those which are made to simply protect a company in the event of an incident.
- Bulletins and memos about incidents were appreciated by seafarers.
- Safety committees were often only effective as conduits of safety messages from the ‘top down’.
- The effectiveness of safety committee meetings, and safety management more broadly, could be readily undermined by a variety of human resource management practices such as ‘closed appraisal systems’ and the employment of seafarers on temporary contracts.
- Seafarers’ views concerning corporate commitment to safety were informed by a holistic appraisal of the company approach to its employees. They were also influenced by the speed with which concerns that were raised about safety were dealt with (if they were dealt with at all).
Introduction

This report is the fourth in a series which examines perceptions of risk within the maritime sector. The series is based upon the findings of a major research project conducted at the ‘The Lloyd’s Register Educational Trust (The LRET) Research Unit’ based within the Seafarers International Research Centre at Cardiff University and supported by The LRET.

In the first two reports of the series the findings from the administration of a large scale questionnaire were presented. The questionnaire was completed by 2,372 people from 50 different countries. In our first report, findings related to vessel level incidents were presented, whilst in the second report we focussed on perceptions of risk associated with seafarer (personal) injury. These two initial reports highlighted the extent to which perceptions of risk did vary with factors such as rank, department (engine/deck/galley) and nationality. In developing the analysis further, the third report of the series attempted to consider the findings from the questionnaire concerning people’s perceptions of risk alongside reported incidents. The objective was to determine the extent to which workers’ perceptions of risk correlated with reported incident frequency.

Following this work it has been possible to arrive at a number of conclusions. Briefly these confirm that groups of workers perceive risks differently. Variations in perception correlate with differences in role within an organisation (with regard to both seniority and department), nationality, and some other relevant factors such as experience. However, in relation to ship level incidents and personal injury we found that it was senior managers based ashore, and in some cases senior officers working on board, whose perceptions of risk generally correlated most strongly with reported incidents (as recorded by maritime administrations).

In this report we seek to explore this finding in further detail to provide a better understanding of the variance of risk perception amongst personnel working in organisations which attempt to communicate information about risk to all their workers regardless of rank, nationality and department. Specifically we make use of detailed field notes and interview transcripts collected in the course of undertaking case studies in five shipping organisations. These allow us to provide some insight into how and why risk is understood and to highlight the ways in which differences in perceptions of risk and perceptions of appropriate risk management develop, thrive, and persist, within organisations.

Methods

Five case study companies were selected to allow us to consider companies involved in different ‘blue’ and ‘brown’ water trades (containers, tankers, near shore) and to give us the opportunity to include companies of different size. The detail of the work associated
with the conduct of case studies, and its necessarily time-consuming nature, placed an upper limit of five upon us and there is also an extent to which the inclusion of more and more cases reaps incrementally lower levels of return in terms of the provision of fresh insight. Thus we approached five companies to negotiate access and were ultimately assisted by one large operator ‘Boxline’ trading across several sectors (primarily containers), one large operator ‘Vizla’ specialising in oil and oil product cargoes (but also operating a small number of other vessels), one medium/small privately owned company ‘Roberts’ specialising in the operation of smaller coastal tankers, one medium/small company ‘Wyvern’ operating small container and specialist cargo vessels, and one small company operating vessels associated with aggregates ‘Hardacre’. In discussing these companies we have made use of pseudonyms throughout.

In order to understand shipping organisations in the detail we required, we negotiated access to both company shore-side offices and to ships themselves (generally two per company) with a view to conducting in depth interviews, collecting appropriate documentary evidence, and maintaining observational field notes. Ideally in undertaking the five case studies with shipping companies, our preference would have been to utilise the same methods across the board. However, a combination of practical constraints meant that in two case studies our methods varied slightly. In one of these (Wyvern) we were not able to sail aboard any vessels because these were engaged in very heavy port call schedules. As an alternative, we were permitted to undertake interviews with seafarers whilst ships were berthed in a UK port. This meant that we were able to gather interview material but little in the way of observational field notes. In a second case study (Vizla) in addition to the work undertaken in shore side offices, it was only possible to organise a voyage on one vessel and thus our fieldwork and interviews with seafarers took place with just one, rather than two ships. In the course of all five case studies, we were able to interview shore-based personnel.

In conducting interviews with shore-based personnel and with seafarers we sought permission from participants to record conversations allowing for the subsequent production and analysis of transcripts. Such permission was granted on the understanding that quoted material would be anonymised prior to publication and this is the basis for all quotation within this report.
Findings

Company stance and message

There were some differences between the two larger companies (Boxline and Vizla) and the smaller companies in relation to the degree to which their approach to safety had been ‘mapped out’. That is to say that the two larger companies had more rehearsed and better documented approaches to safety. Staff in shore-side offices and aboard vessels could quickly and easily put the corporate safety message into words and this seemed to result from repeated exposure to a consistent corporate message. At Boxline managers were clear that the company priority was to move cargo safely, efficiently and at the smallest possible cost. Whilst they recognised that there could be tensions between safety and cost, managers were insistent that safety took priority and they referenced a ‘paramount clause’ stating that safety comes first in company policy.

Interviewer: What do you see as the most significant elements in your safety management system in terms of effectiveness in managing and controlling health and safety?

I suppose the most significant one is the paramount clause, the one in the front that says that the safety comes first and it’s the master’s discretion, the master can override anything basically, that’s probably the most significant one. (DPA, Boxline)

At Vizla the story was similar in as much as there was a strong rhetoric relating to safety and a clear understanding of the ethos of the company and how this had been developed. Thus at Vizla there was a Health Safety Environment and Quality (HSEQ) department, the values of which were said to be based upon the company ‘core values’. At the time of the interviews, concern for the protection of the environment was widely regarded as the company’s greatest concern. However, many shore and sea staff regarded the company as taking seriously its stated commitment to safety and felt that in relation to other ship operators it compared relatively well in terms of a concern for safety.

