Decoupled implementation? Incident reporting in Chinese Shipping[1]

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Abstract

The Occupational Health and Safety record is relatively poor in shipping and under-reporting of incidents is a concern in the industry. Much previous research investigated why workers did not report, this paper shifts the focus to examine whether management genuinely welcomes safety related reports in the context of Chinese chemical shipping. It reveals a functional decoupling between policy and practice related to incident reporting despite external monitoring. While companies had policies and procedures to encourage reporting, in practice the management associated seafarer competence with the number of problems reported and discouraged the crew from reporting problems which would be difficult or costly to solve. The findings suggest that to address the issue of under-reporting, it is more appropriate to deal with the problem of decoupling than to focus on changing crew's behaviour.

Keywords

International Safety Management Code, Chinese chemical shipping, Decoupling and interaction, Incident reporting, Occupational Health and Safety management

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Introduction

Shipping is a relatively risky industry and its safety record has been a concern of the stakeholders (Bloor et al., 2000; Robert and Marlow, 2005). For example, a Danish paper suggested that Danish fleet seafarers were about six times more likely to die from occupational accidents compared with Danish workers ashore (Borch et al., 2012; Hansen, 1996). Against this background, and spurred by a few high profile sea accidents, particularly the tragic loss of the *Herald of Free Enterprise*, the International Maritime Organisation (IMO) adopted the International Safety Management (ISM) Code, which came into force worldwide in phases between 1998 and 2002. One of the key components of the Code is the requirement of incident reporting from ship to shore. Despite this requirement, it has been found that under-reporting remains a serious problem which undermines the proper functioning of a safety management system in this industry (Ellis et al., 2010; Hassel et al., 2011; Luo and Shin, 2016; Psarros et al., 2010).

Following the ISM implementation, a number of studies were undertaken to identify barriers to reporting. Oltedal and McArthur (2011) did a questionnaire survey on the Norwegian merchant fleet, Kongsvik et al. (2012) conducted another one on offshore service vessels operating on the Norwegian continental shelf, and Lappalainen et al. (2011) conducted an interview study in Finnish shipping companies. These studies revealed a number of significant factors that encouraged or inhibited incident reporting, including safety training and seafarers' competence, safety management, general safety practice, feedback on reporting, and perceived demand for cost-effectiveness and efficiency. Bhattacharya (2011) took an ethnographic approach; he went on ships and studied reporting in practice. His research findings suggested that seafarers were reluctant to report for fear that they would get blamed, or even lose their jobs, for reported incidents. This fear indicated a blame culture which remains operative in the industry (MAIB, 2001).

This culture of blame can hardly suggest that management genuinely encourages incident reporting. As such, instead of asking why employees do not report, it is perhaps more appropriate to ask to what extent employers welcome reporting. This question is important since if employers do not heartfeltedly welcome such a practice, any effort aiming to make

seafarers report would be in vain. This paper addresses this issue by examining incident reporting in the Chinese chemical shipping industry.

Decoupling and interaction

Very often organisations struggle to comply with externally imposed legal and regulatory requirements and to cope with the pressure of dominant public opinions and views of important institutions, because these requirements and pressure appear to be in conflict with organisational efficiency and compromise profit-maximising activities. Yet, for legitimacy and survival, compliance has to be demonstrated. In this context, Meyer and Rowan (1977) noted that organisations may handle this conflict by decoupling between policies and practices. On the one hand, they adopt institutionalized policies, rules and procedures in line with public opinions, the force of laws, and views of important institutions; on the other, rules are often violated in practice and evaluation and inspection systems are subverted or avoided.

Decoupling provides an important concept for empirically examining organizational policy and regulation implementation (Egels-Zandén, 2014; Fiss and Zajak, 2006; MacLean and Behnam, 2010; Wilhelm et al., 2016). Increased public sensitivity and more and more stringent legislation related to issues of environment, business ethics and Occupational Health and Safety (OHS) have forced organizations to adopt various Corporate Social Responsibility (CSR) programmes and policies. Yet, numerous empirical research findings suggest that in many cases such adoptions mainly serve as 'a form of window dressing, symbolic gestures designed to give the appearance of satisfying regulatory requirements and enhance external audiences' perceptions of organizational legitimacy while still allowing for "business as usual"' (Aravind and Christmann, 2011; Christmann and Taylor, 2006; MacLean and Behnam, 2010; Weaver et al., 1999; Yeung and Mok, 2005). In a study of the ISO 14001 implementation, for example, Aravind and Christmann (2011) found no significant difference in environmental performance between certified and non-certified facilities for the overall sample, though a sub-group of high-quality implementers had better environmental performance than their non-certified counterparts.

