

Barriers to WHS Adoption in Australian Fisheries
FRDC 2017-046

Workplace Health & Safety Focus Group Findings Report

Authors:

Dr Kate Brooks – KAL Analysis Pty Ltd

Ms Alex Thomas – Alex Thomas Pty Ltd

Mr Michael Drake & Mr Brad Roberts – AMSA

Ms Tricia Beatty – Professional Fisherman's Association NSW

February 15, 2019

Executive Summary

Strong culture of caring about safety in the industry.

The overriding message received through the focus groups and interviews conducted in this section of the project was that the commercial fishing industry did not see that, given the environments in which they operate, they are generically unsafe. They feel that while their industry is a high-risk environment, which requires care and extra ordinary attention to detail in all activities, the large majority do not have a cavalier attitude toward their own or their crew's safety: they take it very seriously. It is acknowledged that some sectors are perceived as higher risk than others (due to increased dynamic operating environments, such as offshore trawl), but that again, a 'one size fits all' judgement regarding attitudes or behaviours in regard to safety is not appropriate, and that regulatory determinations that 'improved safety' will be achieved through compliance or shore-based learning, is lacking in relevancy to fisher's lived experience.

Industry partitioning of attitudes to safety between regulatory and operational requirements.

When fishers are told they are an unsafe industry and need to improve, they are engaged defensively, due to a desire to gain respect and recognition for how they believe they are actively managing, and attempting to further improve, safety in their particular environments. This is despite safety statistics demonstrating that they are in fact amongst the most at risk of all Australian workers. The industry does not currently recognise that the accidents and incidents that are happening are, in the majority, entirely preventable or could be largely mitigated in their impacts. They perceive that their attempts to comply with requirements and to be as safe as possible are not recognised by office-based determinations, and such determinations are not always relevant to their particular sea-based operations. As a result, the safety culture of the fishing industry is partitioned between the need to satisfy safety regulators - those actions that satisfy the bureaucratic requirements of the regulator; and the activity of keeping themselves and their crew safe - those activities which they undertake on a daily and routinised basis to keep themselves and their crew as safe as they know how.

Industry is open to improving safety, but change management skills are

The nature of the industry (either through a negative history with regulators and the type of personality attracted to the industry) and its lack of recognition or acknowledgement of the current degree of safety issues that persist within the industry has resulted in the industry becoming resistant to change. However, there are some within the industry who are open to change and to accepting

required to support that improvement

assistance and guidance, in cost effective and new methods of improving safety on existing vessels. But without the assistance of robust change management expertise to shifting this attitude to safety across both industry and regulatory implementation, change and further improvement in safety culture is likely to be slow and challenging. Fishers demonstrate that openness through numerous examples, such as; additions of guards to increase safety of equipment; changed behaviours in response to experiences; engagement with regulators to decrease the likelihood of risky situations arising; and establishing communication and fishing protocols to increase safety at sea. That openness is predicated on the means to increase their safety acknowledging and respecting the operational environments of sectoral fishing operations. Overall, the industry articulated an openness to a responsive regulatory approach, engaging in greater persuasive and support activities that recognise existing strengths of the industry. This approach, while reflected in the philosophy of AMSAs state of Regulatory Approach, is not currently the lived experience of fishers (due to current bureaucratic paperwork requirements), likely due to the relatively recent transfer of safety responsibilities to AMSA from state based maritime safety authorities. . Without assistance of robust change management expertise to align the language, communications and expressed values of both industry and regulators, shifting this attitude to safety across both industry and regulatory implementation, change and further improvement in safety culture is likely to be slow and challenging.

Effects of other regulatory actions detracts from the ability to focus on safety

The 'noise' from competing economic demands on fisher's businesses impedes the ability of fishers to focus on safety related regulatory requirements. These competing pressures are in the form of quota reductions; share requirements (purchasing of, or the contract effect of share catch fishing) and other non-safety regulatory actions, which are identified as having, at times, unintended safety consequences. Such 'noise' not only creates economic constraints on safety equipment investment and general maintenance of vessels, but distracts attention from complying with regulatory requirements that are not perceived to have immediate economic benefit or implications. Further to this, such 'noise' also has a significant mental health impacts, severely affecting the ability of fishers - skippers or crew - to invest time and resources in the improvement of safety (which are effectively seen as investing in their futures) when their future feels less than assured; *'Why would I worry about my safety,*

when my life insurance would solve all the problems, and my wife from me?' (Pers Com. 27/9/17).

Opportunities exist through safety agency behaviours to bridge the partition that exists in the industry's safety culture

This research indicates that the industry is lacking the 'why' to adopt regulatory paper-based practices. The generation of regulations at 'all of industry' levels, creates significant challenges of relevance at the individual operator level, in an industry of such diverse operating environments. An opportunity exists to reposition the current perception of regulatory requirements from that of bureaucratic requirements, to one of actions supportive of and building on fisher's knowledge of their operations, and desire to maintain and maximise the safety of their operations. This relates to the survey findings of management being perceived as only 'talking the talk' and not taking the safety of fishers as individuals, as seriously as do fishers themselves. This was articulated in the sharing of experiences, which identified the following opportunities for safety agencies and industry groups to improve safety. Listening to fishers and dealing with the issues that are of most concern to them in their operating environments; assisting with information and collaborative efforts to address those; and providing feedback from the regulatory perspective, will re-position the current perceptions of safety agencies from a bureaucratic agency of imposition (to be disengaged with) to one which actively and positively assists with improving their safety - caring about them - not just regulations and insurance issues. Resolving fractured and conflicting communications from safety agencies will decrease disengagement of fishers and the partitioning of their approach to safety. Maintaining and increasing the geographical coverage and consistency of wharf side conversations which focus on understanding fisher challenges in relation to safety, education, collaborative problem solving, and forward notice of compliance actions. Such actions are indicated, from the research, as likely to be positively received by the industry, and most likely to assist in bridging the partitioning of the industry's approach to safety. Lastly, clearly identifying an agreed safety outcome and pathway to it, for each sector given (bearing in mind that there are no statistics by sector currently), would clearly articulate for both the industry and regulator a common vision relevant to both. The industry associations can then work with agencies and fishers on implementing support actions to achieve those outcomes.

ACKNOWLEDGEMENTS:

We would like to acknowledge the very generous support of the fishers in the time they gave the research team to participate in focus groups and discussions. Without their time, passion for their work, and willingness to be part of this research it would not be possible. We thank them most sincerely.

We would also like to thank OceanWatch and the Sydney Fish Markets for their support in preparing the groundwork for these interviews and focus groups, and providing facilities. This was through discussions with fishers in Sydney and up and down the NSW coast, to underline the importance of this work to their futures, and helping to create the relationships needed for this research to occur. Again, we are sincerely appreciative of the drive and passion of both OceanWatch and the Sydney Fish markets in supporting this work.

We would also like to recognise and thank the Fisheries Research and Development Corporation for their funding (on behalf of the Australian Government) of this research, which forms part of the FRDC's new National Research Development and Extension Marine Safety and Welfare Initiative,

Table of Contents

Executive Summary	2
1. What is this report about?	7
2. Who is the report targeted at?	7
3. Objectives of the focus groups/interviews	8
4. Methods Used	8
5. Background	11
6. Key Results in relation to Project objectives:	12
7. Detailed Results:	27
7.1. Safety as a value	27
7.2. Industry Safety Culture	28
7.2.1. Issues of most concern	29
7.2.2. Effect of fatigue on behaviours.....	36
7.2.3. Identifying what’s risky	38
7.2.4. Interpersonal relations	40
7.2.5. Attitudes to risk control measures	42
7.2.6. Use of PFDs/life jackets	43
7.2.7. Learning about risk and staying safe.....	46
7.2.8. Sharing information	48
7.2.9. Improving industry safety	49
7.3. Effect of Current Management Approaches.....	50
7.3.1. Current Role of AMSA	50
7.3.2. Use of SMSs	53
7.3.3. One size fits all approaches	56
7.3.4. Participation in development of safety programs	57
7.3.5. Ideal Role of AMSA	59
7.3.6. Unintended consequences of non-safety organisations	61
7.4. Other Issues	65
7.4.1. On line Learning.....	65
7.4.2. VMS as a safety measure.	67
8. Preliminary Recommendations	70
8.1. Agency Opportunities	71
8.1.1. Communications	71
8.1.2. Focus on the ‘safety of work’ not ‘safe work’ activities.....	73
8.1.3. Collaboration on addressing issues of primary importance to fishers	73
8.2. Industry Opportunities	74
8.3. Other Agency interactions	75
9. References	77
10. Appendices	78
9.1. Focus Group Location and Dates	78
9.2. Focus Group Guide	80
9.3. Focus Group Notification	84

List of Figures

Figure 1: Summary of Thematic analysis - frequency of specific comments.	10
Figure 2: Fishing Industry Climate Partitioning	13
Figure 3: Fisher Instagram post on choosing to wear a PFD	45
Figure 4: Excerpt from PFA Newsletter January 18, 2018	59

1. What is this report about?

This report represents the third component of the overall FRDC Project 2017 - 046 "Barriers to the WHS Adoption in Australian Fisheries". It presents the findings of the focus group and interview work undertaken to explore the elements identified in the Safety Climate¹ survey (part 2 of the project) which scored lower than others. These elements were, management approaches to safety and participation in the development of safety programs and regulations. It also sought to delve further into the safety values, preconceptions and attitudes affecting decision making and behaviours with fishers in an offshore fishery in North Western Australia and in offshore and estuary fisheries between Sydney and Ballina, in New South Wales. Specifically, it was designed to explore the level of alignment between industry and management's perceptions of how well current safety approaches match the circumstances of fishers and therefore their response to them, to identify what is stopping them from complying comprehensively with current WHS rules and regulations, and AMSA's Marine Order 504, 2018.

This report component of the overall project, builds upon the literature review and surveys undertaken in the first half of 2018. It explores and provides further context to the propositions developed from the survey and sheds a great deal of light on the questions posed in the objectives of the project, being to generate knowledge about the industry's safety culture, understand the barriers to the adoption of safe(r) work practices and identify specific factors that would contribute to improvements in safety climate and the alignment of current industry culture with improved safety outcomes.

This report, in concert with the previous two project reports, provides the foundations for discussion with the industry as to the final recommendations on actions that could be undertaken by the industry and regulators involved with the industry, to improve the climate of safety and outcomes of the industry.

2. Who is the report targeted at?

This report is, in the first instance for FRDC and immediate project stakeholders, however it is also developed with the broader target audiences of both fishers and, as importantly, those responsible for legislation and the development and implementation of regulations. Aside from the Australian Maritime Safety Authority (a project partner) these specifically include, State Agencies for safety, Fisheries and other state agencies

¹ "Safety culture can be defined as the beliefs, values, attitudes, and patterns of behavior that a group of people share with respect to safety (HSC, 1993) while safety climate is "a snapshot of the state of safety providing an indicator of the underlying safety culture of a work group, plant or organization"." (Seo 2005,190)

(such as transport and Workcover Australia) Agencies nationally, who also influence the safety climate and therefore culture of fishers through management regulations.

3. Objectives of the focus groups/interviews

The key objective of the focus groups was to explore survey results to ensure that the findings identified were actually correctly interpreted, and to explore the reasons behind the data.

The opportunity to bring groups of fishers together also provided an explicit opportunity for them to talk about their experiences and expectations in relation to safety and keeping themselves safe. It was also envisaged that such discussions may likely have the supplementary benefit of raising awareness of safety and increasing the familiarity of fishers involved with having such discussions and increase openness to new approaches to safety.

4. Methods Used

Focus groups and interviews were conducted between October 2nd and November 15th in north western Western Australia Shark Bay trawl fishery, and in New South Wales across a variety of fisheries between Sydney and Ballina.

Participants were sourced utilising open invitations and following up from expressions of interest to be involved in focus groups, made during the surveys. Participants were also recruited through Industry bodies, companies and fishing co-operatives, utilising industry association newsletters, flyers on fishing co-operative notice boards and in co-operative pay packets. Participation was entirely voluntary and no incentive was offered, with the exception of a BBQ breakfast in Coffs Harbour, as a means to draw fishers together in that location.

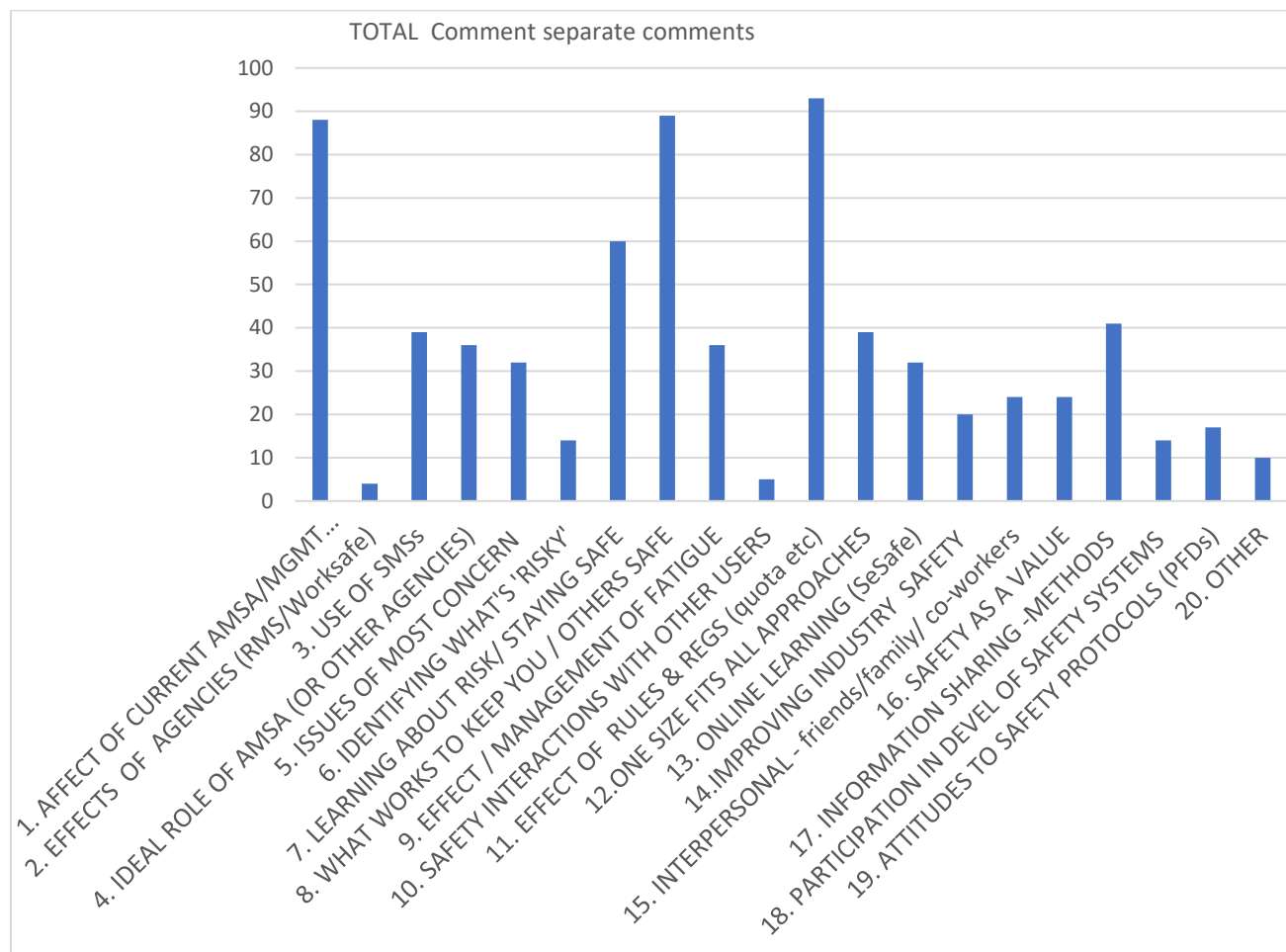
Approximately sixty-nine individuals, comprising skippers, crew members (domestic and 457 visa holders), company executives, and co-operative and industry association representatives, participated in the focus groups. Where individuals were unable to attend a group or it was inappropriate, they were interviewed individually. The names of participants in focus groups were not collected for privacy reasons, and all participants were given the assurance that they would not be individually identified in any of the data reported. (Please see the summary of the focus group locations and dates; Appendix 1- 9.1).

Focus groups and interviews lasted between 30 minutes and one and a half hours, dependent upon the number of participants and the time that they had available. They were all undertaken by either or both Dr Kate Brooks and Ms Alex Thomas, utilising the same focus group guide. (Please see attached Focus Group Guide; Appendix 2 - 9.2). This included a full disclosure of the project, and the use of the final report, along assurances and details of how the anonymity of contributors would be maintained.