Of the two larger companies it was Vizla that consciously demonstrated a clearer commitment to safety in its daily management procedures. For example safety was reported to appear not just as one item on the agenda of Board meetings but to occupy a whole section of the agenda at every Board meeting. Safety-related decisions made at Board level were minuted and communicated verbally via the management chain to staff. Additionally safety was said to be the first item on the agenda of all regular team meetings (usually held every morning) amongst shore-based managers. In short, Vizla was highly concerned with its public image and this concern had produced a transparent approach where safety was embedded in company formalities.

At Boxline safety did not appear on the agenda for Board meetings and there seemed to be a belief that the former Director had not been strongly concerned with occupational
health and safety (OHS) issues. Nevertheless there was a small department for OHS within the shore based management structure and this was described as proactive in improving safety across the company.

In both companies incident reporting schemes were in operation. Both companies operated systems allowing them to inform seafarers about hazards which had recently been identified and both operated sophisticated safety management systems.

The three smaller companies had smaller management teams ashore and a less specialised approach to management generally and safety management in particular. Nevertheless, in line with international regulations (ISM Code) all three companies operated safety management systems. These generally incorporated a requirement for safety meetings to be held on board and for feedback on these to be reported to shore side management. Furthermore, all companies recorded incidents resulting in injuries and fatalities and sent out information about newly identified hazards to their fleet personnel.

If something does happen then the company will normally issue a circular letter to everybody saying, they don’t give names, or vessels names, or where it happened, just the what happened and what should have been done, and what they recommend us to do, and pay more attention be extra careful with that particular situation because this is what may happen.
(Captain, Roberts)

Hardacre was the company with the smallest fleet but it was interesting to note that the larger shore-based operations of the company had an influence on the management of vessels in relation to safety. Thus the company was bound by the ‘group’ safety policies and it operated within ‘group’ structures. Any lost time incidents had to be reported directly to the national Director and at the annual Board meeting the fleet ‘designated person ashore’ (DPA) had direct access to the national director. Additionally safety issues were reported to a regional safety officer who also undertook ship visits with a view to identifying safety issues that needed to be addressed.

In relation to the ways in which safety was addressed by the company Board the picture was similar at Wyvern. The DPA at Wyvern was required to produce a quarterly safety report for the board which outlined details of on board safety committee meetings and safety-related incidents. He suggested that the company had an informal attitude in relation to hierarchies and that he could ‘walk into the chairman’s office at any time and deal with things on that level’ (DPA Wyvern). However he also acknowledged that he was as he termed it ‘the only nautical person here’ which was a considerable contrast with bigger companies such as Vizla where many shore-based managers had prior experience at sea.

Of the three smaller companies, Roberts had the most elaborate management system in place with regard to how safety issues and information were dealt with ashore. Thus the Fleet Safety Officer received both safety committee meeting minutes and details of
inspections directly from all vessels. He reported on these to a monthly meeting of the Fleet Safety Sub-Committee. Further to this the personnel manager was also independently sent details of accidents and near misses by company vessels. Once he had actioned these in line with his own responsibilities he was reported to send them to the Fleet Safety Officer to enable him to double-check that the details had also been included in the safety committee minutes sent by the vessel concerned. Every three months at Roberts a ‘company safety meeting’ was convened which was attended by the personnel manager, the fleet safety officer, the technical department and additionally by the company secretary and Managing Director. Thus the priority that was given by Roberts to safety was clearly reflected in the structure of their shore-side management team and their activities.

In terms of their general message some companies came across to seafarers as more committed to safety than others. Seafarers at Roberts, Vizla and Boxline were perhaps the most certain of their companies’ commitment to safety in some shape or form. At Vizla and Boxline, a strong element of this related to a perception that companies wanted seafarers to work safely and there was an associated recognition that this placed a strong element of responsibility on seafarers themselves. However, there was evidence that seafarers had generally bought into the idea, which was strongly promulgated by the two largest companies, that they were more broadly committed to safety than some other ship operators. This commitment was largely seen to derive from a corporate concern with image and a desire to comply with international regulations and charterer requirements. It did not appear to be experienced as a sense that personnel in the company genuinely cared about the health and welfare of individual seafarers. Thus the commitment was seen to some extent to be superficial. The companies were understood to prioritise the appearance of safe operation which was not always the same as prioritising safe operation per se. At Boxline several incidents where safety was compromised to save money were cited in support of this perception. These indicated to seafarers that the bottom line was more important than their safety. For example, seafarers took a dim view of a decision to allow the watertight integrity of the engine room to be compromised in order to save time preparing for repair work at the next port. As the Captain at the time commented:

I expressed my concerns to it as I thought was my duty of care for the people on board to report this to the office, and I was told I was being obstructive, rather than just getting something back saying your concerns have been noted.

(Captain 1, Boxline)

Such actions served to undermine some of the efforts made by the company to promote an image of safety awareness. At Vizla such incidents were generally not reported and the company had a very effective mechanism for communicating with individual vessels about its decisions and decision making. Nevertheless shore side managers identified a lack of interest taken by the company in the general health and welfare of seafarers. For example, issues relating to the refrigeration of food, passive smoking, diet and nutrition and dishwashing standards were identified as long standing concerns
raised by individual employees which the company had shown no interest in. This lack of interest served to reveal, in part, the extent to which Vizla was driven by external considerations to appear to manage safety, rather than from an inherent commitment to its workers. Indeed an example cited in an effort to demonstrate how careful the company was about safety seemed to reinforce this perception. We were told of an incident whereby the company identified a port state control deficiency on a tanker en-route to the USA (when the coastguard is notoriously strict and punitive). The deficiency was a hole in the fire line. The tanker was carrying condensate and the hot work permit for welding was not issued as the risk of an explosion was too high. This account was given as an example of how the company was ‘even’ prepared to face a port state control deficiency rather than risk an explosion on board. The self-congratulatory nature of the account rather revealed the extent to which the seafarers’ safety was of little concern to the company at the end of the day. Management felt it was deeply significant that having weighed up the risk of a fine and ‘black mark’ from port state control against the risk of blowing up the vessel they had made the reluctant decision to sacrifice public image to the extent of gaining a ‘black mark’. We were left in little doubt that the Public Relations (PR) fallout from an explosion ultimately weighed more heavily in the decision making than the threat to the lives of individual seafarers.