Furthermore, past research has offered a nuanced understanding of coupling and decoupling between policy and practice. Weaver et al. (1999) examined the implementations of corporate ethics programmes in the 1994 Fortune 500 listed service and industrial companies and differentiated between 'decoupled' and 'integrated' implementation. They found that while executive commitment to ethics was positively associated with integrated implementation, top management commitments to financial and strategic concerns was significantly related to decoupled implementation. Christmann and Taylor (2006) studied the implementation of the ISO 9000 quality management system in Chinese supply firms and differentiated between 'symbolic' and 'substantive' implementation. They noted that customer monitoring and sanctions were key drivers of implementation quality. This finding is widely supported by other studies (Egels-Zandén, 2014; Jamali et al., 2017). According to Gunningham et al. (2004; 2005), when external pressure is strong, organizations may go 'beyond compliance' in order to preserve corporate reputation and avoid economic sanctions such as consumer boycotts, troubles in future project expansion and development, and expensive lawsuits. Egels-Zandén (2014) observed a few factors that would help integrate CSR policy and practice: 1) increased external demands; 2) more effective external monitoring and sanctions; and 3) internalised external demands. Egels-Zandén (2014) further noted that external demand and monitoring may raise workers' awareness of their rights and empower them to demand for better employment conditions, which can also put pressure on management.

Though previous research focussed on drawing out individual factors, the evidence nevertheless showed that these factors, as well as the actors behind, interact with each other. When the external demands from customers or clients are strong with stringent surveillance and sanctions, they may empower workers to protect their rights, and under both external and internal pressures, the management team of the firm would be more likely to internalise such demands and show commitment to integrated implementation. As such, the interaction between the involved parties is an important factor affecting policy and practice integration.

In shipping Port State Control (PSC) is one common mechanism of external monitoring. This is the inspection of foreign ships by PSC inspectors in national ports to verify that the ship is managed and operated in compliance with international regulations including the ISM Code. As chemical shipping involves more potential hazards than other shipping sectors, a number of extra (external) inspection regimes have been put in place, including the Ship Inspection Report Programme (SIRE) initiated by oil majors (such as Shell and British Petroleum) and the Chemical Distribution Institute (CDI) – Marine inspection programme, to safeguard maritime safety and environment. These inspection regimes are more stringent than PSC inspection, and chemical tankers have to pass their periodic inspections in order to conduct business with oil majors and major clients in chemical shipping.

Regarding management commitment, it is explicitly stated in the ISM Code that successful implementation requires commitment from the top to invest adequate resources and to empower employees to participate in OHS management activities, such as risk assessment and incident reports, without fear of being blamed. However, as mentioned earlier, a culture of fear which prevents seafarers from reporting incidents is prevalent in shipping (Bhattacharya, 2011). Oltedal and McArthur (2011) and Kongsvik et al. (2012) found that the focus of management on efficiency when under commercial pressure also discouraged seafarers from making reports. More importantly, studies on ISM implementation and OHS management in shipping revealed that the management tended to prioritise financial gains at the cost of OHS (Sampson et al., 2013; Xue et al., 2017). These findings point to a lack of commitment from top management to OHS and ISM implementation.

The interesting question arising here is why external surveillance has not resulted in commitment from management to OHS in shipping. The answer we believe lies in the interaction between the management, seafarers, and external inspectors who carry out ship vettings. Therefore we examine this interaction in the context of chemical shipping and explore how this interaction shapes the practice of incident reporting. By examining this hitherto unspecified factor, this paper will add a new dimension to the understanding of policy and practice in general and incident reporting in particular. As mentioned above,

chemical shipping is subject to more stringent external monitoring. It serves as a 'critical case' (Flyvbjerg, 2006) – if stringent external monitoring does not generate genuine commitment to OHS in chemical shipping, less stringent monitoring in other shipping sectors is more likely to fail. As such, the findings of this paper are relevant to other shipping sectors.

Studying Chinese chemical shipping

This study focused on Chinese shipping industry. Since the 1980s, the Chinese shipping industry has been growing rapidly. According to recent statistics (UNCTAD, 201), China is the third largest shipping nation in the world owning 8.9 per cent of the world fleet by tonnage. China also has the largest seafarer population in the world, more than half a million by the end of 2015 (CMSA, 2015).

The research was conducted in two Chinese chemical shipping companies located in the Yangtze delta area in China. Company 1 (C1) is a subsidiary of its Group Company which specialises in oil and chemical transportation. By the end of 2015, the company owned 21 special cargo carriers half of which were chemical tankers. Company 2 (C2) was established by a few strategic investors and by the end of 2015, it operated 15 chemical tankers. The fleets of both companies mainly traded in the Asia Pacific region, with a few large ships trading globally. Both companies had stable cooperation with major international petrochemical companies, and their ships passed external inspections from oil majors and chemical producers such as Shell, BP, Exxon-Mobil, and Dow Chemical.