The interviews and focus groups were then transcribed and thematically analysed, with the following results identifying comment frequency in regard to issues raised (see Figure 1).

A number of themes were explicitly explored as a result of the survey, which were: the involvement in safety program development; safety values and attitudes affecting decision making, and effects of management approaches to safety. A further two themes were opportunistically raised as a result of concurrent FRDC work and research, relating to the use of online learning, being the 'SeSAFE' on line learning module program; and the use of VMS as a safety tracking device as being implemented in Queensland, for any pertinent information to be passed to those respective project leaders. All other themes emerged as a result of discussions with and amongst respondents, either in further exploration of the survey themes or in direct response to the focus group discussions. The following figure details the themes identified and frequency of individual relevant comments recorded (Figure 1: Summary of Thematic analysis - frequency of specific comments.)

Figure 1: Summary of Thematic analysis - frequency of specific comments.



Please note: The above graph was developed on the basis of a raw count of the number of times an issue was raised across the conversations. The same person may have raised one issue several times (in a number of contexts) - ie the issue of method of boat survey may have been raised in discussions about AMSA management; effects of rules and regulations; and learning about risk. As a result, while there were only 67 participants, the comment count - whether it was by the same or multiple people - serves as a proxy for the level of importance the issue/subject had for participants. in relation to a recorded on the number of times raised.

5. Background

5.1 A period of change within the industry

In order to provide additional context for the report, it is important to note that the focus groups and surveys were conducted at a time of intense change within the Australian fishing industry.

AMSA had taken up responsibility for service delivery of the National System on the 01st July 2018, approximately three months prior to data collection. While the National Law and its regulations have applied to the commercial vessel sector, including fishing, since 2013, it is appreciated that the change of service delivery from state maritime delegates to a single point of service within AMSA represented significant change at the time the survey and focus groups were conducted. Prior to the 1st July 2018, fishers engaged directly with state maritime authorities who acted as delegates for AMSA in administering the National Law.

The survey and focus groups were also conducted during a period of changes in terms of fishery restructure, with the imposition of quotas on a number of fisheries.

5.2 Accident and incident rates

It is also important to consider this research in terms of the current safety statistics within the Australian fishing sector. According to SeSAFE's "What if you don't come home?" presentation, "commercial fishing is the most dangerous occupation in Australia. There are five fatalities on commercial fishing boats each year". The most at-risk group in the industry are 20-24-year olds, and this may indicate that new fishers are not being adequately prepared or being adequately safeguarded by current safety practices. SeSAFE's module "Fundamentals of Workplace Health and Safety Law" states that the fatality rate within fishing is almost 25 times higher than the mining industry.

However, it must be noted, that as the statistics cannot be broken down to the sector level, a focus on statistics with fishers can devolve into a debate about the relevance of those, rather than the key message that safety can be improved at all levels in all sectors - some perhaps more than others. The fact remains that everyone just wants fishers to be safe as possible, and to have the best available information to do so.

6. Key Results in relation to Project objectives:

6.1. *To generate knowledge to foster a stronger safety culture:*

The focus groups and interviews identified that fishers have a strong desire to come home at the end of every trip safe and uninjured, and feel the same responsibility for their crews, keenly. Fishers have a strong culture of seeking to be safe. While there is an element of fatalism in regard to the dynamic environment (mainly the weather) that they operate in, the vast majority of fishers were aware of the ability that they each individually had to influence the safety outcomes of their workplace and the safety of those that they worked with through a focus on equipment maintenance and its use. It was acknowledged that the behaviour of some fishers (a minority) did *not* behave in ways that were seen as not only professional but profoundly sensible in regard to safety. However, these were generally regarded as outsiders, and a diminishing element in the industry.

The emergent issue is not essentially that the culture of the industry is weak in regard to valuing safety. Rather, it is the current climate of safety that is bisected with a partition between what fishers do to keep safe and the perceived necessary actions enforced by regulators to keep fishers safe. At this time these two activities are regarded quite separately by fishers and the partition is most likely to have significant potential to prevent the appreciation, and therefore the effective adoption, of regulatory practices and recommendations at the coal face.

The findings provide much more detailed information and context to the issues identified in the WHS climate survey, where an increase in collaborative approaches to WHS management, and consideration of fisheries management's unintended consequences, could reasonably be expected to be very beneficial to further engaging fishers in improved WHS outcomes.

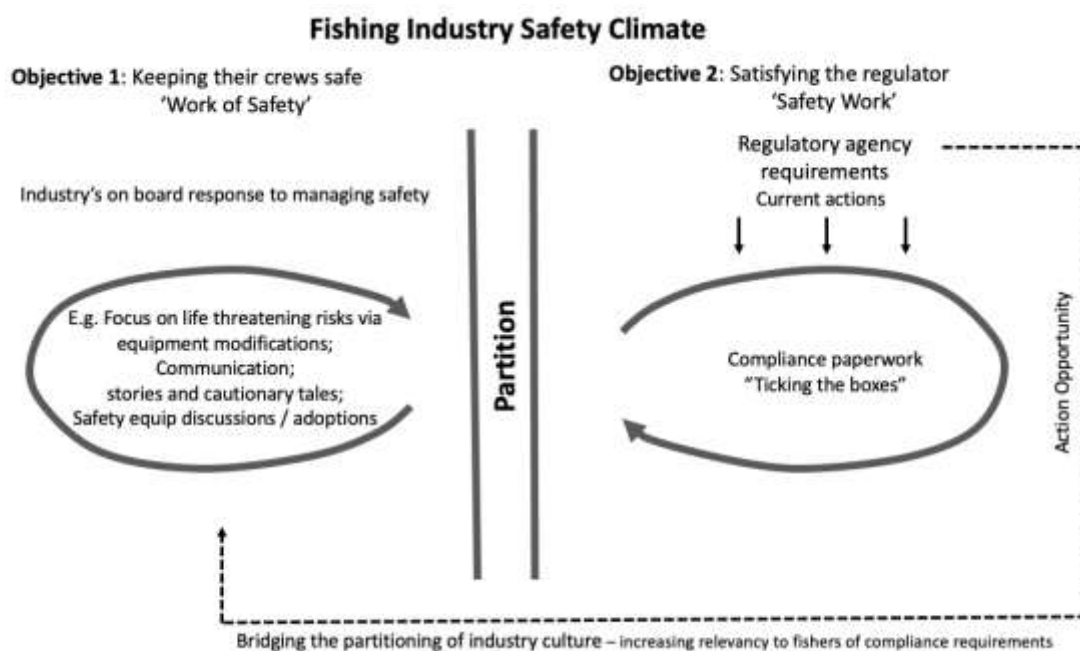
Many of the regulatory management issues identified, related to confusion regarding safety rules and regulations in the industry and the application of these to all classes of craft, regardless of appropriateness to operations; perceptions of overwhelming reporting responsibilities with little understanding of the relevance of them to sectoral operating circumstances; the un-intended consequences of fisheries management rules and regulations, potentially due to a lack of effective communication in all quarters. Significantly, this has the effect of creating a 'partition' in the current safety climate of the fishing industry, between the way fishers implement safety at the 'coal face' and respond to regulatory compliance requirements.

The survey inferred that fishers associated the word 'safety' with rules and regulations and the paperwork imposed on them, in which case they then defer to authorities. If they think of it as preventing someone from falling over board, something going wrong, conducting maintenance on their boat, then the response is grounded in how they and others around them in their fishery have dealt with those issues. Discussions

with fishers identified that fishers had two primary objectives in regard to safety; 1.) that of keeping themselves and their crews safe; and 2.) Keeping regulators happy and 'off their backs'. Instead of being one seamless and cohesive vision that achieved one and the same objective, these two objectives effectively 'partition' the industry's approach to safety.

"It's more about paperwork and it's very annoying to us 'cause we're all being practical, we've been brought up all our life fishing and practical now they're trying to make us all paperwork, so the focus is now off doing the safety side of things, and just filling out the paperwork, really, that's all it is. And if you've got the paperwork right, it doesn't matter."
(Focus Group 19, Newcastle NSW 15/11/18)

Figure 2: Fishing Industry Climate Partitioning



This explains the survey findings from across all regions, that the *key areas of potential for improvement* are those of;

- perception of *management activity* in ensuring safety, and
- *fisher participation in the development of safety* management programs and processes.

Despite a variation in operational structures from corporate to owner operator, or single person operators or those with crews, this divide was equally evident amongst all research participants.

While regulatory agencies were acknowledged as generating good outcomes and positive benefits at times, this identifies that there are significant opportunities for both AMSA and fisheries management authorities to improve the relationship with fishers

with the benefit of engendering greater engagement in the 'safety of work'; that is - working safely compared to 'safety work' which is the bureaucratic work focused on generating evidence (paper trails) of safe work practices (Rae and Provan 2018).

6.2. *To identify barriers to adoption and implementation of safe(r) work practices*

The key barriers to adoption and implementation of safe(r) work practices appear from the focus group data to further build on and endorse the survey data, identifying that:

- a lack of understanding of, or connection with, the relevance of a large proportion of the approaches to ensuring or encouraging safety, that are adopted by AMSA and State Agencies that interact with fishers, exists in the industry;

"It's just like box ticking..."

"Someone sitting in an office saying this is how it runs and this is what you do and what you do... I mean he has no idea... I have no idea how an office runs ... I think it should be something simplified and that a few guys can get together - we know where the dangers are and what we have to do" (Focus Group 16, Coffs Harbour, 14/11/18)

- a clear value for safety and sound WHS approaches in operations exists amongst the majority of fishers, but the need to achieve profitable operations predicates having the 'mental space' to further escalate safety in fishing conversations and resources to further upgrade equipment to the best available.

"I want to go home to my kids, and in one piece." (FG 9, Ballina, 12/11/18)

"We don't run anything dangerously ... if we're doing anything with ropes, anything goes wrong, we let it go. That's it. End of story. It's us before the boat. That's important, very important. So yeah we - we all take care of ourselves which is important..." (INT 14, Yamba, 13/11/18)

"It's (a) situational thing. I mean like, we're not stupid, really. We're not. Trust me. I know I don't want to go swimming, so we'll try and do whatever we can do." (INT 15, Yamba, 13/11/18)

"But to be honest, sometimes you're not comfortable wearing those ones (PFDs) but they have to do it you know... because that's for your own (safety)...you have a family waiting for you, you know..." (FG 1, Shark Bay, 2/10/18)

6.3. *Identify specific factors that would contribute to improvements in safety culture*

The focus group discussions elicited a number of quotes identifying aspects of AMSA and its agents that are very successfully engaging with fishers with positive effects in regard to both safety attitudes and behaviours:

"... he was really good. He just went through everything and he explained a lot of stuff, he wasn't there to cruel you but he would if he needed to - he was fair dinkum - he's been around - he's not straight out of school. Is focussed on talking about stuff not just there to lay the law down." (Focus Group 16, November 14, 2018, Coffs Harbour, NSW.)

"I've had like letters - a letter from him letting us know that they'll be conducting surveys, and my boat hasn't been surveyed since I put in survey - it was fourteen years, it hasn't been looked at for fourteen years. (AMSA delegate) contacted me and came and looked at my boat, and he spent a lot of time looking at my Safety management system - like a lot of time on that And he gave me a whole list of things that I had to...and that one had to be done in two weeks and that one had to be done in a month. ... I thought he did a really good job." (Interview 18, November 15, 2018, Port Stephens, NSW.)

However, the negative feedback in regard to the clarity of what AMSA requires and or the relevance of those requirements to the various individual operators were in the majority, and identify large scope for opportunities to improve engagement of fishers in the work of increasing their safety, with a focus on people and their working environments, rather than the processes of safety at an administrative level;

"...no one here knows what's going on, ... I think AMSA included... we get all this paper and surveys and I ring up AMSA and they go like 'I don't know, I'll give you a case number and get back to you' and it's like two weeks, if I'm lucky and we've solved it all by then. ... that's my issues. ... But I feel that AMSA has no idea it's really messy." (Focus Group 17, November 15, 2018, Port Stephens, NSW)

"AMSA stuff - they stipulate something but they don't take into account context of the operating environment, which could make things more dangerous. So just 'flick' past AMSA stuff." (Focus Group 16, November 14, 2018, Coffs Harbour NSW).

"yeah - 100% we just get stuff dumped on us and say good luck - thank you!" (Interview 6, November 9, Hawkesbury, NSW)

"The way they're going to do it is with a lot of spot checks and I have issues with that ... I was at my boat the other day, and they came and said they wanted to come and do a test but I was going to be at sea, and the boat had been surveyed two months before and they didn't even know."

"Never, (asked if we've operated the extinguisher); as long as the fire extinguishers there and has a sign pointing saying this is a fire extinguisher - it's just a joke." (Focus Group 19, November 15, 2018, Newcastle, NSW.)

"I think the government is just ticking the boxes.... they send us a piece of paper and so long as we go along with what they say...and their rules and that....and they tell us what we've got to do now is teach all my crew.... that I've got no crew of and don't have one on my boat ...yes I'm a sole operator...all about safety and everything else and to please the government I've got to have a sheet there that tells me every morning, ... I do this, this is a natural to me...umm if I had a deck hand I'm responsible for him, but I don't, yet I still have to have this paperwork to appease somebody." (Focus Group 17, November 15, 2018, Port Stephens NSW.)

Consequently, there is a significant opportunity to:

- improve clarity and consistency of communications between AMSA and fishers;
- engage with fishers at times and by means that acknowledges and considers their operating and rest requirements;
- Reviews safety requirements to ensure that they are operational and business relevant; and
- Minimise the bureaucracy entailed for fishers in being able to obtain information from AMSA or provide feedback to AMSA (e.g. not having to complete a survey to be able to provide feedback to AMSA)

6.4. *To identify issues and areas to explore in more detail in case study focus groups.*

The questions identified from the survey for further investigation in focus groups identified the following associated, 'in-short' answers (which are fully developed in the Section 6: Detailed Results: of this report):

- How fishers could gain a greater say in the development of safety systems to ensure that they are more sector specific and relevant.
Fisher's find it extremely difficult to engage with standard written bureaucratic practices:

"Not at all - we haven't had any input into anything have we?" (Focus Group 17, Port Stephens 15/11/18)

"The way it works now and it's been working for the last year, but I wouldn't call it functional, is that (Industry Association) sends out a newsletter and sometimes you read and more often than not, you don't. And on that I might put something about a new safety proposal, but I get about one a day from the Standards secretary proposing something and I filter through them because most of it's not relevant to the guys, and then if they read it and then if they can be bothered....and they think oh yes someone would've responded ..., but no one responds and they think I'm telepathic!" (Focus Group 19, Newcastle 15/11/18)

Further, while the use of committee's was acknowledged, fishers identify that time spent in standard government style meetings is time spent away from fishing, maintenance of their equipment, or gaining rest for the next fishing trip. In addition to this, the decisions made in those meetings are difficult to get across to a large number of fellow fishers - which to do effectively would take further time away from earning a living - often resulting in no direct fisher to fisher formal communication of outcomes. Consequently, there may be little awareness amongst fishers not involved in advisory committee processes and outcomes, let alone understanding of the rationale behind them. AMSA currently convenes consultative committees for fishing and general domestic commercial vessels. These committees are designed to represent industry, by including peak organisations such as the PFA to garner the

views of industries on regulatory efforts as well as providing a conduit for information to be passed on to fishers via these organisations.

Means to address these issues could include:

- An increase of casual wharf side conversations and 'check-ins', to provide information on issues where changes in regulations are being considered, to seek feedback directly, at times suitable to fishers. This practice is already been taken up by AMSA, and adopted on a national basis since taking on National System responsibility on 1st July 2018.
- Where fishers are required at meetings to assist agencies or Authorities in identifying the best means to implement legislation and develop appropriate regulations, compensation could be considered. This would gain greater engagement through feelings of respect by government bodies, for fisher's time taken from earning a living, to assist with the process of developing effective regulatory policies, bearing in mind internal industry politics.

"It's not that these guys are greedy, but it's the fact that they've got stuff to do; and you've gotta appreciate that their time is worth money, so you've gotta give them something to be there. So..." (Focus Group 19, Newcastle 15/11/19)

- Understanding how fishers go about interpreting safety and fisheries management regulations and guidelines provided to them.