At Roberts in some respects the opposite characteristics were identified. At this small tanker operation there was a feeling amongst sea-staff that the company genuinely did concern itself with safety.

This message was effective notwithstanding some practices adopted by the company which are regarded in some quarters of the maritime industry as manifestly unsafe, most notably six on and six off watches (see for example, Bloor et al., 2004). The close relationships between the office staff and the sea-staff and the number of vessel visits from sympathetic, interested, and concerned shore side management seemed to be important in creating this perception.

They come aboard, ........asking us questions on safety and things like that as well, general things, just like you’re doing just then, in the mess room there, so you do from time to time you get them on board yeh, and [The Company Owner] I’ve seen him one or two times, he comes round and has a chat to everybody, if you’ve got anything to say just let them know really, but you know. (AB, Roberts)

Because this company, the superintendents are very easy to get on with when they visit the ship, when they’re onboard during dry docks and things like that. They’ll chat to anybody, it’s never us and them. And they’ll chat with the cook as well as they will with the captain. So people feel they belong to the system so that everyone gets an idea of what’s going on, so it doesn’t always take a formalised system to convey what a policy is. And that does happen quite a lot, a lot more than people actually realise. (Captain, Roberts)
There were also some clear guidelines offered by the management at *Roberts* to seastaff which seemed to have made a particular impression. For example, seafarers suggested that the management had given clear instructions that if there was a serious fire on board and seafarers felt it was becoming unmanageable then they should abandon ship rather than jeopardise their own lives.

At *Wyvern* reports of the company commitment to safety were more mixed. Some staff felt that the company did not really want to know where safety problems lay and that they just wanted reports from the vessels that everything was ‘alright’.

> They don’t want me to say, I’ve got a problem, because then it goes into – how do you solve the problem, action and money. So what they want from me is, everything is beautiful, everyone is happy. (Captain, *Wyvern*)

Similarly there were some problems which employees felt were brushed under the metaphorical carpet by the company and they cited an example of a crack in the deck of one vessel that was ignored because it was not easily visible.

At *Hardacre* long-serving sea staff had little belief in the company commitment to safety whereas newer members of staff were more impressed by on board safe working practices. The company message appeared to be undermined by a perception that office staff were only concerned to protect their own backs by placing responsibility for safe working on to seafarers. Concurrently there was a belief that the company was deeply committed to profit and making money before safety. This belief was reinforced by shore side pressures not to interfere with the schedules of the vessels (to avoid delays) and by practices which allowed important maintenance work or provision of equipment to be ‘put off’ and therefore allowed costs to be deferred.

It was apparent that in these instances if the company believed that its actions (such as not closing out issues raised in safety committees until the next budget year) did not place the vessel at additional risk, in both *Hardacre* and *Wyvern* they were failing to effectively convince seafarers that this was the case. The implications of these practices were of far greater significance than that which was associated with each of them individually. In each case the practice led to the perception that company commitment to safety was hollow which in turn impacted upon seafarers’ subsequent actions.

> In theory yes they’re committed to it [safety] because they have to be…but I think if it comes down to money, if it’s going to cost….well... (Deck Officer, *Hardacre*)

Thus the case studies served to reveal the ways in which companies often undermined their own, considerable, efforts to promote safety on board their ships. In doing so they inevitably made it more difficult to successfully transmit messages to seafarers about the risks that they considered to be the most significant at any given time. Seafarers with little faith in company attitudes to safety were more likely to be impressed by
messages conveyed to them in other ways about which actions and activities were the safest and which were the most hazardous. In undermining their own credibility some companies effectively neutralised themselves as an effective influence on the risk perceptions of seafarers. It was very interesting to note, however, that it is possible for companies to do a great deal to counter the impact of some of their actions (which might have compromised safety to an extent in order to reduce cost) via the attitudes and actions of individual employees. A powerful message of concern was effectively conveyed by the staff and management of Roberts and it seemed that personal contact and good communication (in short the maintenance of good interpersonal relationships) served to convince seafarers that an interest in safety throughout the company was genuine. This need for genuine engagement with workers has been well established in land based sectors (Walters and Nichols, 2007). These themes will be returned to later in the report when we attempt to describe in greater detail the ways in which companies may inadvertently reinforce, or undermine, the message they seek to convey regarding commitment to safety.

Means of communication about safety and risk

In all the companies considered, there were efforts made to communicate messages about safety management, and potential hazards and risks, to fleet personnel. A common strategy was to send bulletins about accidents which had occurred across the fleet to all seafarers. These might take the form of newsletters containing trend data for the whole fleet and perhaps features on particular events or newly perceived hazards and/or specific memos following incidents.

Such material was appreciated by seafarers and appeared to be influential in terms of their awareness of risks and hazards. The dissemination of such matter also allowed for the possibility that issues raised by the company at ‘fleet level’ would be discussed during safety committee meetings to try to ensure that procedures/practices were in place on board which would mitigate the risk of such events occurring again.