Both companies were managed by Chinese managers and their ships were manned by Chinese seafarers. Each company employed several hundred seafarers. While the majority of the crew members in C1 had long-term (5 – 10 years) contracts, only about 15 percent of the seafarer employees in C2 were employed on long-term contracts (usually 3 or 5 years) with the rest recruited through crew agencies.

Shipping management and operations are characterised by a hierarchical management, as well as physical separation between shore-based management and shipboard operations

(Bhattacharya and Tang, 2013). On top of the hierarchy are the directors and senior managers who are responsible for policy making and organisational budget allocation. The lower layer of onshore managers is made up of ship superintendents who look into the routine operation of the ships. Onboard a ship, each seafarer is known by his or her rank which determines their job descriptions and positions in the shipboard hierarchy (see Figure 1). The top four senior officers are captain, chief engineer, chief officer and second engineer who supervise and manage shipboard operations. Junior deck officers and engineers can be promoted to senior officers/engineers by gaining experience and acquiring higher qualifications. Likewise, a deck rating after several years of work experience can be promoted to a bosun, and an engine rating to a fitter.
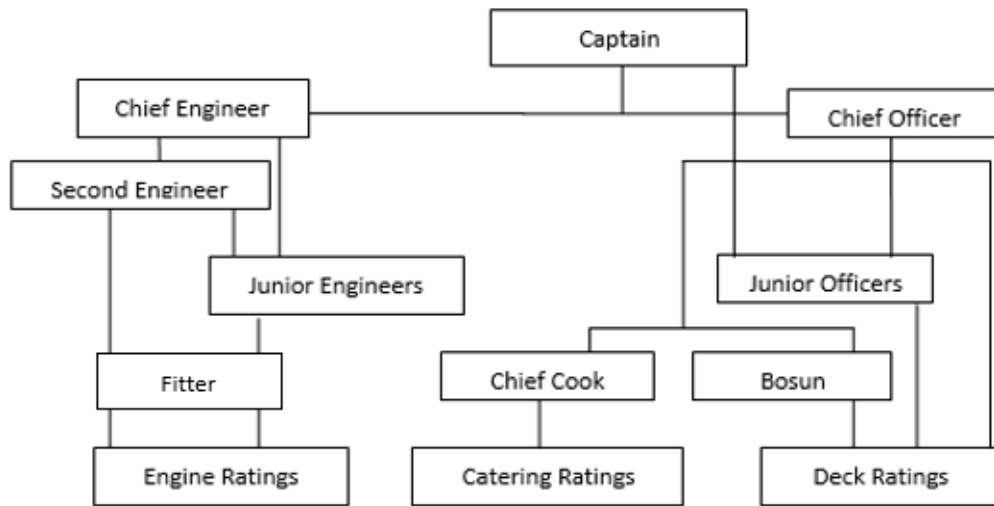

Figure 1. Shipboard hierarchy

This study took a qualitative approach. In order to acquire a rounded understanding of the ISM implementation in the two shipping companies, detailed accounts from both shore-based managers and shipboard seafarers were collected. The field researcher first visited the two companies' headquarters where he collected relevant documents for this study and interviewed 14 managers. The management interviewees are listed on Table 1.

COMPANY 1		COMPANY 2	
Rank	**Sea Qualification**	**Rank**	**Sea Qualification**
Vice General Manager (Safety)	Captain	Vice General Manager (Safety)	Captain

Marine Affairs Manager	Captain	Safety and Quality Manager	Captain
Marine Affairs Superintendent	Captain	Marine Affairs Manager	Captain
Marine Engineering Manager	Chief Engineer	Marine Affairs Superintendent	Captain
Marine Engineering Superintendent	Chief Engineer	Marine Engineering Manager	Chief Engineer
Quality and Safety Superintendent	Captain	Marine Engineering Superintendent	Chief Engineer
Crewing Vice Manager	2nd Officer	Crewing Vice Manager	Captain

Table 1. Shore-based management interviewees

The field researcher also obtained permission to sail with four chemical tankers (two from each company) for four research voyages. The details of the ships and voyages are shown on Table 2. During the four voyages, the field researcher worked with crew members, observed their daily work activities, and talked with them as a routine activity. In particular, he conducted formal and semi-structured interviews with 55 seafarers. Basically they covered the hierarchical structures of a ship as shown in Figure 1. These activities provided an in depth understanding of incident reporting practices from the perspectives of shore-based management and the crew onboard ships. Although all interviews were conducted in Chinese, they were translated and transcribed into English for the convenience of data analysis. The Nvivo software was used to assist data coding and analysis.