Fishers largely rely on word of mouth from other fishers, or synthesised versions generated by industry associations. This is due to the fact that many don't (or are unable to) engage with emails or written documentation. This is due to both, the overwhelming amounts of paperwork generated from government agencies to industry participants that is often generalised and lacks relevance to specific fisheries, and there is still a notable number in the industry with low levels of, or no, literacy. For example, in NSW, a estuary fisher is required to hold 5 different licences or permits to conduct his operations: Commercial Fishing Licence, Coxswains, RMS registration, Safefood Authority and sometimes council and NPWS permits to access specific sites/rivers. All of these require ongoing paperwork and specific regulations that they comply with to be retained. While there are increasing number of literate fishers who do feel confident navigating bureaucracy, they still found that getting information from AMSA is extremely difficult. It is a general consensus that phone or web contacts with AMSA are extremely difficult, alienating, and often fruitless in getting one consistent answer that is also supported by local AMSA or delegated agency staff.

"Well I get out there and I ask these guys, 'what was that meeting all about ...'" (FG 2, Shark Bay, 2/10/18)

"I've not seen anything from AMSA this year at all. Not a thing. Even when we had that issue with the grounding and when I spoke to another guy at AMSA, not (Name), he says 'You should have got your Mariner's – yeah, you should check your Mariner's Report' and

I said 'Well where's that posted?' he said 'Well it's on the AMSA website, you'll just have to go find it'. So, they're expecting these guys to log in to the AMSA website, which is just a mess, to find a Mariner's Report for Teague's Channel. It doesn't come to 'em by email or anything like that. I don't know if there's a subscription list or anything but that – that's – their communication; it's pretty poor. They need some sort of subscriptions, but they need to make it location specific." (INT 4, Shark Bay, 2/10/18)

"AMSA stuff - they stipulate something but they don't take into account context of the operating environment, which could make things more dangerous. So just 'flick' past AMSA stuff." (Focus Group 16, Coffs Harbour 14/11/18)

"We don't know what we got have should have... you have a look on the website to see what you can make of it but we don't have anything concrete to say what we should have what we need." (Focus Group 17, Port Stephens, 15/11/18)

"Oh, we get it from word of mouth from each other...no one's got any real information we just hear from each other." (Focus Group 17, Port Stephens 15/11/18)

"...I find it (what I receive from AMSA) very difficult to read, 'cause it's like ...and we've told them cause it's kind of like... too much rubbish from fisheries...we get three letters a day and we just throw them out." (Focus Group 19, Newcastle 15/11/18)

Fishers are open to receiving information, but as stated earlier, do receive overwhelming amounts of information from government agencies generally, causing them to conflate and confuse the source of information. Given these challenges, clearly identifying safety updates and ensuring they are contextually relevant to fisher operating environments - so that they can make sense of it - would likely increase engagement and uptake rates of disseminated information. Wharf side chats or at the time of boat surveys, would be easier, particularly for the less literate.

Fishers were unsure about the consistency of the advice they receive, and then how it is applied, in compliance processes.

The thing that's worrying with AMSA already, just in the early days is that they're thinking on the run, and thinking 'What can we find to do here?' and ... it's not generic, you know what I mean? I see it in the Yamba boat harbour where a guy passed us, he passed the ... we've got an ocean trawler, 54 foot, he passed that, everything good, he went four boats up and knocked the guy back for exactly the same ... we had. ... There's no consistency so the next guy blows up and says well, you know 'How come?'. ...and that's what's worrying about them making rules up along the way or the guys who are doing it or working for 'em, really haven't been pulled altogether to say 'This is how we're doing it', and it is a real worry that they'll make the rules up along the way." (Focus Group 12, Maclean, 12/11/18)

It is noted that, as in the case above, other fishers are not privy to all of the reasons that may result in variation between cases. As such, what may seem to be a lack of

consistency may at times be differing circumstances that result in differing outcomes. However, this account represents the perceptions of fishers, and requires consideration as such.

Fishers are seeking consistency in not only the information that they receive, (by phone, email, website or mailed letters) but in the way AMSA or its delegates apply the compliance requirements.

- When or if safety ever takes priority over getting the job done.
What is regarded as safe by fishers who undertake their work on a daily basis in conditions which the majority of the population would never put themselves in in the first place, is very different from the perception of what is 'safe' by those who are not experienced in the work. 'Safety work' - the work of demonstrating that all has been done to ensure a safe environment - is not the priority of fishers. However, the 'safety of their work' as far as reasonably possible to ensure they all come home safely, is a priority - which is undertaken in the context of the pressures associated with earning a reasonable living.

"...they know how to manage those issues they have, so it becomes safe for them, but anybody looking from the outside in – 'Well that's pretty unsafe'. ... this is like a bloke walking a highway. He does it five days a week, then he does it with his eyes closed. If someone looking down there at that bloke going 'I couldn't do that' well that's right, you couldn't do that! So how is it that you have control over that fella and what he does, when you're just looking?" (Focus Group 8, Hawkesbury, 10/11/18)

All fishers acknowledged there are risks associated with their work; even if it was as benign as falling asleep on the way home after an extended fishing period, compared to the risk of falling overboard offshore past the continental shelf at night, with sharks following the nets. They are very aware of these risks and have largely built mediating behaviours into their work regimes, however, they acknowledge that there is always room for improvement. It was generally agreed that they learn from theirs and others' mistakes and work to address them - as to not do so would result in down time and income losses.

"... I had a relief decky on the boat. Now we catch these sea eggs. ... He was shaking it out one morning and one of these sea eggs fall down straight on his eye. Lost his eyesight. Now from that point on, I've got safety glasses on there." (Interview 10, Ballina, 11/11/18)

It is this acknowledgement that there is always room for improvement, however fisher's respond to physical examples of how they could cost effectively improve their operations, not paperwork directives. This still provides an opportunity for AMSA to work with fishers to identify those opportunities that are perceived as relevant to their particular operating environments, and that they can see will sensibly and directly benefit their safety.

- How fishers go about identifying what is risky that can be managed when at work. While fishers do talk explicitly about risk and risky behaviour on a day to day basis as part of their everyday activities, they don't use the same language or context as safety agencies. Rather they utilise observation and comparison to what looks and 'feels' normal for their type of operation and the conditions. Consequently, that have an acute awareness of risk, but see it as part of their operations - not a separate assessment.

"So we have, umm, when our lines are out or whatever it's just making sure everything is normal. So we look and check the back deck and you make sure your wires are the right way and the right kind of tension on them I 'spose, a right angle, umm, and then on top of that making sure your gauges and everything are right for the engine, the engine's not changing load and stuff like that. So it's just making sure ... making sure everything's just normal and how it should be, and the moment something's not quite how it should be, it needs to be looked at and not brushed over." (Interview 14, Yamba, 13/11/18).

they share and listen to stories and information by word of mouth about what has happened to them, or someone they know mediating it for differences in their own operating environment as they synthesise the information. In this way, they accumulate a 'knowledge bank' of what is likely to be 'risky' or dangerous to them in their operating environment.

- Attitudes and use of SMS's
Some fishers do see the benefit in a written down Safety Management System, largely for the combined purposes of having a new starter sign a piece of paper as a method of 'arse covering' and an induction checklist was a helpful reminder of what to show a new starter.

(SMS) "...can be useful as a VERY basic outline (fire extinguishers/ operating a radio) and would be useful as a deckie's check list. Same as a deckie's ticket that already exists through TAFE. But it's important that they don't think they know everything 'cause everything is different." (FG16, Coffs Harbour, 14/11/18)

"Some things (have improved as a result of the SMS). Well there's a lot of blokes that have got guards on ... things now, like their winches ... but there are fishermen that have taken it upon themselves, like where your wire goes onto your drum that's all guarded so you can't fall into it." (INT. 10, Ballina, 12/11/18)

"I have no problem with the SMS, I have no problem with having a safety check off list for crew, and an induction, but I don't know about SMSs Fishermen are fishermen. It's really hard to get them to maintain logs and things like that and the only reason they want you to maintain logs is because if something goes wrong, there's gotta be a routine you're going to follow. But on fishing trawlers, depending on where you are, what you're doing, how you're doing it, what the weather conditions are ... is a different circumstance." (FG 12, Maclean, 13/11/18)

However, the use of an SMS even for an induction purpose assumes that the recipient of the information can read and that they will digest all of the information presented. For example, those in the tuna fisheries utilise international crews, consequently the SMS used on these vessels are solely pictorial based to ensure the ability to comprehend the intent. A very small minority talked of the benefit of an SMS in the form of a checklist (rather than a large document) and that pictures were useful where relevant/possible. The majority noted that they had to have an SMS to be compliant but had simply adopted the template offered by their Industry Association or AMSA and had not looked at it since procuring it.

"Yep, once you do it you throw it (an SMS) up the front of the bloody boat and never see it again" (INT. 7, Hawkesbury, 9/11/18)

"...it could be one piece of paper, but most of the time it's about 6 or 7 pieces of paper. Most of the time it's not worth the paper it's written on." (Why is it not worth the paper it's written on?) "Well it's just common sense." (FG 9, Ballina 12/11/18)

"Yeah, nah (it doesn't get recorded in the SMS) you just talk about it amongst yourselves (near misses) ... the crew... and you make note...to stop that happening again" (FG 3, Shark Bay, 2/10/18)

Concerns were also expressed that it created a false sense of security of knowing everything, when it was only useful as an induction piece;

The problem with SMS's is that it gives a false sense of security of knowing everything about the safety of a boat. A young guy who's just come out of TAFE thinks he knows everything cause he's aware of the SMS.

SMS doesn't separate crew from skipper and crew - and they are different operating parameters/expectations. (From interviewer notes, FG 5, Sydney, 9/11/18)

Where larger organisations are in charge of the fleet, SMSs were used and tailored to each vessel, however it was acknowledged that they were not, in the vast majority of cases, updated or modified as intended, nor were they able to capture highly variable circumstances e.g. weather events, or being 'hooked up' on the sea floor.

However, the concept of tailoring SMS's to suit individual small operator's vessels has more often than not, been missed. While some have diligently tailored their SMS's to suit their particular vessel and operation, there is a general lack of understanding that SMSs are meant to be tailored to their operation, and monitored and updated on a regular basis;

"So, with an SMS - that the PFA done up for us - but no one knows what to do with it...we just thought you got this SMS piece of paper on your boat - no one told us you had to fill anything out." (FG 17, Port Stephens, 15/11/18)

"Yeah, a 50ft trawler is the same as a 10ft tinny goin' meshing. (Sarcasm) Having the same safety plan doesn't work. They're basically templates." (FG 8, Hawkesbury, 10/11/18)

"...they (AMSA) don't get onto us about SMSs and we're yet to have, you know AMSA Officers in our estuary come and have a look at us, it hasn't happened to my knowledge yet. We've all – we did SMSs through the PFA and we've got one and we've done it and there it is in a folder, and we throw it up the front in the cabin and that's where it lives. And you go 'well I've satisfied that garbage, throw that up there' and yeah I can get back to work!" (INT 7, Hawkesbury, 9/11/18)

While the majority of fishers viewed SMSs as a bureaucratic imposition, this is amplified in the case of smaller and sole operators who have only one or no crew, and where they are so intimate with their environments, the imposition of an SMS becomes – in their minds – completely without purpose, except to increase their paperwork.

"Nup. It's in my cupboard in there, I'll go and show you the whole – that thick – what I had to do. ... I took it out so the cockroaches wouldn't eat it in the winter and now it's back on the boat while I'm working, but you know, my wife said 'Oh you've gotta have that on the boat' and I said 'Why have I gotta put it on the boat?' but I don't look at it." (FG 12, Maclean, 12/11/18)

Further, because of the perception of the high prospect of fines if fisheries management requirements are not responded to immediately when making port, it detracts from their focus on ensuring crew safety, and recording anything that might need to be updated in their SMS, (if they were aware that SMSs are supposed to be updated regularly in the light of operational events or changes, in the first place):

"There's too much paperwork.... you have five six logs books - you used to just have the skippers log book and the fisheries research log book and we used to put everything in that, now you've got the masters log book, and the engineering log book, and the crab log book, and the scallop log book, and your safety management log book, it's just too much paperwork. And if you come in and forget to phone in or put your email or how many crabs you've got on board (to fisheries) you get a \$750.00 fine straight to the skipper no questions asked ... we've just got too much stuff on our minds..." (FG 2, Shark Bay, 2/10/18)

These issues highlight the different attitude between single operators and those with crew, an issue which needs to be explored in how regulations are implemented. An opportunity exists to consider the greater relevance of a Safety Induction System to a fisher than a SMS. For example, why have a SMS that outlines your operational procedures and emergency responses if you are single operator. For practical purposes, a single operator may only need to have a risk assessment so that he/she can have both considered and then are able to demonstrate that their risks and the mitigation of them, and a logbook and maintenance plan.

- How fishers would like safety to be managed to improve outcomes.
Fishers are keen to keep themselves safe, but are unlikely to respond to what might be perceived as 'dictatorial' or bureaucratic approaches – either because they feel

intimidated /disrespected, or because they simply do not understand the language, intent or basic means of communication (emails and written documentation, of which it was expressed there were excessive amounts). As a result, fishers retreat from the process and seek assistance from fellow fishers and industry associations to ensure they have done what is necessary "...to keep them off their backs." Fisher's expressed the desire that: "We want them to listen to us." (Focus Group 2, October 2, 2018, Shark Bay, WA). This was most commonly in the area of not being subject to a one size fits all set of rules and regulations that, they perceive, bear no or little relevance to their particular sector, or specific operational parameters.

Further to this, fishers uniformly feel that current safety management approaches adopt a 'one size fits all' approach, and that there is a general lack of understanding amongst safety agencies of how they actually work, and that fisher's experience is not listened to or considered; or if it is they do not receive the feedback in ways that they either receive or understand.

"Film the way these blokes work, get on the boats and just see what, everyone runs a boat differently and try and keep it a little bit more uniform... within the sector. I mean we've got nothing to do with rock lobster, we've got nothing to do with (inaudible) fishing, we've got nothing to do with -, we're a trawl sector. ... We're completely different," (FG 2, Shark Bay, 2/10/18)

"...look at my fishery - I'm a river fisherman now - I'm completely different I run a little tinny - a 6-meter power outboard boat, not a big trawler - it's completely different. ... What I do on the river is completely different ... We don't have the risks of catching a reef underwater or running into a ship, and stuff like that." (INT 6, Hawksbury, 9/11/18)

"I feel its people who don't understand the intricacies of small different fishing businesses and trying to make regulations... get them to jump through hoops about things they don't quite understand properly ... its not one size fits all." (FG 17, Port Stephens, 15/11/18)

"You know like, they wanted us to - see them blocks on the end of the arms out here? Where the boards go through? They wanted us to put breakaway points on them that break after a certain thing. Say your you're snagged up? But we put safety chains on them to stop getting killed. I've seen them blocks come flying in and take people's heads off for not having safety chains, yet they want us to put breakaway points on them, so that if we snag up the boat doesn't tip over. But there was no thought given to it, I argued with ... AMSA that I wanted a breakaway pressure point on the winch, so the winch would stop winching ... and he agreed to that but then there was never anything in writing but they approved my boat. Then other guys are saying 'Oh, I put a breakaway point out there', one guy's gotta have 200 kilos, another guy's gotta have half a tonne dependent on your stability, but it doesn't work like that, and it's dangerous. But they didn't want to listen." (FG 12, Maclean, 13/11/18)

As an extension of this, fishers do not respond well to paperwork. They acknowledge that their literacy weaknesses (ability to read and/or write and therefore willingness

to comprehend and complete paperwork), is one reason, commonly, that they are in the industry they are:

"We got too much paperwork, we're not office jockeys... we work with our hands, we work with our bodies, we work with our minds..."

"I might get chewed out for my hand writing aren't real good ... because they can't read my information but I've never been a rogue scholar, I was lucky to be at school"

"I left school at 14... three or four, three or four, six months, five months of the year... 14 schools and 9 years of going to school in four different countries... for some of two or three months"

(FG 2, Skippers, Shark Bay, 2/10/18)

Consequently, they are exceptionally unlikely to respond to the consultation processes currently used by regulators which uses written calls for submissions and written responses to safety proposals: not because they don't think safety is important. The industry typically generates information, provides feedback and learns from active verbal engagement;

"He's very safe. He used to do like drills... like pop quizzes and stuff. Dunno, always felt safe with him."