Despite the fact that there were suggestions that safety committees did not work as well as they might, because many seafarers (particularly in Wyvern and Vizla) did not contribute to meetings, they were nevertheless identified by both sea and shore-staff as an important part of the process of risk and safety management communication. At Vizla for example they were effective in communicating ‘top down’ messages from the company to the sea-staff despite the fact that they did not work very effectively as a communication channel in the opposite direction. Bhattacharya’s 2009 study of the impact of the ISM Code in the tanker sector similarly found that information flow in such meetings tended to be largely unidirectional.

Safety committees appeared to work best where seafarers felt the company was genuinely committed to them, and their safety, and wanted to work to improve things.
This was the case at Roberts where seafarers identified a rapid and effective company response to matters raised at safety committee meetings.

I’ve never seen anything that’s brought up genuinely that the company have not responded to, [Roberts] as a company, I couldn’t name you an instance of that, any things that have come up they’ve addressed them and done something about it. You know in a fairly smart manner. (Chief Engineer, Roberts)

In contrast at Wyvern, the company was not seen to respond quickly to what were sometimes regarded as very serious messages from the fleet regarding safety. Equally Vizla for all of its procedures and safety rhetoric, had ignored requests which had come through safety meetings for helmets and radios for ‘smoke divers’ and for the involvement of engineers in mooring operations as the mooring teams were felt to be short-handed. Such inaction led seafarers to conclude that the company did not genuinely prioritise safety over other concerns such as budgets and commercial success and it also weakened seafarer commitment to participation in such meetings.

It was not only the way in which matters raised at safety committee meetings were dealt with, which impacted upon seafarers’ perceptions of their usefulness and effectiveness. Company ethos, and wider approaches to human resource (HR) management, impinged on the effectiveness of safety committee meetings and indeed communication about safety from the bottom up more generally. On several ships seafarers reported being afraid of being seen as ‘trouble makers’ on board and/or of receiving poor appraisals from senior officers if they raised a safety matter that might place the officer concerned in a poor light which would result in ‘no re-hire’ for themselves. Similar findings are reported in Bailey (2006) and Bhattacharya (2007).

They are officers, I cannot stop them what they do …I never make complaint… I feel if I make a point maybe they make a report … they can reverse everything…I want to work sea for my family. (AB, Boxline)

Seafarers were also concerned about the creation of ‘aggro’ on board from the point of view of their own ‘survival’. They were afraid that officers, and supervisors, might be ‘on their case’ if they displeased them and that fights could break out between peers. On one ship operated by Boxline there were fears that racism undermined the extent to which those in the lower echelons of the hierarchy could rely on Captains of a different nationality to protect them if they were mistreated by officers. Ratings suggested that white officers would effectively protect ‘their own’ in the face of any disputes between whites and non-whites.

The captain would not listen to us because they are the white colour you know. (AB, Boxline)

This reinforced fears about displeasing officers and undermined the possibilities for more free and honest communication about safety-related matters. Thus HR policies relating to decisions about permanent vs temporary contracts, appraisal systems, and
equality of opportunity all impacted on seafarer approaches to risk and its management in ways which are likely to be unanticipated by companies. Where seafarers are on temporary contracts with a possibility of ‘no re-hire’ at the end of every voyage the attitude of seafarers is more likely to be to stay out of ‘trouble’ even where keeping quiet about something might compromise safety. Where seafarers are afraid that closed appraisal systems (i.e. those where seafarers do not have the opportunity to read or comment upon their reports) may jeopardise their future employment they are likely to attempt to avoid irritating their senior officers. Finally, in relation to these examples, in organisations where racism is perceived to pervade, seafarers are likely to feel very vulnerable on board and will say little to challenge more senior officers or shore-side staff regardless of any potential safety implications. These findings begin to indicate the way in which seafarers perceive company attitudes to risk and safety management through a holistic ‘lens’. Their understanding of what is important to companies is sophisticated and complex and their own behaviour is affected by their broader understanding of the real motivation and requirements of the companies they work for. Thus they differentiate between what really matters to a company and what is ‘lip service’, what represents genuine commitment and what represents efforts to ‘cover your back’. Inevitably seafarers listen more carefully to messages about risk from those they believe to be genuinely committed to risk avoidance. Equally they contribute more to risk management where they feel their contribution is genuinely welcomed and desired.

Other than the safety committee meetings, companies adopted a number of strategies to assist in raising awareness of particular hazards. In the case studies considered here these included the production and distribution of posters and pamphlets and the conduct of drills. Generally posters and pamphlets seemed to be relatively easily forgotten by seafarers who tended to feel a bit overwhelmed by paperwork in the conduct of their daily lives on board. Posters could soon fade into the day to day scenery as seafarers passing them regularly no longer ‘saw’ them.

[Y]ou’re inundated with posters and stuff like that, and quite often people just switch off to it all you know. (Chief Engineer, Hardacre)

Drills could be helpful but were less influential than might be expected and were said to sometimes be combined, in order to get ‘several ticked off at once’, and to sometimes be written up but not actually undertaken. These latter approaches clearly undermine the capacity of drills to influence risk awareness and assessment. Such failings are similarly highlighted by the head of the MAIB, Steven Clinch, in his introduction to the MAIB Safety Digest January 2012.
Further factors relating to safety communication on board

There were innumerable examples of the ways in which the detailed practice of safety management by companies served to reinforce or undermine the safety messages they sought to convey.