	COMPANY 1		COMPANY 2	
	SHIP 1	SHIP 2	SHIP 3	SHIP 4
L.O.A.	90M	135M	95M	100M
D.W.T.	3,700T	12,400T	3,900 T	3,600 T
Tank Coating	316L Steel	Epoxy Resin	Zinc Silicate	Zinc Silicate
Sailing Areas	China, N.E. and S.E. Asia	China, S.E Asia and Middle East	China, N.E. and S.E. Asia	China, N.E. and S.E. Asia
Ship's Nationality	Chinese	Chinese	Chinese	F.O.C
Number of Crew	15	20	16	18

Port of Departure/ Cargo Carried	Changzhou, China/Phenol	Qingdao, China/ P-Xlene	Jiangyin, China/Ethene Diol	Changsu, China/None
Port of Call/ Cargo Carried	Daesan, South Korea/ Phenylethylene	Dalian, China / P-Xlene	None	Mailiao, China/ Dichloroethane
Port of Destination	Shanghai, China	Qingdao, China	Quanzhou, China	Jiangyin, China
Total Days onboard	13	8	7	17

Table 2. Details of ships and research voyages

Regarding incident reports, a number of questions were asked in the interviews with both shore-based managers and seafarers, including their attitude and experience of incident reporting, factors affecting seafarers' safety reporting to the shore-based management, and consequences/feedback of incident reporting. The analysis of the interview data and the field notes revealed that decoupling between policy and practice was common in the two companies.

Incident reporting encouraged?

The ISM Code states that a company should establish procedures to ensure that 'non-conformities, accidents and hazardous situations' are reported to the shore-based management by seafarers onboard ships (section 9.1). Non-conformity is defined as 'an observed situation where objective evidence indicates the non-fulfilment of a specified requirement'. An accident is an occurrence involving personal injury or casualty, damage to property, environment, a ship or its cargo. A hazardous situation is similar to a near-miss which refers to a sequence of events and/or conditions that could have resulted in loss. According to the Code, these incidents and near-misses should be 'investigated and analysed with the objective of improving safety and pollution prevention' (section 9.1). In addition, a company should also consult crew members for the purpose of 'reviewing the safety management system and reporting its deficiencies to the shore-based management' (section 5.1.5).

In the two companies studied, procedures and forms for reporting 'non-conformities', 'accidents' and 'hazardous situations' were in place, and all ships were required to make such reports to the shore-based management on a regular basis. Each of the crew members onboard a ship had the responsibility to report safety-related events to the shore management no matter how minor they were. Safety related reporting was seen as a 'window' through which the management could monitor ship operations and conditions as well as a mechanism to facilitate ship management and improve safety. The managers in both companies claimed to have policies encouraging communication of safety issues. They also expressed understanding that incident reporting was a good practice because lessons could be learned to prevent similar incidents from reoccurring in the future and to 'avoid unnecessary economic losses'.

As for the consequences of reporting, the management frequently made reference to 'non-blame culture' to emphasise their attitude. For instance, a marine affairs superintendent said:

> The company adopts and always practices a non-blame policy. Seafarers are encouraged to report whatever incidents occurred. It is much better that you report ten near-misses than if you hide them but in the end they lead to an accident.

In the Safety Management System (SMS) of C1, it was stated:

> The company guarantees that the person who makes the report will not be treated unfairly; instead, the company will reward those who help improve the company's safety management and environmental protection.

In line with this statement, C1 had a policy to offer a reward of RMB 200 per reported near-miss to the reporting seafarer.

The managers also suggested that it was in seafarers' interests to make incident reports, as one marine engineering manager explained:

> If a seafarer hides problems, he does not fully understand the essence of the ISM Code and the safety management system. If you have identified a problem and made a report, it would be the company's responsibility to solve this problem. If you cover up this problem, however, you would be held responsible when the managers discover this.

However, upon further examination, the managers revealed another, somewhat contradictory view: the fewer reports seafarers made, the better OHS outcome it suggested.

> Generally if they do not report any problem, it is good news. It indicates that the ship is run and managed well. (Marine Affairs Manager, C2)

> If neither the captain nor the chief engineer reports any problem, then this ship is perfect. It shows that everything is in good order. (Marine Engineering Superintendent, C1)

The two quotations indicated a common understanding among the managers of both companies that the number of reported cases was an important indicator of the quality of shipboard OHS management.