"Unless you start saying this is the easier, quicker better way, then they actually go 'oh!'... There's some that are that headstrong and proud they go 'nup this is how I do it'." (FG 3, Shark Bay, 2/10/18)

"Do it hands-on when you're out there. You've just – you gotta talk to 'em, and tell them, show them." (INT 7, Hawkesbury, 9/11/18)

There was general agreement that the dynamic environment in which fishers operate was not something that was considered in the creation of safety regulations and how they are implemented. They see their operating environment as something that is unique on a day to day basis and can't be learnt from books or quickly. Examples of the belief that learning is something that is a progressive process for new crew member, and something that could only really be delivered by fellow fishers, included;

"...I started off with him (new crew) going slow. You know, doing – doing things that I do quickly now – I was doing them a slower speed so he could get used to using his hands in ways that he'd never used his hands before, you know? Things like that. ... he has to get his sea legs, and he has to get used to walking around and not knowing where to put his hands" (INT 11, Ballina 12/11/18)

"Without having knowledge from other fishermen, you can't do anything safely. Because the closest thing you can relate driving a trawler to is driving a car. They're totally different." (FG 8, Hawkesbury, 10/11/18)

However, they do recognise the value of basic levels of introductory knowledge. From the information received in the process of these discussions, it is indicated that fishers would respond more positively to;

- Their sectoral/individual working environments being paid attention to, and the support for tailoring risk assessments and mitigation plans to individual circumstances;
- Collaborative resolutions identified, or responses explained, to their safety concerns and issues with safety rules, regulations and directives;
- Decisions, and the rationale for them, being provided in simple, non-legalistic, laypersons terms, to fishing co-operatives and industry associations, for dissemination direct to fishers either in newsletters, via social media and/or through word of mouth; and
- Sharing of experiences in the words of and from fishermen who have lived experiences, with lessons learnt, that articulate the reasons for particular safety rules and regulations

6.5. Implications for relevant stakeholders:

The key implication is that previous attention to training packages - to provide more and better - is inappropriate to an objective of improving the current climate of safety and further strengthening the long-term safety culture. This also extends to achieving the objective of improving the the nexus between industry behaviour and regulatory objectives. Education about safety is nested within the social environment of relationships with organisations and policies that dictate the climate of safety², and consequently education that looks to increase the intensity of current approaches, will only achieve entrenchment of the current outcomes. This explains why, without changing the relevancy and language of rules and regulations focused on in safety training, previous endeavours to improve outcomes (Jarrett 2017), have been ineffective, with initial results backsliding to pre training behaviours within three months. While this was identified as being due to a lack of leadership and accountability for the embedding of new behaviours, by skippers, crew and the industry association³, leadership is difficult to engender when there are so many different influencers within the industry, and there is a general lack of relevancy of the material to specific industry circumstances, whilst the language imposed alienates the audience.

The industry currently perceives that they are skilled and competent to undertake their work, and value safety, articulating a strong culture of safety within the industry. Fishers perceive that risks in that industry, while they exist in every operation, are higher in more dynamic environments due to the speed at which things occur and weather/sea

² Per the Socio-economic model discussed in the Literature Review report for this project p. 14 (Sallis 2015)

³ Pers Com Sentis 30/01/2019

conditions of particular operations, and acknowledge that there is always room for improvement.

A mismatch appears to exist between the industry operators and the safety management agencies (AMSA and various work safe organisations who may be implementing regulation of the industry) in understandings about, what safety competence is, and how risk can be mitigated. That is, fishers measure competence by on the job behaviour (a positive lead indicator of safe behaviour) and record of accidents/incidents. By contrast regulatory agencies measure competency via bureaucratic compliance with paperwork. While the use of statistics to demonstrate that the industry is one of the least safe in Australia⁴, this does not resonate with the majority of fishers who cannot relate that, due to their strong focus on bringing themselves and their crews home safely at the end of each trip.

Consequently, the current situation is akin to industry and the variety of different regulators speaking separate languages. The result is a lack of comprehension on the part of both industry and regulators. This results in an inability to respect or value the other party's position/perspective and tendency to 'blame the other party' as being at fault (Besharov 2014).

Approaches to improving the safety climate (and ultimately extending and maturing the culture) of the industry are reliant on new and different ways of talking about and 'doing' safety in the industry - not just more of the same, done better.

Further, there are potentially mental health implications for the industry, in continuing to pursue traditional modes of work health and safety management and communications. This is due to fisher perception of a lack of respect and increasing frustration with the lack of recognition of their professional pride in their work, and years of success in the industry to date.

⁴ <http://www.sesafe.com.au/>

7. Detailed Results:

7.1. Safety as a value

The value of 'safety' was resonant throughout the conversations conducted in the focus groups and interviews. It was identified as common sense, a basic tenant of ensuring you got yourself home to your family. They treat the risks seriously;

"...I value my safety." "I want to go home to my kids, and in one piece." (FG 9, Ballina, 12/11/18)

"Fishermen are always perceived as rogues and rah rah, but when you're out there it's our job, it's our office it's our machine shop, so we treat it all seriously." (FG 16, Coffs Harbour, 14/11/18)

"...if it's questionable we just won't do it. ...We don't run anything dangerously ... That's it. End of story. It's us before the boat. That's important, very important. So yeah we – we all take care of ourselves which is important..." (INT 14, Yamba, 13/11/18)

"I think your natural instincts is that you don't want to die or you don't want to hurt yourself, like your common sense, you know like..." (INT 7, Hawkesbury, 9/11/18)

"But to be honest, sometimes you're not comfortable wearing those ones [PFDs] but they have to do it you know...because that's for your own (safety)..." "...you have a family waiting for you, you know..." (FG 1, Shark Bay, 2/10/18)

"... I mean like, we're not stupid, really. We're not. Trust me. I know I don't want to go swimming, so we'll try and do whatever we can do." (INT 15, Yamba 13/11/18)

They recognise that changes over the last ten to twenty years have meant that it is only the good businesses and safe operators largely who are remaining and that that is a good thing for the culture of safety in the industry.

"In the past there's been some that you've have to call them fairly average, but mostly now days... geez I'd reckon all skippers are mostly good...it's a vastly different era." (FG 17, Port Stephens 15/11/18)

"We've been a sea for 40 odd years and the blokes are dead that don't know how to do it" (FG 19 Newcastle, 15/11/18)

"Most of the operators I see in my industry are pretty responsible, I don't see anything dangerous happening. We've all got good equipment, we all replace equipment" (INT 18, Port Stephens, 15/11/18)

To that end, many see safety as being connected with professional pride and regard working safely and having equipment current and in good order is part of their personal image.

"... I like to be compliant, 'cause I don't want, I mean I launch here where the water police and maritime are at the ramp, I pride myself, I don't want them to go through and see

that I don't have all my gear in check, check 'cause it's going to create doubt - it's going to make them think (I'm) not a professional operator and I want them to think that I'm a professional operator. So, I make sure that I write a reminder when things are due and my flares are up to date and when things need replacing..."

One of the factors complicating this perspective, is skippers who want to be as safe as possible equate safety with the quality of equipment, as well as attention to what's going on, on board. Quality and/or new equipment has a financial impost that must be recouped through operations. It is acknowledged that the industry is already faced, in some regions, with an aging fleet and increased operating costs and operating parameters that force them into situations where they would never previously have "risked it", just to stay in business. However, there are also those vessels owned and operated by investors are focussed on bottom line profits and will run operations as lean as possible, regardless of Skipper entreaties. These skippers see that the whole focus on active safety is then lost when, when futile attempts to focus owners on the work of safety is exacerbated by the bureaucratic association of completed paperwork with being safe.

"You do get a lot of owners (investors) – they don't really care, they just want the boat to go out and make money ... yeah, you get a few of them who just don't care" (INT 18, Port Stephens, 15/11/18)

In a further section (7.3.6), we will discuss the unintended implications of non-safety agency rules and regulations on the safety of the industry, however, it was endorsed that regardless of these, fishers will always endeavour to ensure that while they may operate in less than optimal conditions they still regard safety as paramount.

"Regardless - quota no quota, safety is paramount". (FG 5, Sydney, 9/11/18)

7.2. Industry Safety Culture

As stated previously, the industry has a strong safety culture - they care about their safety and getting home safely to their families. However, the current climate of safety in the industry is dissected between, the things fishers do and talk about that they see as directly beneficial to keeping them safe, and undertaking the minimum amount necessary to satisfy the procedural requirements of the regulators.

This level of focus on regulatory requirements is not, as a rule, because they are recalcitrant or seeking to be obstructive. It is because the processes associated with proceduralised safety are often disconnected from their lived work experience and/or the processes are simply inaccessible given their levels of literacy; reading, writing and/or ability to access and navigate a computer/internet. Overall the consistent theme was that of a high regard for safety, irrespective of how they respond to regulatory compliance:

"In the past there's been some that you've have to call them fairly average, but mostly now days... geez I'd reckon all skippers are mostly good...it's a vastly different era. They've had safety...at least ten years or so of your responsibility toward your fellow fishermen,

from what you hear it's rubbed off in a way... you know... no one wants to go out there and hurt themselves and no one wants to hurt his mate. So, our safety consciousness has been drummed into us what we have to do - you know, it's arrived. And then if something does go wrong you look back and you do, do something wrong and you do hurt somebody, then there's hell to pay." (FG17, Port Stephens, 15/11/18)

The following subset of themes identified in the focus group and interview discussions reveal a more complex matrix of considerations and conflicts that fishers are juggling simultaneously, with their attempts to be compliant with bureaucratic perceptions of safety.

7.2.1. Issues of most concern

While the most recent safety issues focused on the AMSA website include how to manage a 'hook up' for trawlers⁵, this was an issue that was not mentioned once in the discussions of what scares them most, despite this item being added in the week or so before the field work was conducted and being a topic of some derision.

"You know that thing I was showing you this morning that sticker about getting hooked up - it says check the life gear and get on the radio and call boats near you.... well the last thing I need to be doing is ringing anyone else near you if you're boat's sinking...What are you going to do.... 'Shit me boat's sinking where's that bit of paper?' I'm not going to ring anybody else, I'm going to be getting me lifejacket and hitting the EPIRB - I mean when a boat's sinking it's going down pretty quick! I accidentally set one off (EPIRB), and I got a call from Canberra in about a minute...yeah it worked." (FG 17, Port Stephens, 15/11/18)

It is noteworthy that the information on getting hooked up was developed by fishers, in response to a number of actual incidents, in a particular region. The response to the advice may indicate a reaction to AMSA as the perceived source of the advice, rather than the quality of the advice itself, and identifies the potential benefit to clearly referencing the source of information used by safety agencies, and that they are attempting to work with fishers.

The issue of concern most commonly cited was that of being able to trust equipment, keep it up to a safe standard or modify it to be safe, and to be 'tuned in' to the boat enough to know when the vessel or its equipment was most likely to create problems.

Following on from equipment, the management of the unpredictable behaviour of others on the water (commercial and recreational) was the next biggest concern, then the weather followed by fatigue and falling overboard.

⁵ AMSA Website accessed 29/1/19 (<https://www.amsa.gov.au/audiences/commercial-fisher>)

The frequency of these issues being raised is salient in terms of those that are of greatest concern to fishers.

Equipment

Participants were very aware that their safety was completely dependent upon not only their boat but the state of its' equipment, and how they managed themselves and the impact of the environment around it.

Working with on Board Equipment

The key issue identified by participants in the study was the need to be aware of interacting with the dynamic elements of their environment; that it is one which is changing on a daily if not hourly basis and that things move and change very quickly. They need to be not only constantly aware of all these elements, but also if there is any way that they can improve how it operates or is accessed to decrease the risks they face on a daily basis. This covers anything from being aware of ropes and capstans while doing other jobs that could catch you up or just keeping the deck clear of elements that could cause slips and trips. Some examples of these comments include:

"...mainly just the ropes, getting tangled up in the ropes as the traps go over, not that that's a real major problem but yeah, it could pull you off balance. And the only other thing would be ... bull routs ... and jelly fish getting in your eyes, and things like that" (INT 13, Maclean, 13/11/18)

"The most dangerous thing on the boat is that there (a winch), you tell 'em to stay right away from that.... You've only gotta be standing there, get hit up the side by a chop ... and all of a sudden, you're sideways because you haven't' got good sea legs on, stick your hand in it, you're done." (FG 12, Maclean, 12/11/18)

"Capstans are dangerous especially with wet weather gear. You know nine times out of ten you've got a bit of flap of a sleeve of wet weather gear or otherwise and ... next thing you know it blows into the inside take of the rope and it just pulls you in. There's no stopping it." (FG 12, Maclean, 12/11/18)

"...scared of getting under the rigging...you know...we've still got no way of getting up in the rigging." (FG 2, Shark Bay 2/10/18)

"...it's little things like just washing the deck down so there're no little fish or bits of squid on the deck so when you walk out you don't slide on 'em.....so just things like that you have to keep the deck clear and easy to walk around so you're not tripping over stuff, that comes just with being on a boat..." (FG 19, Newcastle, 15/11/18)

"I think one of our biggest worries is the nets, so if umm, usually (name) gets on the back and he'll clean the nets and I'll be working capstans for him. So, when he's out there doing that, if something goes wrong, if a rope snaps or something, there's a good chance he could end up overboard." (INT 14, Yamba, 13/11/18)

Maintenance

Learning to understand how and when to maintain equipment was a key issue which the fishers were aware of, and paid significant attention to. This related particularly to wires for those in the offshore fisheries, which was repeatedly commented on as an issue, usually due to individuals having seen the carnage caused by a wire breaking and there is an understandable fear associated with the potential effects. They did, however, acknowledge that they could reasonably manage equipment maintenance, safely, despite a highly variable, and at times environmentally hostile, work environment. However, knowing exactly when to replace equipment to keep themselves safe was a challenge, with experiences of brand-new wires snapping on their first use. They understand that fixing equipment at sea is far riskier than addressing potential issues in port, and will result in less down time, aside from the dangers involved of doing repairs on the run.

"Worried about breaking wires. You keep an eye on things and try and because the quality of wire has gone to "shit" - so some have changed over to Ropes. But it comes back to years of experience and observation. You get some of the new skippers who can't even do an oil change" (FG 16, Coffs Harbour, 14/11/8).

"...in a strapped-on harness and winch him up, to get, to get a rope that's broken. It's just, it's radical. I mean, scary."

"I've asked him to put his gantry back up and he said alright... I'll put it on this side, it was at the back and it used to smash, I said you drill in the side, put more ladders on this side and that side so you can get to these blocks and then we've got a better boat to climb around it's just dangerous and shit." (FG 2, Shark Bay 2/10/18)

"Cables tend to wear...splices and ropes and stuff" (FG 3, Shark Bay, 2/10/18)

Interaction with others

Interaction with other on water users - commercial or recreational - was an issue that a number of respondents identified as challenging to find ways of addressing. While being well aware of the rules and regulations as to how vessels should move about and interact with others on the water, there were numerous stories of vessels and recreational users acting in unpredictable or inflammatory ways that were very challenging to not only avoid, but in the process, avoid getting into dangerous situations; either for themselves or the other party, or both. Examples of the commentary articulating this, included:

"The only thing that worried me would be a fear of running into another vessel. I work in the estuary, it can be highly populated out on the water way during tourist time, so you can have lots of water ski boats, wake board boats, jet skis and honestly, they haven't got a bloody clue. ... you've got to be forever vigilant..." (INT 7, Hawkesbury, 9/11/18)

"Other boats. So, I know there's other boats and other skippers that are dodgier than we are, or other deckhands ...you don't really know what they're thinking; if they're even awake... if something does happen and you might put yourself between their boat and a snag and if they start coming closer, pushing you close to that snag, you're going to have to pick up or try and push them back, which you don't know if they're going to push back or not. You can talk to them, you can ask them to move over, but half the time you don't know who they are until you're up real close, too close to 'em and umm just radioing doesn't work all the time. Theirs might not be on, they might not know who you are, if they're asleep you got no chance so...if the prawns are all in one place, everyone will be there squished up. I can't say I've had any close calls, so umm I've had one with a bloke from down south who's done it to me twice now, tried to, basically he pushes everyone out of his way ... everyone knows him so they know he's just, you can't trust him. Up here we're all pretty good, we all talk to each other, but still – you never know. Yeah, that's probably the scariest thing. It's having them push you towards snags and getting close that way particularly." (INT 14, Yamba, 13/11/18)

In addition to this, a danger was identified by participants in employing inexperienced crews. It was commonly agreed that newly certified individuals were perceived as a danger to themselves and other crew members as they more often than not had more confidence than ability.