*Undermining the safety message*

At *Vizla* staff were conscious of the difference between the company approach to health and safety and the company approach to environmental protection. In relation to the former the company was deeply committed to a drive to improve environmental protection and had lifted all budgetary constraints with regard to such matters (Sampson 2011). Thus any measure deemed important by shore-side management could be adopted regardless of how much it cost or how much had already been spent on the area in the financial year. Managers were aware of, and commented on, how this had never been the case with regard to safety equipment. To some extent this drive therefore served to undermine the perception of a corporate commitment to occupational health and safety. Equally the company had made some purchasing decisions in former years which served to undermine the perception that they lived up to their own safety rhetoric. One example related to the provision of survival suits for each seafarer on board. For as long as the regulations only required survival suits to be available for the nominated ‘fast rescue boat’ personnel, the company stuck to this limited provision. This was notwithstanding the fact that many vessels traded in cold regions where survival suits could make a significant impact on the life chances of a seafarer in the water. It was also notwithstanding the fact that some national flag states¹ already insisted on the provision of survival suits for all personnel on board. However, once the IMO SOLAS regulations were amended, to incorporate a requirement for survival suits to be provided for all seafarers on board, the company brought in survival suits as quickly as possible wanting to be seen to outpace the regulatory requirement and provide suits to all seafarers before the new regulation had come into force. They also claimed to make a decision to purchase survival suits of better quality than the minimum required standard. In the light of their previous stance this tended to appear to seafarers as another PR strategy rather than a genuine commitment to safety.

One of the overwhelming impressions conveyed by seafarers and shore staff at *Vizla* was that customers were accorded huge importance by the company with regard to its strategy and set of priorities. This could lead *Vizla* to be risk averse, in some respects, which could be beneficial in terms of health and safety on board. However, there was open acknowledgement by staff at sea, and ashore, of the pressures to prioritise profit over safety that could be placed on seafarers by the shore-based middle management. Such managers were under pressure from charterers and it was said that large clients could exert considerable influence which translated into heavy pressure passed on to Captains – always by telephone – from shore side staff. Senior management in the

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¹ The company did not generally register vessels with these flag states and if/where they did they would comply with regulatory requirements.
organisation appeared oblivious to this situation although it is likely that they were fully aware of it and recognised that in this way the company could appear to be committed to safety and could cover its back should anything untoward occur whilst at the same time making concessions to clients to appease them, even when this could compromise safety. It is worth noting that Walters et al (2011) also observed that charterers and others in the supply chain, such as port authorities, may put such pressure on Captains

At Boxline there was a perception amongst some seafarers that the company were keen to meet regulatory requirements and to ensure paperwork was in place to protect the corporation in the event of any mishap. These sea-staff did not hold the view that the company was genuinely committed to safety and this seemed to relate to issues of cost-cutting and budgetary restraint. Concrete examples relating to the daily operation of vessels included a decision not to test heavy lifting gear despite safety certification having expired. This decision remained in force until the vessel was due to visit the USA where fears, that the US coastguard would identify the deficiency, led to a rectification of the problem.

The captain actually sent them a message and said ‘look, it needs to be done’… We could have been in trouble in the States quite easily if somebody had found out. Then he pointed out … ‘the superintendent could be in prison for it’. So I think that got through to them, they said oh yes we’ll get a firm in, in Singapore (Chief Engineer, Boxline)

Similar examples of what was regarded as ‘penny pinching’, which seafarers felt potentially compromised safety, included the replacement of ‘able bodied seamen’ (ABs) with ‘ordinary seamen’ (OSs), a reluctance to provision vessels adequately with regard to Personal Protective Equipment (PPE) such as gloves and with food, and a reluctance to supply additional seafarers (riding crew) for necessary maintenance.

The smallest of the companies, Hardacre, took pains to communicate to their crews that safety should never be compromised in favour of profit. Managers were able to identify a number of occasions where this message was specifically communicated to Captains. However in this case, just as with Boxline the message was not entirely believed by many seafarers. Some identified a variety of cost cutting measures as evidence that the company was not genuinely committed to safety. Chief amongst these were cost cutting measures relating to crew. Seafarers were uneasy about the employment of East European nationals with poor English language communication skills and also cited a move from the employment of two second engineers to the employment of just one with the support of a third engineer. Moreover a number of relatively trivial matters from the point of view of the company ‘bottom line’ were of considerable symbolic significance to seafarers in communicating the company attitude towards them. At the time of the fieldwork the company were instituting some changes including a requirement that when crews changed over departing crew would stay on board until 6pm. The seafarers felt that the company were paying little heed to the impact of this decision upon their
welfare and that this demonstrated disregard for them and their feelings. Similarly, seafarers were incensed that in the course of long journeys to join a vessel the company refused to cover the cost of refreshments. An example was provided of refusal to reimburse the costs of a cup of coffee and a cheese sandwich costing a total of £4.60. Such symbolically significant actions conveyed a strong message to seafarers about their relative importance and value to the company. They were unable to take seriously a corporate commitment to their personal safety in the light of such evidence and had formed a view that managers were only concerned to avoid the costs associated with accidents and/or to protect their own track records in pursuit of promotion.

The extent to which the safety message which ship operators seemed to want to get across to their workers was de-railed by such actions was summed up extremely well by one seafarer who commented that:

Having [East Europeans] on the ship is cost effective. It saves money and they’re not bothered whether they can speak English....and the next meeting they tell you how concerned they are about safety. You think, ‘they’re just lying, all they’re bothered about is money’. (Seafarer Hardacre)

At Wyvern an issue which was regarded by seafarers as relating directly to safety had particular symbolic power with regard to its capacity to undermine the company message about safety. This concerned a crack in the deck of a vessel (previously mentioned) which was not repaired until it expanded in size after the vessel encountered some heavy weather. In this instance the crack had been raised in a safety committee meeting and the matter was referred to shore-side managers. The lack of action served to reinforce the impression amongst seafarers that managers were only interested in feedback which told them that ‘everything was alright’.

At Roberts there were a number of issues which had the potential to undermine the perception amongst seafarers that the company was committed to safety. Chiefly these consisted of the approach to crewing which resulted in officers working six on six watches producing fatigue, insufficient fire fighting equipment such as BA sets, and an awareness of a number of significant incidents on board such as collision/groundings, fires, and mechanical problems. It was interesting that notwithstanding these pressures for the safety message of the company to lose credibility with seafarers, this was not the case in practice, and seafarers generally held the view that the company commitment to safety was both high and genuine. The reasons for this are considered within the next section.