One of the main duties of the shore-based management was to monitor and assess whether a voyage plan had been successfully and properly implemented by the crew. From their perspective, the successful completion of a voyage meant fewer reports of any safety-related problems. A marine affairs manager in C2 commented:

> If the crew completed a voyage and did not report any incident or accident, this would mean that the ship did not cause any major economic loss to the company. This is a successful completion of the voyage.

The management of the two companies thus showed ambivalent attitudes: on the one hand, they claimed to encourage reporting of safety issues, and on the other, they hoped to see fewer reports. The question is how seafarers interpreted and reacted to this ambivalence in practice, to which this paper turns next.

Reluctance to report

The safety management policy and objectives were posted in public areas on the ships of both companies. The crew demonstrated a clear understanding of the reporting policy, and was aware that each of the crew members had the responsibility to report safety-related events to the shore management. For example, two third engineers explained in the interviews:

> According to the requirement of the safety management system, any problem, however tiny it is, should be reported. Even if the problem has been sorted out by ourselves, it should reported.

The report must be made. Deficiency reports must be made regularly. It is not realistic if you do not have any deficiency (to report).

Even with an adequate understanding of company OHS policies, the crew acted differently in practice. According to the policies, nonconformity cases had to be communicated to the shore-based management on a monthly basis in the form of 'monthly self-inspection reports'. Seafarers, however, were reluctant to make any report, because reporting nonconformity cases would imply that the crew's safety management onboard was poor. For example, one fourth engineer in C2 said in the interview:

If we report them, it is certainly not good for us. It has the implication that we do not do our work well.

A common view was held among seafarers that if a lot of cases were reported, it would worsen the management's impressions of the crew on that ship. The shore management might think that the ship's leaders were incompetent, as two seafarer officers explained:

If the crew reported lots of problems, the shore management would think: this ship often makes many reports, while other ships do not. The shore management would think that your ship had safety problems and that the ship's leaders were no good.

If we solve all problems by ourselves, this shows that we are competent. Otherwise, if we require support from the shore management, it might mean that we lack competency. Others would have second thoughts about us.

Clearly, the shore-based management successfully communicated to seafarers both the company reporting policy and their belief that fewer reports indicated better OHS results. A chief officer in C2 made this point explicit:

For the Marine Affairs Department, they wanted the ship crew to report fewer problems, right? If we report more deficiencies, it would not be good in the eyes of the company senior managers. It would also involve the relevant shore-based management departments in the problem.

These words revealed another point. As the reported items were likely to be investigated thoroughly by the senior managers or designated persons of the company, crew members were worried that the reported problems would lead senior managers to think that the superintendent in charge of the ship had failed in his managerial and supervisory duty. In other words, they were concerned that superintendents might get blamed because of their reports.

In order to save the superintendents from any blame, the senior officers would normally make informal communication with them before sending a formal written report if a deficiency had to be reported. Through information communication, the superintendent in charge of the ship would provide 'guidance' regarding how the report should be written. One chief officer in C1 explained this process:

> Sometimes, the superintendent hopes that you report by telephone, while other times, they hope you report in writing. If we send a written report directly, it would be very formal. His (superintendent's) boss would also be able to see it, which would affect the superintendent himself. This might not help us. So we would make a telephone call to the superintendent first to discuss the report in order not to annoy him.

To be sure, this strategy was learned through interaction with shore-based management. One second engineer in C2 recounted a story:

> On one ship, the engine of one lifeboat could not be started manually, and we reported this deficiency to the company. Later, a superintendent contacted us, asking the captain to have a thorough check of the problem before reporting it. It was a hint that the ship should not have reported this deficiency.

Seafarers also learnt through experience that shore management would be annoyed if some 'inherent' deficiencies, particularly equipment problems that are difficult and costly to solve, were reported. Some cases were observed during the four research voyages, including the cargo pump problem on S1 C1, the tank heating system on S2 C1, and the anchoring system on S4 C2. They all had functional deficiencies, and it caused the crew troubles to make them work temporarily. However, the management did not want the problems to be reported in written form, as one second engineer said:

> If you submitted a report about an inherent deficiency, they would ask you, 'Should the ship be scrapped to eliminate the problem?'

The reason for discouraging such reports was that if these problems were reported, they would have to be dealt with in accordance with the costly formal procedure set out in the safety management system. As revealed by other studies (Kongsvik et al., 2012; Oltedal and McArthur, 2011), the concern of management over cost-effectiveness prevented seafarers from making deficiency reports. Seafarers were worried that they would give the

management a bad impression if they reported such issues, as a captain in C2 revealed in the interview:

> If I reported a deficiency that could not be solved easily by the company, the company might think that I was intentionally making things difficult.