"Where the biggest risk lies is in the casual fill in staff, ... there's a lot of methods where a second set of hands would be great, but you don't make enough out of it to pay great money so you sort of getting these casual fill ins, so I think that's where the problem or the risk lies ... I mean I've had guys who've done deckhand work with me who talk themselves up like they're right onto it and you think 'yeah they'll be good', but they're not." (INT 18, Port Stephens, 15/11/18)

"The worst part about it is that you're thinking for them and less about yourself. So instead of being five steps ahead you're only two and you're both in danger then. If you have to molly coddle the deckie, then you're putting yourself and others at risk." (FG 19, Newcastle, 15/11/18)

"...you get someone who's not so cluey, you know you get people who work on boats who don't understand the danger and you can't really put 'em in a position where they're in danger because they don't understand it yet anyway, you know what I mean? So...I 'spose, and seen dangerous things happen... or where a dangerous thing has happened makes you aware for next time, ..." (FG 3, Shark Bay, 2/10/18)

There were also comments in regard to being aware of the broader occupational health and safety issues of allergies and interactions with animals that were dangerous to crews:

"Another thing you gotta make sure too, is if your crews got any ... allergic reaction to any of that sort of stuff" (INT 10, Ballina, 12/11/18)

Despite this comment however, the individual involved admitted that they don't carry an EpiPen despite this awareness, identifying an opportunity for improved industry awareness and training in its use, if they had to administer it in the case of an allergic reaction to stings or bites.

Weather

Weather was one element that all participants acknowledged deserved a high level of respect and was one that was commonly regarded as something that 'scared' them. Additionally, that what was a challenge for one vessel may not be for another, and that 'safe' conditions were not a one size fits all classification, but rather had to be fully understood in regard to an individual operator's vessel.

"... but weather, weather's the thing..." (FG 2, Shark Bay 2/10/18)

"Weather conditions. The conditions that you're in, the conditions that you can be caught in, like the other night I was caught in a storm ... it was blowing and raining quite heavily but ... we knew it was coming, yeah it was something that come through, and we've been caught in some pretty bad ones I'll tell ya." (INT 10, Ballina, 12/11/18)

"On a 7-metre boat, 30 knots of wind it'll kill you ...to tell you the truth, anything over 18 knots is a bit dodgy." (INT 11, Ballina, 12/11/18)

"You can get two or three different weather apps and they can be different, so what are you going to do? You just got to try and make an educated guess." (FG 17, Port Stephens, 15/11/18)

"You live by the weather.... we check the weather everyday... but they can get it wrong...one of those thunderstorms can come from nowhere and only last 20 minutes... one came in one day and was blowing 160 kms." (FG 17, Port Stephens, 15/11/18)

While participants talked of checking the 'BOM' (Bureau of Meteorology) forecasts they did not discuss any specific awareness of reading the nuances of forecasts, such as taught in the aviation industry, including aspects of expected wind strength changes, effects of fronts and squalls etc., rather they relied on informal means of evaluations;

"The first thing you do is check the weather out and if the weather's favourable you do it, if not or if there's a change coming, depending where it is. It's a visual thing. Well we generally we go and have a look at the sea and if it looks alright you do, and if it looks alright you don't and you get a gist ... of the weather ... you may talk to people down the coast, but the facilities available now on your mobile phone are pretty well it. Like once upon a time they never had that, whereas now you can look at ... you get your seven-day forecast, your monthly forecast and all that sort of thing... it's technology, is a big thing." (INT 10, Ballina 12/11/18)

This potentially identifies an opportunity to increase awareness and skills, in this very important element of fisher safety.

Fatigue

Fatigue is a wicked problem of fishing and while it is broadly recognised within the industry, it is simply accepted as part of the job. However, what appears to be less discussed or considered is the unintended consequences of the administration of fisheries and safety regulations that put either undue pressure on fishers at time when they are already fatigued (e.g. spot checks on arrival back in port at the end of a trip) or fisheries management determinations that are interpreted as pressure to operate within specific set times that result in fishers perceiving that they have to fish at less than optimal times; or for longer periods than are healthy for any person to be undertaking work - let alone dangerous work - for. It was common for those who operate offshore to be working 18-20 hours per day without rest, for periods of up to three weeks and for stretches of six months at a time. This has the effect of fishers turning to whatever means they need to stay awake - be that caffeine in its various forms or other 'medications'.

"First three trips to be honest, yeah I almost gave up the first three trips...because you know ahhh, yeah we've been work hard before but you know the sleep cycle on this one uhh...yeah because we've been work almost that time, uhhh 18 hours to 20 hours... that time we have to wake up by 4'clock in the afternoon and you cannot sleep the next day at 12 or 1 o'clock... it's too many you know, yeah... Yeah but eventually you know ahhh... these couple of last trips we have a lot more sleep, around 4 to 6 hours" (FG 1, Shark Bay, 2/11/18)

"The hours that you have to put in because that you're forced by (fisheries) legislation to do it. I've gotta work 24 hours, 'cause I only have 24 hours. If I log on, then I go and do a shot and I got nothin', well I've gotta keep going. And I've gotta keep going, because I can't afford to come home too many days with nothing. So, if I've gotta work 24 hours, I end up falling asleep in the truck" (FG 8, Hawkesbury 10/11/18)

"...we... meant to sleep for 6 or 8 hours uninterrupted ...meant to have 2 hours something break with that... and it just doesn't happen, we work up to 22 hours in winter. You get used to it; energy drinks; coffee, and you sleep when you can ...try and do everything as quick as you can. I might get 4 – 5 hours of sleep a night but it's interrupted. (We) trawl from sunset to sunrise, then we add on for fuelling, cleaning, weighing in...finishing weighing in at 11am and then start again at 1pm... and I live out of town so it's half an hour there half an hour back, days like that I sleep here (on the boat)." (INT 14, Yamba, 13/11/18)

"But then you'll like, if it's real busy and no one's got any time to stop, and sit down usually once a night, probably... you'll just have ten minutes, but they won't go to bed, it's all still there, if you keep on top of it enough so it's not going off and the products still good but, you need to have that five – ten minutes, just that coffee..."

"Three-minute power naps if you can fit one in. I love my three-minute power naps." (FG 3, Shark Bay, 2/10/18)

"We work 24 hours sometimes. ...We get an hour to sleep, go back we've worked 48 hours. We've been awake 48 hours. An average night is 14 but we're catching nothing.

We're shooting away at twenty to- twenty to seven now, and winching up at 6 o'clock. So it's 11 and a half hours or a bit less.... You've still got net work to do....this and that to do. Clean the boat....and you gonna finish at 6 o'clock and then they gotta finish sorting for an hour. Then they gotta – when it's all boxed and put down in the freezer – then they've gotta clean the boat! They get off the deck late! That stuff never changes.” (FG 2, Shark Bay, 2/10/18)

Managing fatigue is largely about utilising whatever method is to hand and keeping an eye out on your fellow crew members. As itemised by one focus group, these tactics included:

“Coffee.”

“Three-minute power naps if you can fit one in. I love my three-minute power naps.”

“...18 years of doing it, used to it. Your body adapts to it.”

“Black coffee and a smoke. That's why the durr'y's there.”

Falling overboard

Falling overboard is something that is top of mind for all offshore fishers and to be avoided at all costs. When asked what scares you most at sea the responses were;

“I fell overboard once and I reckon I ran on water....” (FG 17, Port Stephens, 15/11/18)

“Falling in the piss; being in the ocean ocean...drink...water. We wanted one of those - that that net, I don't know who's boat they tied it on but for man overboard...” (FG 3, Shark Bay, 2/10/18)

“If there are big waves the skipper and the ...crew tell us to wear life jackets...and harness... they always remind us....” (FG 1, Shark Bay, 2/10/18)

“Falling overboard, always conscious of that, always wear a lifejacket. All the time...(INT 13, Maclean, 13/11/18)

“PFDs with EPIRBs on them and a method for getting back on board, the things that we think is most important and wireless lanyard”

“We all got to have an EPIRB but I've got a personal one as well” (FG 19, Newcastle, 15/11/18)

There are several phases involved in ending up in the water. As identified in the RIRDC (now AgriFutures) (Brooks 2011) Health and Safety in the Australian Fishing Industry Report, the fact that fishers die from going overboard, which, while it could be mediated by wearing a PFD, most often occurred through being hit by moving parts of the vessel unexpectedly, or as in the case of a fisher in western Australia, being lifted overboard by a lazy line (<https://www.amsa.gov.au/audiences/commercial-fisher>). The primary objective should be to identify the most likely causes of going overboard in the first place and ensure that measures are in place to avoid this. In the instance where

best efforts have failed to prevent an overboard, the next two points of action are; to be wearing a flotation device of some sort (which in itself is not a straight forward decision, as discussed under 'use of Life Jackets' p.43); and then have the means to get back aboard the boat.

A number of participants had discussed the steps of managing going overboard, acknowledging that it was more often than not only 'theoretically'. However, many of them (due to age and fitness) didn't rate their chances highly of achieving a successful reboarding if it actually happened at sea, particularly in rough weather - the most likely instance for this occurrence.

"Well we've gone through it in the SMS...like theoretically"

"But we do actually have a ladder that we found at sea about five years ago and have that"

"Well I'd just put the tipper down...if I fell overboard"

"Well my boat's got a step...you'd just reach up and pull yourself up."

"Like we've talked about it and if someone goes overboard we've got a derrick, but it would be tricky.... I always think about it."

"I think all of us think about them things.... yeah" (FG 17, Port Stephens, 15/11/18)

"We've done a man overboard - I've got photos...on the wharf. We done it on the wharf - no we didn't get wet."

"I was on my own and seven miles at sea and the boat was going and I was hanging onto the ropes at the side and paddling with a duck" (FG 19, Newcastle, 15/11/18)

One deck hand was obviously still traumatised by the experience of a fellow deckhand going overboard in the previous fishing season as they had not talked about managing a man overboard prior to that occurrence. He was keen to share his experience and the need to think on your feet and act fast to keep track of the overboard person - in this case he threw plastic prawn boxes overboard to leave a trail for them to follow to retrieve the person, who fortunately was wearing a lifejacket though it had no personal locator beacon, which meant the vessel was dependent on whistle blowing, and the 'pathway' of prawn boxes, allowing them to get the crew member back on board within 45 minutes. He was in the water however, for all that time, at 2am in the middle of the night.

There are a growing number of fishers who are talking about these issues and there is an opportunity to develop this conversation. This may be something along the lines of a three-step process: Prevention, Flotation and re-boarding, but is something that should be explored extensively with and developed by the industry.

7.2.2. Effect of fatigue on behaviours

Tactics of recognising fatigue is something that skippers are very aware of, and ensuring that fellow crew members keep an eye on each other, as it was broadly

acknowledged that mistakes are made when fatigue takes over. The methods of identifying fatigue were outlined by one group of participants who were all skippers, which included:

"Their eyes go really bloodshot"

"They slow right down, they slow right down."

"Sometimes (their) mood change(s)." (FG 2, Shark Bay, 2/10/18)

"...yeah sleep deprivation's huge. You get used to it, that's basically it. Energy drinks, coffee, that's kind of – kind of it." (INT 14, Yamba, 13/11/18)

And where fatigue is identified, the methods of dealing with it included:

"Put them on lighter duties."

"Try and give them a boost though too, get behind them a bit, because a lot of the time it's a confidence thing..."

"Come on guys we've just gotta get through this, you know if you all pull together, then you know we're sort of seeing the 'light at the end of the tunnel' and yep." (FG 2, Shark Bay, 2/10/18)

Giving in to having a sleep was not the first or even one of the top five options considered.

While fatigue was broadly acknowledged as just being 'part of the job', it was also acknowledged that fatigue was a contributing factor to accidents and incidents. Participants talked of the methods they used to try and keep alert, however, the reality of poor decision making as a result of fatigue was highlighted within participants comments including:

"...people are tired and over work they don't check things that are getting worn, and you know..." (FG 1, Shark Bay, 2/10/18)

"A lot of the time it's just checks on wear and stuff, you know and... people are tired and over work they don't check things that are getting worn, ...(it) falls on the deckie as well because at the end of the day it's his life, you know he should be aware that if he's pulling something down and it's wearing then,..." (FG 3, Shark Bay, 2/10/18)

"The other issue is fatigue..., I thought 'Righto I'll work all day, come back, get my stuff for the truck for the Co-Op and then go to Sydney, and I'll cover that day. Well I got stuck, I didn't get back to the Co-Op until 8:30pm (and) the truck had already gone (to Sydney Fish Market). So, and then I had to take my own product which, okay I've gotta do it. Keep in mind that I'd only had about 6 hours sleep the day before and I'd done a full 18 hour shift and I'm on the road again at 10pm to Sydney to make sure my product gets to Sydney for the market, the last market of the week. ... well, I made it, got back here, I didn't stop because I just need to keep going. Got back here, sat in the car and just passed – just feel asleep in the car. I got home at 2:30am." (FG 8, Hawkesbury, 20/11/18)

However, it must be noted that poor decision making is complicated by the economic pressures to catch product when it is available and deliver it to market in good condition.

Further, fatigue has secondary effects as in the following case whereby returning a crew member to port resulted in a vessel grounding, due to a variety of contributing factors - some of which, on the basis of information provided by one participant, may reasonably be attributed to fatigue and stress affected judgements in less than ideal conditions (non-maintenance of channel markers).

"Okay, so it was about 2 o'clock in the morning, one of the crewmen aboard the vessel had become sick. Ummm...So the skipper decided to pull up his nets and take him into Port. Yeah, he was bedridden, pretty much, so he just wasn't feeling the best, so the skipper was worried, you know and the skipper said 'Yeah let's get him in'. He come in through the Leads, which is the sort of channel umm, at low tide, well as the tide was going out, so and as he got around that last bend he got stuck on the sand bar. One of the navigation markers doesn't work out there. Which they know about but ... Oh, in the daylight it's not there, they know it's not there, but it's there – but it's actually sunk to the bottom of the water. ...So, he's misjudged that because the marker wasn't there, he's gone wide on the turn and got stuck in the mud or the sand. So he's sort of misjudged it because of that, and I think he was more worried about the crewman than he was about where he was going. (So we) got a dinghy at 3 o'clock in the morning to retrieve the crewman on the boat and bring him in and take him straight to the hospital... It was fatigue. Yep, just gross fatigue." (INT 4, Shark Bay, 2/11/18).

While the boat was required by AMSA to be slipped and resurveyed to ensure the ongoing safety of the vessel, there was no investigation of the causes of the incident and the health and welfare of the crew, nor of the physical contributing factors to the grounding which is where the primary cause and effect WHS risk lay. This highlights an unintended safety consequence of other departmental activities explored in section 7.3.6, 'Unintended consequences of non-safety organisations management approaches'.

7.2.3. Identifying what's risky

While 'risk' is not a term generally used by fishers, they are constantly assessing for risks pre, during and post fishing trips, utilising audio and visual cues to identify potential hazards. The management of critical risk is continual in the context of the operation and a highly variable environment, that is, not on what's been generically predetermined in an SMS, hence. The majority of fishers did not do a formal, paper-based risk assessment, but relied on experience and stored knowledge to know what was dangerous and of greater likelihood and consequence in the range of situations they expect to experience in their regions.

"And as silly as it sounds, after you've been on a particular boat for a while, like this vessel I've got here I've been on for ten years, and I know ... every creak and groan in it. Where it comes from, what it is and when something's different, you go looking for it. ... and that's

not written down anywhere or anything like that. It's all ... in your mind. ... You're very conscious of your environment." (INT 10, Ballina, 12/11/18)

Situational awareness was noted by participants as essential in being able to identify what is risky by 'paying attention'. Many made comments about the importance of knowing where to stand, and what equipment poses greater risks during each operation of a vessel, and that this varied from vessel to vessel.

"So we have a camera that shows our back deck, so that's really useful ... I'll be inside turning the boat, (name) might be out there doing something or whatever, and it's easy to just check there to make sure they are still there. There's been a few times that (he's) gone to do something just out of the view of the camera, I'm like 'Oh he's not there anymore' so you gotta go have a look, but it's just making sure you know where they are and also what they are doing out there, so you gotta understand what their job is at the time. ... We've had a few jobs we've had to get up the gantry a couple times, so when he does that I'll make sure I'm out the back looking for him always. ...out on the arms as well." (INT 14, Yamba, 13/11/18)

"...I'm very particular on who uses what, like I don't let any crew touch anything mechanical." (INT 10, Ballina, 12/11/18)

"Be aware of your surroundings, know the job though, and the safe practice...being aware of where everybody is...especially in rough weather" (FG 3, Shark Bay, 2/10/18)

"...you know, it's just places you gotta stand on the boat, ...you stand behind the table or in front of the table – right out the way – don't stand out the sides, because everything's going over the sides. Like I said, you gotta stand in all the right positions on the boat when the nets coming up." (FG 3, Shark Bay, 2/10/18)

"...it's just second nature now. It's like how to tie a rope on, where to stand, what not to do over here, these are all safety issues –" (FG 8, Hawkesbury, 10/11/18)

"...For us, we look at something that's going to break... don't touch things we don't have to." (INT 14, Yamba, 13/11/18)

"...you get someone who's not so cluey, you know you get people who work on boats who don't understand the danger and you can't really put 'em in a position where they're in danger because they don't understand it yet anyway, you know what I mean? So...I 'spose, and seen dangerous things happen... or where a dangerous thing has happened makes you aware for next time, you know like..." (FG 3, Shark Bay, 2/10/18)

"...and that's one of the things you've gotta do as the skipper of a vessel, is keep a proper look out, and that's what you have to do! Especially in those peak times around Christmas and Easter time when there's a lot of boat movement around the estuary, so you've got to be highly vigilant about what's going on. Keep an eye out, you know, you've just – that's what you've gotta do..." (INT 7, Hawkesbury, 9/11/18)

"If you stick to a set way of doing things - that when things go wrong. You have to be constantly be assessing the risk. " (FG 16, Coffs Harbour, 14/11/18)

Overall, all fishers - skippers and crews - who had a season or more on their particular vessel were very aware of the risks that that vessel presented at all phases of its operation. To them, talking about the specific risks they were presented with and have

either mitigated or managed and continue to do on a daily basis, was akin to trying to explain all the different elements of driving a car to and from work every day in the whole range of conditions you might expect; it was second nature but articulating it was not something they found easy to do.