Conveying commitment to safety

Just as crew reductions could undermine the safety message conveyed by a company so too could the reverse occur. At Vizla for example, although it was not a widespread view, several seafarers had been convinced that the company was genuinely committed to safety having witnessed the provision of extra officers to vessels engaged on voyages which involved long periods of pilotage.
It was at Roberts however where staff were most convinced that despite limitations placed upon the company with regard to the need to turn in a profit, the management were genuinely concerned with seafarer safety and wellbeing. Seafarers insisted that they were not under pressure to sail if, on leaving port, crew would be fatigued and that in severe weather the company was happy for them to seek shelter and/or go to anchor.

**Example One**

Interviewer: "You said as well that like if you feel people have not had enough rest that you’ll stop the ship

Captain 1: That’s right yes, stop the vessel, I stopped it already quite a few times actually.

Interviewer: *And the company you’ve never had any kind of come back?*

Captain 1: No no problem at all, I call them up, before stopping and I tell them and they say ‘yeah no problem’. No pressure at all. (Captain 1, Roberts)

**Example Two**

Last trip on a ship, I had to stop the ship twice for fatigue. Once for myself, once for sailors. Nobody likes doing that though, but it’s all there in black and white in all the company’s rules and regs. (Captain 2, Roberts)

There was a belief that commercial pressures could be successfully resisted by sea-staff without any negative comeback and that in some areas the company went beyond the minimum level of provision with regard to PPE, for example providing prescription safety glasses where required.

Whilst at Roberts there were examples of crew being replaced by cheaper nationals (in this case from Eastern Europe) and measures of economy relating to spare parts, these actions were not generally interpreted as negating the power of the corporate message about a commitment to safety. Seafarers persisted in their belief that management were committed to safety. One powerful reason for this appeared to be the kind of human resource management practiced by the owner/operator company. Seafarers talked about feeling ‘part of the family’ and suggested that managers and owners cared to ask their views about things and to seek their opinions. These were not perceived to be subsequently ignored and seafarers could cite examples of where, having expressed a view, they had seen action taken in accordance with it. They also felt that they were not pressurised to work at dangerously fast levels on board and that if they thought a task was too dangerous this would be accepted without argument. Superintendents had close relationships with staff on board and were open to talk to any crew member on the occasion of any visit and responses to issues raised at safety meetings were generally
quick and were regarded as supportive by those on board. There was also a connection made between the company ‘treatment’ of seafarers in the event of emergencies or illness. In such cases the company was seen to look after seafarers very well and provision for injured/ill seafarers included not just repatriation at no cost but also up to six months of paid sick leave.

This is a family owned company, I think they go above and beyond, I had a tumour taken from my liver, which with most companies after a few weeks I would have been struck off the books, I was off 6 months, full pay, no pressure to come back to work whatsoever, come back when you’re healthy, and it’s not just me, I’ve seen lots of cases like that………… this company will actually pay for a private clinic, to get them back, whereas with other companies it’s a cost issue, you’re more of a man, you’re considered for your manpower, you’re one of the people. (Roberts)

**The example of fatigue as a risk factor**

There were two factors routinely said by seafarers to increase levels of risk on board. These were ‘fatigue’ and ‘bad weather’. At Roberts seafarers made it clear that they felt that they could always seek shelter/go to anchor in bad weather.

In other companies there was also an expectation that severe weather could/should be avoided if possible. However, when it came to fatigue seafarers described situations that were more complicated and which demonstrated to them the seriousness of their companies’ intentions when it came to safe operations. The management of Roberts sent a clear message to seafarers that if crew were fatigued then vessels should delay sailing until adequate rest had been taken.

The hours of work regulations are obviously statutory and they are managed by the master on board and it is in our quality system, it states that if people are going to be working excessive hours then he is within his rights to stop the ship, drop the anchor and allow everybody to catch up on their sleep until he’s happy that everyone is well rested and able to go on with their duties, and this does happen, it’s a busy industry and the master is fully supported, he phones up and says look you know we’ve been tank cleaning all night and we’re due in port tomorrow but we need a rest, yes that’s not a problem. (Manager, Roberts)

It is possible that the small crew sizes of the vessels combined with the family ethos of the company to produce a concern for the mitigation of fatigue and certainly it seemed to be the case that seafarers regarded the instruction as genuine. In other companies the picture was less straightforward however.
At Vizla on some trips the company ensured that an additional officer sailed with the crew. On others where seafarers found they were unable to abide by work-rest hours regulation the company was less obliging and seafarers reported experiencing fatigue. The management of Vizla asserted that a vessel could delay sailing any time that seafarers were suffering fatigue but it was apparent that the expectation was that this would never happen and the company were clear that a Captain would have to provide a thorough account of the reasons why this had occurred if s/he ever took such action. This in itself should be expected to act as a deterrent to Captains who would be reluctant to be dragged through the rigmarole of providing such a detailed justification. Shore-side management reported that seafarer fatigue was raised as an issue at every seafarer seminar held by the company. Equally seafarers indicated that fatigue was a problem and that crew sizes were generally too small with particular burdens falling on chief officers. However, seafarers and some shore-side managers felt that sea-staff were in a no win situation. In dense fog for example shore side management described how a Captain would never be expected to leave the Bridge and would similarly be expected to respond in port to whatever demands were made of him/her. Equally they were aware that no sane seafarer would interrupt cargo operations because of fatigue as this would represent commercial suicide. By the same token managers laughed aloud at the idea that the company procedures as laid out in the safety management system would be followed in relation to a fatigued officer on watch calling the Captain to relieve him/her because of tiredness. They recognised this as a complete fiction which they would never expect to encounter in reality. However, they also expected seafarers to appear to be complying with work-rest hours on paper. In essence they had passed responsibility for fatigue onto seafarers by ignoring all efforts by sea-staff to raise the issue and have it addressed at a company level, and instead making seafarers aware that fatigue management was their problem and not the company’s. The company attitude as expressed by the Vice President was that fatigue was more a matter for personal leadership and management on board and was not a company responsibility. On the part of the sea-staff there was a fairly strong awareness that if they responded to fatigue by delaying the departure of a vessel, or if they truthfully recorded their working hours and these exceeded the regulatory maximums then they would be dismissed. In support of this view, they described an incident which was much talked of in the company. It involved a Captain who delayed bunkering for eight hours prior to a loaded voyage because crew were exhausted. He signed off at the next port and was never seen again. He was presumed to have been dismissed and seafarers held the view that the company was not like some where you might be allowed to take the vessel to anchor to allow crew to recover from fatigue. They suggested that if you tried anything like that with ‘this’ company then ‘you might as well book your ticket home’.