Safety bonus and promotion

The data has shown that instead of following clearly specified company policies and procedures, the crew learned to read the minds of the managers and superintendents through routine interactions and acted accordingly. In other words, they engaged in decoupling in accordance with management expectations. Why did the crew choose to conform? The main reason was that both companies operated a reward and punishment scheme in the form of a safety bonus. Accident and deficiency reporting could affect seafarers' safety bonus. As mentioned earlier, all the work on ships was well structured across different hierarchical levels, and each position was assigned a specific duty in terms of the division of labour. Therefore, it was quite easy to identify to whom a deficiency was related. The reported items would be assessed by the shore management as evidence when deciding a seafarer's safety bonus in accordance with the company's scheme. In C1, the safety bonus comprised several separate items, including a one-hundred day safety bonus and a fuel consumption saving reward. In C2, it amounted to ten percent of a seafarer's total salary. During the field work, the crew expressed a similar concern for their safety bonus:

> We work here to earn money, and therefore we are worried that they might deduct our bonus. For some deficiencies they would say it's our fault and deduct our bonus, even though we would not think so (Pumpman, C2).

The amount of the safety bonus was basically decided by the shore-based management. Although some crew members felt this was 'unfair', they would get only whatever was given to them.

Furthermore, the safety bonus scheme was collective. When an accident happened on a ship, the safety bonus for the whole crew would be affected. A few personal injuries on the four ships were witnessed and recorded in the field notes by the field researcher, but none of them were reported. One of the cases is below:

The motorman showed me his bloody finger. His finger was hit by a roller, and his thumbnail came off. The cut was briefly treated. Luckily, he was sent to hospital one day later when the ship called the foreign port. On the return voyage, I asked the second engineer how the shore management responded. He said the accident had not been reported. I continued to ask why it was. He replied that if it was reported, the management would think it was caused by a violation of operational procedures, which would lead to a deduction of everybody's safety bonus onboard. But the real cause was fatigue.

Apart from the impact on income, reporting could also affect the promotion prospects of seafarers. In order to be promoted to a higher position, a seafarer would need his company to arrange a license upgrading exam. In such an arrangement the shore-based management would prioritise those whose were seen as good performers, with the reported cases being a key indicator of a seafarer's performance. This was particularly true in C1, where a majority of the seafarers had long-term contracts with their company, as one second officer explained:

If I do not perform well and a problem related to my job was reported, it would affect the company's decision for the arrangement of my license upgrading examination which in turn would affect my promotion. They are all related.

Furthermore, even if a seafarer passed the exam and his license was upgraded, the appointment to a senior position was decided by shore-based management. One chief engineer explained:

If a senior officer does not perform well, it is impossible for him to be promoted to captain or chief engineer. The managers and superintendents have the decisive power on his appointment.

Thus even if a chief officer obtained a captain's qualification, he might not be appointed to a ship as a captain supervised by a superintendent who disliked that person or distrusted his capability. Clearly the shore management was in a very powerful position, which explained why seafarers also considered the impact on superintendents when making reports.

Onboard solidarity

The practice of incident report was further complicated by a sense of solidarity onboard. The crew was literally all on the same boat, and they prioritised good collegial relationships when considering safety reporting. One rating pointed out:

> If you made such a report, you would have offended that person. We all know each other and are not willing to offend others.

This sense of solidarity is not unique to Chinese sailors and in other contexts it was also found to influence incident reporting (Bhattacharya, 2012; Rossignol, 2015). Nevertheless, 'avoidance of conflict and need for harmony', as part of the core values of Confucianism, are upheld by the Chinese people (Fang, 1999). To maintain 'harmony' onboard, a chief officer in C1 explained why and how a captain should take everybody's interest into account:

> When reporting near-misses, captain would consider our interests. Captain is the same as us. We work together, and we are colleagues, brothers. …Once, the ship was sailing at sea, and the third officer was on duty. When Captain went to the bridge, he could not see the sky line as there was a very big ship ahead. Captain immediately took control. Luckily, an accident was avoided. If he reported it, the third officer's career would definitely be finished.

Nevertheless, when an accident occurred which could not be covered up, it had to be reported to the company by senior officers. In such a situation, senior officers also had many factors to consider when making the report. For example, a chief engineer talked about his observations and experiences in dealing with a previous accident report:

> The way of dealing with this is: first, do not associate yourself with the causes of the accident in the report; second, do not associate your colleagues with the causes of the accident; and third, do not associate your managers with the causes of the accident. If you throw all the blame to the company, do you mean that the shore management is not competent? Definitely, this is not good. Then what do we do? Try to find and identify some external environmental factors as the underlying causes. The principle is to minimise or avoid any potential impact on people.

This view was commonly held by senior officers who had experienced one or more accidents. When drafting an accident report, they would try to attribute blame to factors that were beyond human control.