7.2.4. Interpersonal relations

Interpersonal relations are those networks with family friends and social networks (Prochaska 1997; Sallis 2015) that we respond to, shaping our decisions and responses. The interpersonal relations that emerged from discussions in the focus groups was the agreed authority of the skipper in all situations - it is well ingrained and unquestioned. If you don't like the skipper and the way they do things, then you leave the vessel - you don't question it. This was articulated in comments such as;

"Good crew operations. ...they don't get there from just being able to catch, it's the whole thing, it's catching, awareness, crew, morale, everything, you know like." (FG 3, Shark Bay, 2/10/18)

"...worked for a lot of different skippers, and I've seen some stupid ways of doing shit, but that's their way like... like, you can't be like, you can't try and change them because they've been set in their ways, and that's pretty dangerous like you think to yourself... sometimes (you might say something if you disagreed with the skipper), and you know but some of them are that steadfast you just can't change them, they're you know? They're old school." (FG 3, Shark Bay, 2/10/18)

Further to this, Skippers, while they observe each other keenly, they do not comment on or provide unsolicited advice, even if they see dangerous activities taking place;

'It depends on the experience of the skipper, you can't say anything about a skipper even if you think what's he's doing individually (is unsafe), cause it's his business.' (Interviewer Notes FG 5, Sydney, 9/11/18)

"No because that's not our business. It's not my business to tell someone else what, what their thing is. ... Some people get away with it." (INT 11, Ballina, 12/11/18)

"Nah well it's not, you're just conflict you know? And we don't want conflict in between ourselves. (But if they were in trouble) ... oh, you'd go and help 'em straight away." (FG 12, Maclean, 12/11/18)

"You just look at little things that they're doing and you're like 'Well you don't have to be doing it that way'. I could (say something) now, now I'm more experienced now and taken a little bit more seriously. Back then, no; they'd laugh at me basically and throw me off – not literally – but, I wouldn't have a job afterwards. I think that's a big thing with a lot of young people is that, you know they're dealing with a lot of men that are a lot older than 'em, a lot more experienced, and if they speak up they won't have a job afterwards. You do what you're told and that's about it. You gotta put up with it for a while until you are taken seriously and (then you) can put your two cents in. And some of them have

been doing the same thing and it works for them for so long they go 'Oh no, I've been doing it like this for years'." (INT 14, Yamba, 13/11/18)

Family relations complicate this, where a skipper or fisher may instruct a family member or discuss with them acting in a manner to increase safety, but not do so themselves;

"Every single person (is instructed to wear safety glasses); well I tell me brother every time 'Two pairs of safety glasses here, it's up to you to wear 'em, but I'm telling you, they're there for you to wear them, so if you get something wrong with your eye, don't come back at me and say..."

(He doesn't wear them himself, but acknowledges that the same thing could happen to him.)

"But I work with my brother don't forget, if I had a younger person or a different person he'd be wearing 'em. My brother's been fishing as long as I have, he's skippered boats and stuff like that and I'm not gonna mentor him on the safety aspect of it, however ... if I have another person or another person comes for a ride with us, he wears 'em....There's an old saying, 'Do as I say, not as I do'." (INT 10, Ballina, 12/11/18)

"See I think most fishermen ... are very conscious of safety and very conscious of their crew, but they don't say 'Oh you going to wear a lifejacket'. ... I've mentioned it to me brother because you know these high vis vests, I think they're a great idea because you know I think ... we should wear 'em. ...I won't sort of jump out there and do it first, but ... because me brother will tell me I'm stupid and he wouldn't wear one." (INT 10, Ballina, 12/11/18)

In all of this, respect and regard for experience were paramount, with actions and incident free time at sea having a much higher status amongst fishers than any level of certification.

"Time without incident is the track record of the skipper - but that's why the safety people have to get to know each skipper" (FG 5, Sydney 9/11/18)

"Older guys only trust experience" (FG 16, Coffs Harbour, 14/11/18)

Or in regard to the challenge of suggesting that the Skipper still has things to learn:

"You know it's like, if you went and done your car license how many years ago? So if you went for it today, you reckon you'd pass? So that's what I'm saying, but you can drive a car can't ya... you know what about the guys that have been driving for 40 or 50 years and he's been doing it ... he hasn't had an accident, but I'll bet you if he went to the training test today, you know in a manual car to the letter of the law on how you should change the gears and not change the gears and oh my god, and so, and you go well hang on a minute, he hasn't killed anyone, hasn't been in any accidents ..., fisherman ... and you're going to tell those blokes to go and do training?" (INT 7, Hawkesbury, 9/11/18)

It was noted in the Sydney focus group that the experience of the skipper IS the safety of the crew, with all participants reinforcing their awareness and agreement that the

safety of the crew was their highest priority; it was not just a point of honour, but a heartfelt responsibility - ingrained by family connections in this particular case; but remained a consistent message regardless of the familial relations of skipper and crews. Because of the hierarchical status of the skipper, it was noted that training and other administrative risk control measures such as SMSs may experience greater receptivity if the differentiation between Skipper and crew experience was recognised.

There is also a strong culture of keeping channels of communication open at all times, regardless of how highly a skipper may be regarded by others. Additionally, there is also an informal code of conduct in a number of fisheries involved in this research that either no vessel goes out alone, or they let someone know at the co-operative when they are heading out and expected back to keep an 'eye out' for each other.

"They talk to each other every day. The skippers. So there's a private radio station that they've got that they'll interact with each other, umm, and then there's the public one which is the HF one. So we've got our own private frequency ..." (INT 4, Shark Bay, 2/10/18)

"Well that's another thing. Yeah, we don't go out alone. One boat will not go out unless they're doing the wrong thing. ... So for the... most of us we – there was one night, one of the boats up there were pretty broke..., they wanted to go to sea and no one was going to go. ... and we ended up deciding to go with them. They can't go to sea unless we go, so we might as well go." (INT 14, Yamba, 13/11/18)

"A few years ago there was one trawler guy... and he told the guys downstairs that he'd be home Wednesday -two days later - and he wasn't home, two days later; so we called his phone, and his phone's off; called him on the radio and his radio's off cause he doesn't like the chatter; called him on the HF set and he didn't have that turned on cause he didn't like the chatter. So we called the Police and AMSA and they sent a chopper out. So that as an industry as a co-operative that's what we do." (FG19, Newcastle, 15/11/18)

"I usually ring the co-op up in the afternoon and let them know what time I'll be in and how much fish I've got to unload m going to be coming in..." (FG19, Newcastle, 15/11/18)

Interpersonal relations in the fishing industry are complex and layered and significantly influence the ability to adopt information. Skippers are the 'gate keepers' of information and behaviour on board their vessel and, culturally, crews are very unlikely to contravene directives in that environment - regardless of safety. Skippers will not tell each other what to do, but they do hold skippers of many years 'blemish free' experience in very high regard and may seek to learn from them, through listening and observation. Such skippers in each fishery are likely to be leaders through their behaviour and stories, potentially provide effective nexus points of communication in regard to improving the adoption of new and better safety equipment and practices.

7.2.5. Attitudes to risk control measures

A risk control measure or 'risk control' in this context is treated as those measures that – in relation to health and safety – seek to eliminate or minimise the associated risk.

The key message that was broadly conveyed through the focus groups and conversations was that the majority of fishers was that if a risk control made sense to their operating environment then they are most likely to adopt it.

"But you know, if the blokes just go well...l if they think it's important, they'll do it." (INT 7, Hawkesbury, 9/11/18)

For example, while it is recommended to man overboard drills, there are basic environmental factors that mean it just doesn't make sense to implement the risk control of conducting drills;

"Do you know what's in the water?" (bull sharks)

"I don't trust the boat to come back to me so I'm not going to do a drill" (FG 9, Ballina, 12/11/18)

Further, where the importance of a particular risk control or recommendation is not obviously relevant to their operating environment, they do not understand why they are being perceived as unsafe and receiving such directives. An example of this is the recent hook up advice put out by AMSA;

"Like the operation manual that AMSA gives ya for ... being hooked up, apparently it was on Facebook, I haven't read it, but believe you me, I've got me own plans as far as getting hooked up's concerned." (INT 10, Ballina, 12/11/18)

The hook up advice was actually in response to a number of incidents that resulted in fatalities; it was developed by fishers, but it's source and situational relevance was not acknowledged.

While fishers acknowledge with changes in equipment and greater resources, circumstances can always be improved, they believe they are doing the best they can to be safe. The key to contemplating change in regard to adopting new ideas is being convinced of the importance of the change it will bring about in their particular environment.

7.2.6. Use of PFDs/life jackets

Although work health and safety legislation provides clear guidelines regarding the need to identify and manage risks in the context of the operation, and in order of effectiveness⁶, significant emphasis is placed by those outside the working environment (e.g. agencies, society) to wear personal floatation devices (PFDs) or lifejackets at all times. This is often in contrast with the fisher's perception, and management, of the incumbent risk.

⁶ See Safe Work Australia's Model Work health and Safety Regulations (2012) section 36. Hierarchy of control measures, where personal protective equipment is identified as a last line of defence

While to some it is eminently obvious as to why you would do so in the context of their operation:

"Falling overboard, always conscious of that, always wear a lifejacket. All the time. Well I wear a belt one you see. Nah I wear a belt, and I always turn it around to the back. ... So all I've gotta do is roll it around. ... but I could probably swim to the bank (of the river)." (INT 13, Maclean, 13/11/18)

There are others who may have tried to wear a PFD some time ago, or only tried one type, and found that it was cumbersome, or hot, in their operating environment, and have not been made aware of the broad range of PFDs that they can currently choose from to suit their particular situation.

"...they would love it for us to wear life jackets. And seriously, I'm not wearing a life jacket. We going to make everyone wear a life jacket in a boat are we? ... it's hot. It's 42 degrees, I'm out there workin' and I don't have a bloody life jacket on." (INT 7, Hawkesbury, 9/11/18)

"I tried to wear one (PFD) and I found it was in my way... I just couldn't work with it..it was about two years ago.. it's just the work we do you're bending down a lot and it just gets in the way..." (FG 17, Port Stephens, 15/11/18)

"No. Doing what we're doing they're fairly cumbersome. If there was some way of sort of making them not cumbersome, you might think about it. ... if we've gotta go off the boat, yes, we've got one of those little auto-inflate vests that we just put on. ... so if we've got to go out the arm or something like that, if you fall in, you wear one then. But I do find it tends to get in the way a bit." (INT 15, Yamba, 13/11/18)

Lastly there is the issue that we are all aware of but is rarely discussed until the barriers to wearing PFDs is explicitly raised; and that is sharks. One participant shared a video taken of the sharks following the boat - a very sobering visual explanation of the reason why you wouldn't want to be 'bobbing around' in the water in the wake of a trawler.

"Hell yeah (he gets sharks following the boat). I'd rather not be floating, and not be a floating target." (INT 15, Yamba, 13/11/18)

"...And umm lifejackets that's well, something we don't wear. Obviously, we have them. But umm, yeah, we just don't wear 'em because sharks just, I've seen - we've thrown a shark over before, like a big 6 - 8ft shark over, these guys (other sharks) were eating it. So, we figure if we're going in, that's it. "They follow us all night as well. So we figure if we're going to wear something that's uncomfortable to start with, that kind of gets in the way a little bit, umm it's not worth it when you're going over they're going to get you, so... The big thing with sharks too is that if you're something on the top of the water, they're going to want to get you, because they'll think you're something dead or injured. If you can dive down and be with them on their level, you might have a bit of a chance." (INT 14, Yamba, 13/11/18)

However, fishers are not silent on the issue of life jackets, as evidenced by the following public Instagram post (Figure 3), which articulates the multiple factors that fishers innately - consciously or otherwise - consider in whether to wear a PFD, and over what period of time during a trip, or not.

Figure 3: Fisher Instagram post on choosing to wear a PFD



What becomes evident is that for fishers, the choice of wearing a PFD is not a simple binary one; yes or no, nor is the management of any risk in the context of any individual operation based on the availability of resources, vessel layout, work environment, fishing method, years of experience etc.

The decision to wear a PFD or not is nuanced by weather; inshore or offshore; areas they operate on the vessel and if wearing one will put them in greater danger in the case of a capsize than not (e.g. inside the wheelhouse), and proximity to other dangers, such as sharks.

While there is a significant opportunity to shift the focus from conversations about PFDs (which should be the last line of defence), to more robust, preventative risk control measures (that is, measures to prevent going overboard in the first instance), there exists a gap in the provision and sharing of information amongst fishers regarding the breadth of – perhaps more tenable – PFD options available. This again highlights the need to increase fisher access to safety information through not just written form, but visual and experimental interactions.

7.2.7. Learning about risk and staying safe

Learning about risk and staying safe in the industry is universally a 'show and tell' scenario. Participants valued being told about how to stay safe, and skippers were exceptionally aware of the need to layer information in time frames that new crew members could absorb it. Skippers are aware that new crew operate in an environment like no other they would have experienced, let alone be expected to work in, increasing the risks for not only them, but fellow crew members;

"You keep a good eye on them (new starters). You've gotta, you've gotta baby them for the first week or so. And then just, yeah, then they can start to getting into it, like you know, just hold them back and let them watch. Watch and learn about what the jobs about first and then you can get your hands in there and start doing things...you get someone who's not so cluey, you know you get people who work on boats who don't understand the danger and you can't really put 'em in a position where they're in danger because they don't understand it yet anyway, you know what I mean? So... I 'spose, and seen dangerous things happen... or where a dangerous thing has happened... makes you aware for next time, you know like..." (FG 3, Shark Bay, 2/10/18)

"... you pull the crew aside and you point it out and you make note of it to 'em you know, that's what you've gotta keep your eyes out for, like you know next time you gotta stop that from happening..." (FG 3, Shark Bay, 2/10/18)

"You have to scream at 'em when it gets dangerous and then you'll pull 'em up in the wheelhouse and say 'look don't do that again and just explain it, just explain what it is and then normally if you try and keep the newbies back to watch it for a few months and then you let 'em have a crack, and then keep them out of the action" (FG 2, Shark Bay, 2/10/18)

"Hands on experience is better than anything out of a book. Basically, we're a factory so you can give them a basic overview of how everything works over a couple of nights. (But)... passing on the experience can only be achieved with time on the water - you get knowledge from years of experience. 'Listen and watch' is the only way to learn." (FG 16, Coffs Harbour, 14/11/18)

"Do it hands on when you're out there. You've just – you gotta talk to 'em, and tell them, show them." (INT 7, Hawkesbury, 9/11/18)

It was also felt that for the type of crew that the industry attracted, showing and telling was the only effective way because they won't sit and read information:

"You'd have to. Because that's probably the only way they'd listen, they're not going to sit down and read a book." (INT 10, Hawkesbury, 9/11/18)

For some crew members learning about staying safe is either direct experience, or has come at the ultimate price for fellow crew members;

"Like a near miss, you know because when I was ahh, when me and my partner were on the boat every time they, ahh, bring up the nets, because have too many species like ahh, weed or like spines or stones – they tried to shake those ones, but one time ...this one is a big stone come right down on my head, that's why next time I had to do

something, that's why I bring a safety hat... and this guy he got hit by big scallops... it's not really hard but when it comes (from a height) it hit him right here (indicating his head)... a little bit blood" (FG 1, Shark Bay, 2/10/18)

"To be honest I was working on uh ...is very dangerous because ah three guys ...uhh.. on two deck...died, just right in front of us...yeah, because falling... rocks fall down to them, everything was smashed up, you know but... I don't know how high it is, but uh when they came fall down on the boat, 1900T of block... the deck was too, you know... it went through all the way down to the wet deck...that's why I always think about the safety" (FG 1, Shark Bay, 2/10/18)

To that end it was agreed that some have the inclination for the work, and others just don't regardless of how much training they have - raising ongoing safety concerns.