At Boxline watchkeepers on the deck side described having experienced regular periods of fatigue. This was generally attributed to port calls or external factors such as rough weather. Whilst the issue seemed less acute than at Vizla the general approach of the company was similar. Shore-side management recognised that the introduction of new measures relating to new regulations such as ISPS did produce increased workload on
board and they recognised that the completion of this work was achieved without the provision of an increase in personnel. Nevertheless, they once again insisted that fatigue management was achievable on board, and by implication that any failure to manage fatigue was a failure of the on board team rather than a responsibility of shore side management. They described for example how there had been occasions when vessels delayed sailing because senior engineers were fatigued as a result of undertaking substantial work in port. The engineers were criticised as being unable to delegate in such circumstances and the implication was that the delays to the vessel schedule should somehow have been avoided.

There were two companies which employed ‘six on six off’ watches – Roberts and Hardacre. In both cases seafarers commented that it was impossible to get six hours of rest in an ‘off period’ as a result of disruptions from meals, drills, alarms and so forth.

However the general attitude in both companies was one of acceptance and fatigue was seen to some extent to be part and parcel of the job. Roberts was the only company, of all of those involved in the case studies, where there appeared to be a genuine intention for ships to be delayed if necessary to allow seafarers to rest. Like Boxline and Vizla shore side management at Wyvern also asserted that sea-staff could delay sailing from port and go to anchor if crew were fatigued. However, the perception of senior staff tended to be that although this was said by the company it was not their intention that seafarers should actually follow the ‘advice’.

“Now, we can have a heavy week where there’s very little sleep, because we’re leaving – now the company will say “Captain, if your crew are fatigued, stop the ship.” But they’re only saying that, they don’t really mean it.” (Captain, Wyvern)

**Hierarchy and awareness of company view of risk and safety management**

One of the findings which emerged from our questionnaire data, collected in an earlier phase of the study (Bailey et al 2006, Bailey et al 2007), was that shore-based managers and senior officers perceive risk more similarly than managers and junior officers or managers and ratings. This suggests that companies are reasonably effective at cascading safety data and safety messages down to senior officers aboard ship, but are less successful in communicating their message to other seafarers that are employed on board. In the course of the case studies we identified several possible factors which might contribute to this situation.

In all five case studies a picture emerged of closer and better communication between senior officers on board and shore-based managers than between other ranks and shore-based managers. The company where this applied least was Roberts where longer-serving seafarers of all ranks did identify with the company and did have regular face to
face contact with shore-based staff such as superintendents and even vessel owners who also took the time to visit their ships in port.

Nevertheless, even at Roberts where a strong ‘family’ feeling prevailed most telephone and written communication took place between senior officers (usually the top four) and the office. Company seminars which were reported to provide a good opportunity to exchange views and information with the shore-based management included some junior officers as well as seniors but were not extended to ratings.

At Wyvern the general perception amongst crew members was that it was only the Captain who had contact with shore-based management. This view was particularly expressed with regard to any communication regarding safety. The on board hierarchy was fairly strongly established aboard Wyvern vessels and communication was very linear through the ranks.

[Any issue on board] always goes to the captain. From the ratings which is the crew and then to the officer, [then] to the chiefs. The chain of command is always, unless otherwise emergency – let’s say, you are the only one remaining onboard alive!” (Third Officer, Wyvern)

Shore-based management also anticipated that it was normal and appropriate for communication to come from the Captain.

The situation at Hardacre was similar in as much as it was largely the Chief Officer and Captain who were said to have regular contact with shore-based management. In relation to ship visits these were largely conducted by the vessel superintendent and the company safety officer, although the General Manager had also been on board. The superintendent and the safety officer were reported to speak on a one to one basis with the Chief Engineer and the Captain and it was apparent that some seafarers would have preferred more opportunities for contact with shore-based staff. As one third engineer put it ‘I would definitely get people from the office to come and see the views, get the views, of all the crew’.