Thus, in order to protect themselves and their colleagues, the crew had to make careful decisions regarding not only what they report, but also how they report it if the reporting

was unavoidable. This practice indicated not only under-reporting but also manipulated reporting.

A façade of continuous improvement

During the four voyages, the field researcher noted that interestingly both companies paid particular attention to near-miss reporting, and to encourage such reports, they adopted an anonymous approach to emphasise a non-blame policy. On the two ships in C1, there were two boxes labelled 'NEAR MISS', one in the meeting room and the other in the mess room. They were there for the collection of voluntary, anonymous reports by whoever onboard witnessed an unsafe act or behaviour. In C2, it was a compulsory requirement that at least two near-miss cases be reported every month.

At the same time, however, the safety management systems of the two companies specified that the reported cases should not repeat what had been previously reported from any ship in the company fleet. The reason was that since all the ships in the fleet had been informed of those cases, repeated reporting could only indicate irresponsibility regarding company notifications. For instance, a chief officer said:

> All the near-miss cases that have been reported previously should not be repeated. If it has occurred once and it occurs a second time, then it proves that your (ship's) management was not good.

According to the general principle of the ISM Code, by collecting and analysing incident and near-miss occurrences, organisations would be able to learn their root causes and make more effective prevention efforts so that mistakes identified would not be made again in the future. This principle is about continuous improvement. Both companies were trying to demonstrate that they had achieved continuous improvement in their OHS management and that they had implemented the ISM Code successfully. In practice, however, the non-repetition rule led to a gradual reduction in reportable cases, instead of a reduction in incident occurrences, as one captain in C1 made this point clear:

> Generally, the number of reportable near-miss cases was reduced. We have made reports of whatever we are able to think of. We are running out of ideas what we should report next, because we are not supposed to repeat the mistakes we made before.

This problem was more serious for the crew in C2 where it was mandatory to report two near-miss cases per ship every month. In order to meet the requirement, two deck officers described how they responded to this requirement:

> We have to submit a report even if there are no such cases. What should we report if there is none? The only way is to fabricate something.

> For the purpose of collecting near-miss cases, captain would ask whenever he met us, 'Report a case to me today' in a joking tone.

The responses of the crew on the two ships in C2 showed that they did not take this requirement seriously in their work practice. They treated it as a joke.

As such, the impression of continuous OHS improvement that the two companies tried to give was just a façade, behind which there was the reality of decoupling between policy and practice. The question is why both companies made such deliberate efforts to build up and maintain this façade. The answer lies in external inspections.

External inspections

Reporting safety related problems to the shore-based management was not only a requirement of the safety management system but also subject to external inspections. As mentioned earlier, strict external inspection regimes are in place for chemical shipping, such as the Ship Inspection Report Programme (SIRE) and Chemical Distribution Institute (CDI) – Marine inspection programme. Chemical tankers have to pass these inspections on a regular basis in order to conduct business in the market (Bhattacharya and Tang, 2013).

When conducting inspections on ships, inspectors from oil majors or CDI would check OHS management documents, including safety related reports. These reports served as the key evidence of free safety communication and successful ISM implementation in a company. During the field voyage on one ship of C1, the chief officer told one story. Several years ago, the company told the ship crew to hide all the deficiency reports (treated as internal confidential documents) prior to an external inspection. But the absence of any deficiency report was judged by the external inspector to be a deficiency. Thus, it is not

surprising that safety reporting was emphasised by both companies for the purpose of inspection.

However, seafarers also learned from their interactions with inspectors that it was not good either to have too many written reports. One second engineer explained:

> Reporting too many deficiencies is not good for external inspections. If an inspector found that you had many deficiency reports, he would doubt your ship's management and check in more detail.

Furthermore, if a deficiency report was made in writing, it would have to be dealt with according to the relevant procedures in the management system, which meant that follow-up measures would have to be taken, and written records would also have to be maintained accordingly. If a deficiency had not been, or could not be, rectified entirely, it would raise more questions during an inspection. As mentioned earlier, the shore management did not welcome reports that would be costly to deal with. This was another reason why, as mentioned earlier, the crew learned to communicate informally with the superintendents and seek their guidance first before sending out a written deficiency report.

An alternative solution was not to make report on serious issues, as a chief officer explained:

> We had certain considerations. We could not report all the issues to the shore-based management. We could not report nothing either. Therefore we usually report some innocuous cases.

What were 'innocuous cases'? One second officer and one bosun gave examples:

> Sometimes, if it is hard to find anything, I just randomly write something unimportant, for example, I find something that is going to expire.

> In the galley the flour was put on the fire prevention station, which was not allowed. Let's make a report.