"... you have to have the mind for it (managing unpredictable, highly variable circumstances) to tell you the truth. You have to know what needs to be done without being taught. You need to be guided along the way, you need to be taught what needs to be done, but you then need to look at what needs to be done when something's not working how it should be, you need to think about it." (INT 14, Yamba, 13/11/18)

While some participants agreed that basic introductory knowledge was useful as a foundation platform, it was also potentially dangerous if the person concerned thought it had taught them everything they needed to know.

"...they're (his crew) fairly conscious on everything, you know like straight away at 1:30am on Saturday night, there was a storm ... to sea, there was a yacht, I'm steering and (Name) had to be woken up at 1:30am, there's a yacht and it's just coming straight at us ... and I said '(Name)..., there's a yacht there' and she's got the spotlight, put it straight on 'em, blew the horn and everything, so she's up to speed quicker than what I would be ... I could see straight away well she's learned something from all this, umm she's done a Master 5 ... she went and done all the courses in Sydney and Tweed Heads, umm, so she's got all that and you can see that that kicked in straight away" (FG 12, Maclean 12/11/18)

However, the majority of skippers and crew maintained that in high risk situations, hands on experience, within the specific fishery and vessel type, is the only way that a crew member could be taught to operate safely.

"Well you can't. It's only experience." (FG 12, Maclean 12/11/18)

"... 'cause in hindsight until you're here and until you're doing it you really have no idea. It's not something you can learn theoretically." (INT 14, Yamba, 13/11/18)

You have to teach yourself. ... people don't like to give up their secrets." (INT 13, Maclean, 13/11/18)

"You may think you know how to safely de-hook on one vessel but it could be completely different on another (same thigs with planes...all planes have different emergency responses!). (FG 15, Coffs Harbour , 14/11/18)

The one thing that all fishers could agree on in terms of how they best liked to share information was;

"We all just tell stories." (FG 9, Hawkesbury, 10/11/18)

These responses regarding learning, must be contextualised in the reality that current courses and certificates are generated for the maritime industry generally⁷, and hence have limited specific relevance to the fishing industry and the type of operations on board a fishing vessel. Hence they and technical courses and training in general, have and are not highly regarded. Once again, for fishers to engage with a source of information it has to have a high level of relevance to their operations.

7.2.8. Sharing information

Fishers, per learning scenarios, are very open to sharing information in the appropriate context - such as weather or other operating conditions - over the radio. Participants talked generally of loosely keeping in touch with fellow skippers in the general vicinity of their operations.

"They talk to each other every day. The skippers. So there's a private radio station that they've got that they'll interact with each other, umm, and then there's the public one which is the HF one. So we've got our own private frequency, so there's a lot of skippers who actually – like (Name) and (Name) – who'll work together. (Name), (Name) and ..."(Name), (Name) and ..."(Name) will all work together. They'll be constantly on the radio ... 'What's your catch, what was that last trip shot.'... so they're all in constant communication. There are a couple of skippers who are isolated, not in the sense that you know, no-one talks to them, ... you know they have their own little groups. So even with guys from the private side, they'll still fish with the nor-west blokes as well... well these guys all were deckhands together, and come up through the ranks as skippers together ..." (INT 4, Shark Bay, 2/10/18)

They are also aware of and where they are able/inclined, share opinions or experiences over various forms of social media such as Facebook and with the younger generation this is now expanding to include WhatsApp, Messenger, Instagram and Snapchat.

"... yeah, no they do (crews communicate), because I do hear stories about you know, on Facebook Messenger and texting each other about what they got and how they caught and things like that, so there is some communication there"(INT 4, Shark Bay, 2/10/18)

"I talk to a lot of other deckhands, young deckhands, particularly all around the coast and yeah we talk about it all the time ... mostly Instagram. So Instagram's a huge platform for

⁷ Certificate in Maritime Operations, <http://www.amc.edu.au/study/coastal/vet/certificate-iii-in-maritime-operations-master-up-to-24m-near-coastal-mar30918> (Accessed 14/2/19) and General Purpose Hand Near Coastal, https://www.maritimesafetytraining.com.au/courses/general-purpose-hand-deckhand/?gclid=Cj0KCQiAnY_jBRDdARIsAIEqpJ1omTV3nt1PhQPk93ts28px-JJKYJvJ4HBLAswTSjxoCMu7Kedh6loaAt8sEALw_wcB (Accessed 14/2/19)

me, in particular. We do actually have a Facebook page which is umm, Old Australian Prawn Trawlers Photos or something like that. ... it has most of the old blokes on it. Whereas a lot of us younger guys we're all on Instagram and we all kind of follow each other and share stories, stuff like that. ... Snapchat – depends on how close you are to 'em. ... If we had a bit of bad weather I like to put that up just so people ... we had a pretty sunrise, that kind of stuff, if we have some kind of catch that's a bit umm, different, whatever ... share that" (INT 14, Yamba, 13/11/18)

This highlights that while the primary method of sharing information that all fishers are familiar and comfortable with most likely to be verbally, there are increased opportunities to expand how safety information is disseminated to those who are open to receiving it via visual forms (not just the written word) over a variety of social media - dependent on their demographic - but that short videos are very conducive to this form of media, are powerful and increasingly cheap to generate.

7.2.9. Improving industry safety

The key element of this research is to look for methods to assist industry in continuing to not only be safe, but to seize opportunities where they exist to help industry with continuous improvement. One of the key opportunities to assist in motivating industry to engage with new technologies or approaches, is to identify the cost benefits in operating at increased levels of safety:

"Safety's not our only motivator ... like if your boats run down its going to let you down and you'll lose money. That's the other reason - anyone who's successful in the industry and survives in the industry knows that what you've got to do. If you don't maintain look after your gear it's going to let you down and it's not going to break down on the mooring." "I think it'd be alright if the person knows at the time that they want to go fishing then they'll pay attention to things and its interactive." (FG 17, Port Stephens, 15/11/18)

Increased conversations about safety, as fishers are expert story tellers and sharers of anecdotes, may be a key opportunity to share learnings from incidents, raise awareness and to enhance the industry's capacity to continually improve.

Further to this, opportunities to establish an apprenticeship or mentoring program were raised.

"... I think there needs to be a standard practice that gets applied across the fishing industry that is ..is minimum requirement for crewing and then a refinement for any operation, ... and I think it would be really good to see ... a recognised - not an apprenticeship - a traineeship fishing industry....it's more than that (the General Purpose hands course)..., it's for young people coming out of school to choose the fishing industry to get access toIt'd be nice to have a mentoring program... it could be a PFA OceanWatch, sponsored by Sydney Fish Market program and Fishing Training Council - it'd be nice to see something we could offer school leavers, so we could get generational change." (INT 18, Port Stephens, 15/11/18)

A potential challenge in the improvement of safety may exist amongst the minority of well-established Skippers and older crew members who are unwilling to engage with new equipment or methods of fishing. This is due to the hierarchical nature of the industry (i.e. a younger person won't call out an older person, fear of being laughed at for making a suggestion.) However, there are increasing numbers of well-established and respected Skippers who could act as leaders in this aspect of the industry through video story telling with lessons learnt.

To undertake a program of capturing the experience of well-established and safety credible skippers, in collaboration with AMSA representatives would create a significant opportunity to challenge the current partitioning of industry safety activities and regulatory compliance approaches.

7.3. Effect of Current Management Approaches

7.3.1. Current Role of AMSA

Perceptions of the benefits offered by AMSA varied broadly amongst the participants, with some seeing significant benefits generated to the industry by AMSA activities, and others seeing no benefit but just costs to themselves from interactions with the agency. As identified earlier, the majority of participants perceive that AMSA is a disconnected bureaucratic process from their lived experience of safety in fishing. This has the effect of alienating them from the objectives or intent of initiatives, except to be legally compliant.

"They write legislation from a 9-5 perspective. ... We are dictated by the environment, the moon, the tide changes an hour every day..." (FG 8, Hawkesbury, 10/11/18)

"It's just like box ticking...Someone sitting in an office saying this is how it runs and this is what you do and what you do... I mean he has no idea... I have no idea how an office runs ... I think it should be something simplified and that a few guys can get together - we know where the dangers are and what we have to do. (The current approach) presumes everybody's the same... you know like trap fishing." "Yeah we'd agree with that. Safety out there compared to what you say and do in an office is completely different. "AMSA stuff - they stipulate something but they don't take into account context of the operating environment, which could make things more dangerous. So just 'flick' past AMSA stuff." (FG 16, Coffs Harbour, 14/11/18)

"I think the government is just ticking the boxes...they send us a piece of paper and so long as we go along with what they say...and their rules and that ...umm if I had a deck hand I'm responsible for him, but I don't yet I still have to have this paperwork to appease somebody." (FG: 17, Port Stephens, 15/11/18)

"I'm a sole operator and I've got to have a have a map (of the boat) showing me where everything is!" (FG: 17, Port Stephens, 15/11/18)

"It's like saying to someone you've got your 1970 Torana, if you just write and document everything down it's be safer. But no, today's car built today with all the safety equipment and collision avoidance, that's what's making it safer. The paperwork is not making it safer." (FG: 17, Port Stephens, 15/11/18)

"As long as you've got your stickers, what says your fire extinguisher's there, that's good." (But) "Never, (asked if we've operated the extinguisher); as long as the fire extinguishers there and has a sign pointing saying this is a fire extinguisher - it's just a joke." (FG 19, Newcastle, 15/11/18)

"It's more about paperwork and it's very annoying to us cause we're all being practical, we've been brought up all our life fishing and practical now they're trying to make us all paperwork, so the focus is now off doing the safety side of things, and just filling out the paperwork, really, that's all it is. And if you've got the paperwork right, it doesn't matter." (FG 19, Newcastle, 15/11/18)

"I don't see a lot from AMSA to tell you the truth. You know I really don't, not yet. ... The thing that's worrying with AMSA already, just in the early days is that they're thinking on the run, and thinking 'What can we find to do here?' and ... it's not generic, you know what I mean? I see it in the Yamba boat harbour where a guy passed us, ...everything good, he went four boats up and knocked the guy back for exactly the same thing we had. ... There's no consistency so the next guy blows up and says well, you know 'How come?'. ...and that's what's worrying about them making rules up along the way or the guys who are doing it or working for 'em, really haven't been pulled altogether to say 'This is how we're doing it', and it is a real worry that they'll make the rules up along the way."

The lack of information, relevancy and consistency are the key issues that participants have with the current AMSA processes and operations.

However, there are also very positive stories of interactions with individuals who have explained AMSA requirements and processes to individual fishers and provided not only a greater level of understanding, but of comfort and engagement with the AMSA objectives.

"(Name) he was really good. He just went through everything and he explained a lot of stuff, he wasn't there to cruel you but he would if he needed to - he was fair dinkum - he's been around - he's not straight out of school. He's focussed on talking about stuff not just there to lay the law down. You get a young guy straight of uni who's trying to prove himself, cause they're reading out of a book." (FG 16, Coffs Harbour, 14/11/18)

"I've had like letters - a letter from him letting us know that they'll be conducting surveys, and my boat hasn't been surveyed since I put in survey - it was fourteen years, it hasn't been looked at for fourteen years. (AMSA delegate) contacted me and came and looked at my boat, and he spent a lot of time looking at my Safety management system - like a lot of time on that - I'm really glad I'd written a good one.... And he gave me a whole list of things that I had to and that one had to be done in two weeks and that one had to be done in a month. ...I thought he did a really good job." (INT 18, Port Stephens, 15/11/18)

"... I think as much as I might whinge about things with AMSA, you've got to have something ... to say they can come along and check. Well, the threat that they're going to come along and say 'You haven't done this or done that' ... and at times I think a spot check is good, I really do, as much as people don't like it, so long as it is consistent and it's the same for everybody... There's a lot of people that just fly by the seat of their pants that could, say, 'Well that's not real safe.'" (FG12, Maclean, 12/11/18)

The credibility of staff of AMSA or their delegates is crucial to engaging with fishers - they respect experience not only amongst themselves, but particularly of agency staff who are there to tell them how to do their work.

"He was very well qualified, he told me all the things he'd done - and I knew that he wasn't a mug. He explained he was the area AMSA guy, I put his number in my phone and I'm going ring him ...to get his advice to make sure that what I'm proposing complies with AMSA. I don't think I'm going to have a problem." (INT 18, Port Stephens, 15/11/18)

"They say they've (AMSA representative) done a lot of sea time and that, but sea time to me maybe on a big cargo ship, will look a lot different to being on a prawn trawler ..." (FG12, Maclean, 12/11/18)

"Well the AMSA bloke here, we get on fine with him but I mean like, it's the blow-ins. Yeah, the fly in squad." (INT 7, Hawkesbury, 9/11/18)

One of the key issues of concern in regard to the current arrangements of AMSA is the methods of communication - or in some fisher's views - the lack thereof, and the confusion that can be created.

"...no one here knows what's going on, everyone knows what we've got to do, I think AMSA included... we get all this paper and surveys and I ring up AMSA and they go like 'I don't know, I'll give you a case number and get back to you' and it's like two weeks, if I'm lucky and we've solved it all by then....that's my issues. ... But I feel that AMSA has no idea; it's really messy." (FG: 17, Port Stephens, 15/11/18)

"I spent hours up there, and there is no one up there who's trained to talk to us...like this is a fishing village and there isn't a person up there who's got a vague idea." (FG: 17, Port Stephens, 15/11/18)

"Well I wouldn't know where to start. Website is a nightmare ...can't find anything. Then you try calling them and that doesn't work either..." (INT: 14, Yamba, 13/11/18)

"Oh we get it from word of mouth from each other...no one's got any real information we just hear from each other. "The only thing we get is I get a call from (name) that he wants to come and check my boat over - that's the first thing I get from AMSA - the first thing I hear from them." (FG17, Port Stephens, 15/11/18)

"For example, we had to ... fire buckets. We were all going mad running around making sure we had these fire buckets, and then he came and said to us on the day he did it 'A firm plastic bucket would be sufficient' and we said 'Well shit (Name), we wish we had of told us that before', but he said 'I only found out today'." (INT 10, Ballina 12/11/18)

"I receive a little bit about safety from PFA - if I hadn't paid my \$16.50 a week I wouldn't know nothing. You know there are a lot who don't like PFA and...and they don't know anything know anything... So, I'm trying to do the right thing." (INT 6, Hawkesbury, 9/11/18)

While AMSA may have deployed email or letters as the preferred form of information dissemination, fishers either aren't aware to get on distribution lists; are not literate

enough to read it; or, if received it was noted that much of the information provided by AMSA (including the website) is very bureaucratic in its delivery - at times employing 'legalese' which is very alienating to most people, including fishers - hence they don't read it and forget they have received it.

Additionally, as identified in the quotes above, the other critical aspect that is exceptionally alienating to fishers trying to engage with the latest in safety information, is the lack of availability of reliable information, or consistency in the information provided.

7.3.2. Use of SMSs

There was a wide range of responses to the usefulness of SMSs, which it appears is largely predicated on the degree to which individuals understand the purpose of it, and their level of comfort with paperwork. However, the overriding message is that SMSs have a use in regard to being a check list, but don't do anything to improve safety on board over and above what they would normally do; SMSs have not significantly changed their awareness of risks or unsafe activities.

Those who see SMSs as simply a bureaucratic paperwork requirement, appear to likely have one or more factors in common. They have been given a template for the SMS, which they believe they have to fill in every item and not change or remove anything - they have not received an explanation of its purpose and use, that makes sense to them; so, they have done what they believe is necessary to be compliant.

"Nup. It's in my cupboard in there, I'll go and show you the whole – that thick – what I had to do. ... I took it out so the cockroaches wouldn't eat it in the winter and now it's back on the boat while I'm working, but you know, my wife said 'Oh you've gotta have that on the boat' and I said 'Why have I gotta put it on the boat?' but I don't look at it." (FG12, Maclean, 12/11/18)

Well, I just made mine up. You know? I just ... copied one off the internet and changed the name to mine What a waste of time." (INT 11, Ballina, 12/11/18)

"I'd say there's a lot of crap in there that doesn't need to be there. I mean...um... like we're not a nuclear plant out there, but there are ...are a lot of moving parts....but if we could simplify things.... you know we're not office people we're fishermen and we've got a lot of things to focus on... so if we could simplify things that would be good." (FG 16, Coffs Harbour 14/11/18)

Some see it as useful as pre-departure checklist or an induction, as they see it as too basic to cover their operation comprehensively to be a safety manual.