At Vizla and Boxline there were very similar systems for regular ship-shore communication. Communication with the ‘office’ tended to come via the Captains and Chief Engineers. Such communication was relatively frequent and took the form of email and telephone contact. Both companies had relatively stable crewing in terms of officers and particularly senior officers and this assisted in building relationships between office managers and vessels. It was interesting that at Boxline however the superintendent was identified as being much more helpful to the engineers than to the deck side officers, and in addition a number of the shore-side management staff were said to be out of touch with things on board because it had been so long since they had been at sea. In both companies the health and safety divisions made significant efforts to pass on information to vessels about recent incidents, safety developments and near misses. At Vizla, however, in an innovative development the HSEQ department had initiated something akin to a web based ‘discussion board’. In essence this allowed
seafarers to email the HSEQ staff with any concerns that they had or any new knowledge they had acquired (about a particular task or piece of equipment for example) and their emails were fed into a so-called ‘knowledge pool’ for others to read and learn from. Vizla also ran ‘seafarer conferences’ four times a year in different countries and there was a rolling programme to bring Chief Officers into the shore-side offices for six months to facilitate ship-shore ‘understanding’. At any one time there were said to be between five and ten of these ‘secondments’. Finally the company reported that they publicised contact details for both the company Vice President and the DPA to enable seafarers to contact them directly should they wish to. However, nobody had ever been known to bypass the Captain in relation to the DPA and it is most unlikely that they would have contacted the VP directly. Despite all of these efforts however Vizla had identified via its own investigations that junior staff were not fully ‘keyed in’ to the corporate safety message and that they believed that the company actually expected them to take risks and short cuts where necessary for commercial advantage. Whilst the company did not understand why this view persisted, it emerged in the course of our case studies that they presented several conflicting messages to seafarers as a result of their decisions and priorities. Moreover, it appeared that sometimes the efforts they made to increase ship-shore understanding only widened the gulf between frustrated seafarers and management. A powerful example was provided by an account of a seafarer conference where in relation to environmental issues seafarers raised the issue of insufficient port reception facilities for oily water waste. They told management that if slop tanks could not be pumped out properly in ports then the only option for seafarers was to pump waste overside (illegally). The VP of the company reportedly covered his ears saying that he did not want to hear anything about these kinds of practices and the group were told they would return to this issue later in the conference. The seafarers noted however that the topic was never returned to and when two years later a vessel was found to have employed so-called ‘magic pipes’ to empty a slop tank overside, the seafarers concerned were sacked. A disillusioned seafarer commented that however ‘the Vice President is still the Vice President’. In this the company approach echoed the stance it took in relation to the question of fatigue being repeatedly raised by seafarers. The power of these kinds of accounts in undermining the belief that seafarers have in the rhetoric of their companies was found to be largely underestimated by shore side personnel. Nevertheless, such examples gave rise to a strong belief that companies wanted to cover their own backs whilst requiring seafarers to take risks and to break rules in pursuit of commercial success. It is worth noting that Abou-Elkawam’s (2011) study of the tanker sector and seafarers’ environmental concerns has identified similar tensions.

Conclusions

In the course of the case studies a number of key findings have emerged. Firstly it is apparent from the case studies that the considerable effort that some companies put into mapping and documenting safety strategies, and their underlying corporate principles,
does not necessarily translate into a more universal consensus across a company regarding the corporate safety strategy. In this, both seafarers and shore-side staff readily distinguish between what they regard as ‘real’ statements of intent and what they regard as ‘flummery’ designed to impress charterers, clients, and inspectors. In the small family run company included in the case studies the corporate apparatus and publicity stating and reaffirming company commitment to safety did not compare with that available at Vizla or even Boxline. However, it was nevertheless at Roberts that seafarers were most consistent in their view that the corporate safety commitment was genuine and could be trusted.

The case studies also shed light upon the means of communication about risk which seafarers appeared to favour. In the main, seafarers appreciated the bulletins and memos they received from companies documenting incidents and trends both within, and sometimes beyond, the company. These frequently fed into safety committee meetings which were identified as more effective in relation to the transmission of ‘top down’ messages than they were as two way flows of information. Having said this it also emerged that the effectiveness of safety committee meetings could be undermined by a variety of human resource procedures on board such as closed appraisal systems and temporary employment contracts. Furthermore, racism was identified as a block to the effective participation of lower ranking members of mixed nationality crews in safety management systems which relied to some extent on whole crew participation. The most effective communication appeared to be that which was undertaken on a face to face basis and in the company with the most open and inclusive approach to communication with seafarers (Roberts), employees were the most likely to follow management guidance on the prevention of fatigue related incidents and the maintenance of safety.

One of the most compelling findings from the case studies relates to the extent to which seafarers respond to the perceived commitment of their companies to safety and to regulatory compliance more generally. Where seafarers felt a company held a genuine commitment to safety, as in the case of Roberts this impacted upon their own readiness to take radical action should safety appear to demand this (such as anchoring a vessel to allow for rest or in bad weather). Where companies were not perceived to be entirely genuine in their safety rhetoric seafarers were far more fearful of such radical action and frequently felt that it could result in their dismissal. In this, the power of stories passed from seafarer to seafarer about things that had happened to personnel in the fleet who had taken actions of this kind were persuasive. Seafarers were also strongly influenced by their company’s response to issues relating to safety when these were raised on board. Where companies were slow to react to these issues or where they made decisions to circumvent safety in favour of cost-savings, seafarers took such actions to be powerful indicators of the company’s true position vis a vis safety. Similarly, seafarers appeared to be influenced by their company’s more general attitude to their welfare and where they found this wanting they also failed to believe that the company was genuinely committed to safety and the principles of its own safety.
management system. Thus seafarers’ understanding of the corporate stance vis a vis safety was found to be very holistic. As a result, companies could potentially spend a considerable amount of effort, time, and perhaps money, attempting to consciously convey one message about safety whilst concurrently, and inadvertently, undermining it on a daily basis as a result of the actions and policies of particular personnel and corporate divisions (for example middle managers and human resource managers).

Acknowledgements

We would like to thank the five companies which generously agreed to take part in this study. We owe further thanks to all of the individuals at sea and ashore who gave up their time to contribute to our research.

We are grateful to our colleague David Walters for his assistance with data collection.

This research was generously supported by The Lloyd’s Register Educational Trust.
The Lloyd's Register Educational Trust (The LRET) is an independent charity working to achieve advances in transportation, science, engineering and technology education, training and research worldwide for the benefit of all.

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