These cases were in fact near-miss reports as discussed in the previous section. The problems reflected in these reports were easy to address; and the written reports showed inspectors evidence that safety related issues were reported to and addressed by the shore-based management. Since inspectors cannot see the routine practices of OHS management

on the ships, they could only take these documents at face value. The façade of continuous improvement did seem to have a function. It helped them pass inspections without making significant investment in rectifying deficiencies.

Discussion

In compliance with the ISM Code, both companies had policies and procedures requiring incident reporting. In practice, it was the crew who initiated the reporting process, and it was the crew who decided what and how they should report. Nevertheless, such decisions were made based on their previous interactions with and the prior knowledge of the shore-based management, as well as their experiences with inspections.

Through their interactions with shore-based management, the crew learned that despite the management rhetoric of a non-blame culture, the managers regarded reported deficiencies as problems, perhaps related to a crew's incompetency. Furthermore, they also learned that the management were not willing to read reports regarding machinery deficiencies and problems that would be expensive to deal with, and that the superintendents did not expect to receive reports which could potentially expose their negligence. To be sure, external inspectors monitored incident reporting and safety communication between the ship and the shore regularly. Both the shore-based management and crew nevertheless learned some tactics to cope with such monitoring. They learnt that near-miss reports could on the one hand demonstrate free communication and continuous OHS management improvement to inspectors, and on the other, avoid further questioning from inspectors as well as avoid revelation of deficiencies that would be costly to rectify. As such, the practice of reporting was substantially defined by the interaction between the crew, the shore-based management, and external inspectors.

Surely, these interactions were not devoid of power considerations; they take place within and are shaped by unequal power relations (Bhattacharya and Tang, 2013). Evidently, the management had power over the crew as they controlled the crews' bonus pay and career development. Due to power relations and self-interest, the crew actively sought cues from their managers/superintendents regarding incident reporting and (re)acted accordingly. In

a similar vein, external inspectors had power over the shipping companies and the managers and the crew paid attention to, and strategically adjusted their practices to meet these external demands.

In previous CSR literature (e.g. Christmann and Taylor, 2006; Egels-Zandén, 2014; Jamali et al., 2017), stringent external monitoring and pressure was found to help integrate policy and practice. This paper reveals significant decoupling in the ISM implementation and incident reporting despite regular external monitoring. It was routine management practice to ignore expensive OHS deficiencies and to discourage the crew from reporting them. External surveillance did not manage to foster management commitment as previous research indicated (Egels-Zandén, 2014; Gunningham et al., 2004; 2005; Jamali et al., 2017). This failure largely resulted from a practical constraint faced by inspectors, that is, when conducting inspections, they are restrained from getting access to daily management practices and mainly relied on written documents. The management and crew worked together to make a façade of continuous OHS management improvement using written documents, which inspectors could only take at face value. This constraint thus limited the power and pressure they could exert on the shipping companies regarding their OHS management.

Therefore while policy reflects the intention of the policy makers, the practical implementation is defined by the interaction between the relevant stakeholders which in turn is shaped by the underlying power relations and constraints. Egels-Zandén (2014) points out that external monitoring in some cases empowers workers and raises awareness of their rights. In this research, the crew was well aware of the ISM requirements and the policy, but due to the power dynamics discussed above they had to fulfill the expectations of the management.

Conclusion

This paper has revealed the decoupled implementation of the ISM Code in the Chinese chemical shipping industry and the factors that underline these practices. As the research was conducted in two Chinese shipping companies, the findings may not be generalised to

other shipping companies. Nevertheless, these findings corroborate other research accounts in the tanker shipping sector elsewhere that shore-based management lacks genuine commitment to OHS but prioritised cost effectiveness and that seafarers were reluctant to report any safety related issues for fear of being blamed (Bhattacharya, 2011; 2012; Sampson, 2016). Thus, it is reasonable to argue that the practices revealed in this research are common in the tanker shipping sector. The tanker shipping sector can be seen as a 'critical case' (Flyvbjerg, 2006) because this sector is subject to more stringent external surveillance and sanctions in terms of OHS management. If decoupled ISM implementation is common in this sector, it is likely to be common as well in other shipping sectors where there are less stringent external monitoring schemes.

The findings suggest policy and practice integration is affected by the interaction between the relevant stakeholders and reflects underlying power dynamics. In this context, if decoupling is employed by top management to solve the conflict between compliance with regulations and profit-maximising activities, questions, such as why some seafarers make more reports than others and what are the contributory factors, become irrelevant. With little power and the necessity for seafarers to meet the expectations of management OHS policy and day to day practice will diverge. Thus, it would be of limited value trying to change the crew's performance and behaviour before addressing the fundamental cause of decoupling – the commitment from the top management.

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