"Yeah there're not a bad thing actually.... It's a good reminder. It's more of an induction" (FG 16, Coffs Harbour, 14/11/18)

"I have a pre-departure checklist with everything that you do and then I just write it down on the log book. 'Cause (Name) came on and we had that stuff and he's like 'you don't have this and something happens ... - it's an insurance thing... so it's just what you got to do.'" (FG 17, Port Stephens, 15/11/18)

"Every boat's different. It's like getting out of a Toyota and getting in a Holden. It's still a car, but just things are different. Some people do do things a different way, and that's the only thing that I can see this SMS is probably ... because you're tailoring it to suit your own vessel." (INT 15, Yamba, 13/11/18)

"We do an induction - we have a form - fills his name in all his details and medical issues this is all part of an SMS we had on that boat - we don't have that boat now...so skipper...he'd take the new guy through and shows life raft, vents, flaps fire extinguishers and all, and he (crew member) signs to say yeah I've seen it all and that's a legal document... (FG 17, Port Stephens, 15/11/18)

"...can be useful as a VERY basic outline (fire extinguishers/ operating a radio) and would be useful as a deckies check list.... But it's important that they don't think they know everything 'cause everything is different." (FG 16, Coffs Harbour, 14/11/18)

"SMS template that is legal with AMSA, but it's very basic and not adequate to give basic operating environment... it's too basic. To me it should be written by the fishermen.... Like I said, it's like trying to plan a car accident... you definitely can't do it from an office." (FG 16, Coffs Harbour, 14/11/18)

In terms of utilising an SMS to record events and update it accordingly there were few who treated it in this manner - more often than not because of a disinclination/inability to deal with paperwork, an inability to see the value in doing so, and/or an overload of fisheries management paperwork. Further, a number of fishers were wary of the temptation to see the SMS as the gospel to all safety situations - which they do not see that it can be given the broad range of potential conditions that they can face at sea.

"Yeah, nah (it doesn't get recorded in the SMS) you just talk about it amongst yourselves (near misses) ... the crew... and you make note ...to stop that happening again" (FG 3, Shark Bay, 2/10/18)

"in their ... safety management system, the guys have actually signed off that they've done man overboard drills. So, whether they have or not, we're taking a gospel from a piece of paper, umm, but it's part of the requirements in the SMS." (INT 4, Shark Bay, 2/10/18)

'The problem with SMS's is that it gives a false sense of security of knowing everything about the safety of a boat. A young guy who's just come out of TAFE thinks he knows everything cause he's aware of the SMS'. (Interview Notes, FG 5, Sydney, 9/11/18)

The communications about SMSs appears to have been inconsistent, explaining why there is such a broad range of interpretation, and some confusion, as to what the

objective of an SMS is, and how a template is supposed to be used/tailored to their environments, and what purpose the SMS serves on an ongoing basis.

"I got a piece of paper on my car about three years ago and it was saying there was going to be this guy talking about SMS systems up this café or something, I don't know, but that's it - that's the only thing I've heard about SMSs. Too bad if my car wasn't parked there that day". (FG 17, Port Stephens, 15/11/18)

"... But then you'll have a surveyor come on the boat, and he won't even ask for your SMS." (FG 9, Ballina, 12/11/18)

"I have no problem with the SMS, I have no problem with having a safety check off list for crew, and an induction, but I don't know about SMSs Fishermen are fishermen. It's really hard to get them to maintain logs and things like that and the only reason they want you to maintain logs is because if something goes wrong, there's gotta be a routine you're going to follow." (FG12, Maclean, 12/11/18)

"Having some sort of template would be great - I've spent days doing mine but I haven't finished it yet. I've got the PFA template, but it's not good enough for my boat....they've got a template that's legal...but it's very basic... you know like it doesn't tell you how to start the engine ... if I had a deckhand who'd been working a couple of weeks, there's no way that (the SMS) would be any help to him." (FG 16, Coffs Harbour, 14/11/18)

Many fishers see that regular or annual surveys would generate greater safety than having such a focus on SMSs.

"...this whole thing of having a legal document to me means nothing ... you know from your car you have it registered every year and that's how it used to be before AMSA took over. You had your boat registered every year; you knew you had to check your life raft, flares etc you knew you were due and what you had to check ...it worked really simply... it was just like a car... really simple...you got your letter in the mail 'Oh rego's due' got to go and get a pink slip - you know oh the tyres a bit bald, got your pads check you have to look at that you knew what you had to do and then you got your pink slip. Now ...turned it all way around and no one knows their ass from their head." (FG 17, Port Stephens, 15/11/18)

Overall, even where participants saw benefit in the SMS as an induction they did not see that it improves safety per se.

"Everyone wants the latest nice new boat, but ...you can't afford it you can't afford and an SMS isn't going to make it a nice new boat." (FG 17, Port Stephens, 15/11/18)

"You can put all the paperwork you want to put in place but if people don't operate safely, the paperwork's not worth the paper it's written on." (FG12, Maclean, 12/11/18)

The SMS discussions highlight that the current approach of AMSA could be improved with a review of the way in which the purpose and expected outcomes of an SMS, and

how fishers can benefit from generating an SMS tailored to their environment, are communicated. Further, the issue of how SMSs relate to single man operations needs to be clarified in order to articulate the benefit to this category of fishers.

7.3.3. One size fits all approaches

The experience of being subjected to the imposition of regulations that appear to be made as a 'one size fits all' was reasonably generic across all participants, with the following examples being shared during the discussions.

"... Simple things like electronics. I got GPS, but they said 'Well, you've gotta have a back-up if that goes down, you've gotta have a back-up power system' I said 'I can see the bank. I've got a telephone, you know, its calm water, I can throw an anchor over. It's dumb, you know, ... but it was all these hoops I had to go through to say well 'Will you pass it?', 'Yeah, I'll pass it if you put back up, back up, back up...'" (FG 12, Maclean, 12/11/18)

"I feel its people who don't understand the intricacies of small different fishing business and trying to make regulations ... it's not one size fits all." (FG: 17, Port Stephens, 15/11/18)

"...and they tell us what we've got to do now is teach all my crew that I've got no crew of ...yes I'm a sole operator.....all about safety and everything else and to please the government I've got to have a sheet there that tells me every morning, that I've got a moving part, I've got this and that, I've must check my fuel I must do this and that... I do this, this is a la natural to me... yet I still have to have this paperwork to appease somebody." (FG: 17, Port Stephens, 15/11/18)

"...there seems to be a lack of understanding of what's going on out there ... I would love to look at, umm, you know ...an estuary by estuary, or umm method by method incident (rate) – instead just looking at 'oh yeah Australia had x amount of deaths or whatever in x amount of months' or whatever it bloody had... I can't remember too many incidents in this estuary the near 30 years I've been working." (INT 7, Hawkesbury, 9/11/18)

"...(every) fishery has different issues to deal with and different vessels, we've all got different vessels,...they've got a little rubber boat ... (Safety regulator) wanted to put one of them life rafts in them! And they are from here to the road off shore. They're a rowing boat, they row 'em." (INT 11, Ballina, 12/11/18)

'In our industry nothing's the same (in any two situations, but) ... the regs that the commonwealth have put on for (how to deal with) hook-ups - don't take into account the variety of conditions in which a hook-up occurs'. (Interviewer Notes, FG 5, Sydney, 9/11/18)

The key take away was that current regulatory focus was on compliance with SMS check lists, and not the risk rating and assessments of the vessel, and measures and operating procedures implemented to address these. The result is that the heavy duty regulatory burden upon those fishers with minimal risk profiles in their operations, drives the industry generally further away from developing the safety culture.

Some participants had had positive experiences in navigating the system to negotiate flexibility in the application of regulations, however, this required time and energy, to find the right person to talk with, or attend a meeting, to articulate why an operation or sector needed to be considered differently.

"... see, I was dealing with a man from Sydney, right, who has no idea what I do for a living. But he's trying to tell me that I need this, I need that, and I'm saying 'I don't need that, I don't need that' because I'm not a big ocean liner. ... so I got in contact with this bloke who's a marine surveyor and ... he wrote a letter to this bloke explaining that the situation is not going to suit my boat, or any of the boats around here that do what I do." (INT 11, Ballina, 12/11/18)

"I'm on the NSW Shellfish Committee ...and one of our meetings ...had an AMSA guy come along, coz it's mainly with the oyster mob. You know they're having a lot of conversations as far as their punts are concerned. You know, at what stage do they gotta be... do they gotta have fire extinguishers in them, do they gotta have life buoys, life rings, vests etcetera etcetera, and he said that they're very flexible. They're not going to come down and put the hammer on your straight away, they're more than prepared to work with you, to a point." (INT 10, Ballina, 12/11/18)

"It's (rules and regulations) not making things more dangerous, I wouldn't say that – but it does make it harder. You know, like when they say you've gotta do this, you've gotta do that, you know ... it's stuff you don't need. ... A big ship out there needs to have ... certain standards, and they try and push that on us! You know and we're not big ship, ocean going ships, you know we're a little boat ..." (INT 11, Ballina, 12/11/18)

The effect is that because of the one size fits all approach, which still appears to have significant hallmarks of being designed for commercial merchant vessels, is to put the onus on fishers to become navigators and negotiators of the AMSA organisation to find a way to operate safely in their particular environment, but not be in breach of AMSA regulations.

7.3.4. Participation in development of safety programs

While safety programs are currently developed seeking input of fishers via calls for submissions in industry newsletters and similar, these fail to be recognised, as demonstrated by the following comments.

"So, what about those people that are making the rules actually come out and have a look at the industry and board the vessels and spend the day with those fishermen? ... How can they make a decision if they don't know what they're managing?" (INT 7, Hawkesbury, 9/11/18)

"Not at all - we haven't had any input into anything have we?" "We don't know what we got have should have... you have a look on the website to see what you can make of it but we don't have anything concrete to say what we should have what we need." (FG 17, Port Stephens, 15/11/18)

"I've had no say in how they should be done. ... I've never had anybody come and say 'What do you think, how it should be?'. I really haven't." (FG 12, Ballina, 12/11/18)

"...we don't get any input, yeah. Like I just seem to think that umm, somebody makes up the rules, they don't consult the people like myself ... I don't think they consult or nothing else to find out what we actually do or how we operate." (INT 13, Maclean, 13/11/18)

"...I've never been asked." (INT 15, Yamba, 13/11/18)

"Well I wouldn't know where to start (in the participation of the design of rules and regulations) ...can't find anything. Then you try calling them and that doesn't work either..." (INT 14, Yamba, 13/11/18)

However, as noted by one participant;

"Correct, yeah but in the defence of the those who are proposing them, it's hard to get fishers involved in a lot of them"

But with the caveat that ...

"Most people who get trained, get paid to get trained - we don't" (FG 19, Newcastle, 15/11/18)

While the last comment related to training, it was equally applicable to the value of their time in helping regulatory agencies design regulations that most fishers don't perceive the necessity for.

In summary, the lack of engagement by fishers with the current methods that AMSA and other agencies employ to engage fishers in proposed regulatory changes, risk control measures or use of new equipment, is commonly most likely to relate to one or more of the following factors:

- Inability to read
- Inability to write
- Do not understand the background information behind the request that is assumed, or they don't know where to find it, and aren't inclined to because the benefit of them investing that time and energy hasn't been articulated clearly to them.
- Don't know about the range of new equipment available that input is being sought about (e.g. as requested in the January 18th Newsletter - see figure 4)

Figure 4: Excerpt from PFA Newsletter January 18, 2018

AMSA - float-free EPIRB consultation
AMSA is seeking feedback on alternative options to carrying a float-free EPIRB on domestic commercial vessels **less than 7.5 metres long without level flotation, operating in offshore or restricted offshore waters**. It may not be practical or feasible to carry of float-free EPIRB on these kind of vessels and have proposed several alternative options. AMSA would also like feedback on any other alternative options that operators consider will achieve an equivalent or acceptable level of safety. The options proposed include:

- Option 1: carry a float-free EPIRB (no alternative)
- Option 2: wear a personal locator beacon (PLB), in addition to carrying a manually activating EPIRB
- Option 3: carry a manually activating EPIRB and wear a lifejacket
- Option 4: carry a manually active ting EPIRB in a buoyant storage device

The consultation is open until Thursday 28 February 2019.

69 Marina Drive COFFS HARBOUR ABN: 93 801 719 337	Ph: 02 6652 7374 Mob: 0429 303 371	E: admin@pfai.com.au E: ceo@pfai.com.au
---	---------------------------------------	--

7.3.5. Ideal Role of AMSA

Participants were very open to offering suggestions that they felt would significantly improve the relationship with AMSA and the climate of safety generally in the industry. The most commonly cited one was for fishers to be listened to and recognition that fishing is a highly variable industry, with what is applicable to one sector, won't necessarily be applicable to others:

"We want them to listen to us." (FG 2, Shark Bay, 2/10/18)

"You've got to have a separate one for the trawl sector, you've got to have a separate one for every different sector, and you've got to hit a reset button and got right back to the beginning" (FG 2, Shark Bay, 2/10/18)

Participants generally felt very disconnected from AMSA and safety bodies, and would be supportive of greater interaction locally with AMSA, in the form of more communication, by all means; email, phone and face to face, directly with skippers and crews.

"So, their communication ... they need some sort of subscription, but they need to make it regional specific. ... 'I'm working in the Gascoyne region, it's not applicable to me And then what we can do it register all our vessels, because all of us have got email ... and if an update comes through they can read it on their way out or when they get back to Port it's there." (INT 4 Shark Bay, 2/10/18)

"Communication is better than paperwork" (FG 5 Sydney, 9/11/18)

"It's communication. It's getting something out there, getting people thinking about it, rather than saying you know, 'This is what you've gotta do and see ya later. We won't speak to you again until the end of the year or until something goes wrong'." (INT 4, Shark Bay, 2/10/18)

'Try to get AMSA to come down and build the relationship - not just come on the boat and ask if we've done the SMS....It's about the regulator getting to know each of the fishers in the group and understanding what's changed in your operation in the last six months - we've gone to quota which means we're working in more dangerous and more stressful conditions.....' (Interviewer notes, FG 5 Sydney, 9/11/18)

"It's gotta go out of there (Sydney) and go to something local, you know, where they know what I'm doing. It's no good them sitting in Sydney and going... Like I'd actually sent him a photo of my boat to show him ... what sort of boat it was. ... As far as he was concerned, I was a 300-metre steamer." (INT 11, Ballina, 12/11/18)

A strengthening of the relationship between fishers and AMSA would create the opportunity to increase the educative component of the responsive regulation approach, facilitating improvements in the safety climate and leaving the compliance enforcement for where all else fails. Currently, participants felt that the relationship was a confrontational one, rather than a supportive collaborative one. As one participant put it 'hold our hands rather than checking on us - that will build a supportive compliant environment'. They are looking for conversations about safety, not just checking that paperwork has been completed and ticking boxes or an SMS has been updated, as Skippers admitted that being reminded about certain aspects of safety from time to time (and before it was due) was helpful as they don't think that they are infallible.

Following on from not responding well to surprises, there was considerable agreement that while spot checks may be beneficial for particularly bad operators, fishers responded much better to annual surveys, with some expressing dismay at the periods of time between surveys.

"...where the deficiency I think lies, is that where we used to have a survey every year, see my survey's not due again until 2020. Whereas this step on the boat and go well 'That's no good, that's no good and that's no good' ...I think if they (AMSA) just come along and they ... do their own sorta little survey and they go 'Okay, well, this is what we've found... you've got 14 days to fix it, and we'll be back if it's not fixed' and then fine ya. That ... sort of system would work better." (INT 15, Yamba, 13/11/18)

"It's not so much AMSA, it's the surveyors (that have made the difference with the bad fishers). "It's a positive for the good ones, it's not for the bad ones." (FG 19, Newcastle, 15/11/18)

"The spot check thing is doing no favours - it's just putting people off side. No one's going to throw their SMS together or get their life raft serviced in an hour or two or even by the next day. Give people at least 24 hours. No one's going to get their boat up to survey standard in 24 hours, you know people come to the wharf, they've got to have recovery time....Like a tuna boat the other day, the skipper had come to the wharf and he's trying to do his stuff and you know he's got to sleep and the AMSA guy was on his boat for more than an hour, that's his recovery time, that's a safety issue,... You know from your car you have it registered every year and that's how it used to be before AMSA took over."

You had your boat registered every year; you knew you had to check your life raft, flares etc you knew you were due and what you had to check ...it worked really simply..." (FG 17, Port Stephens, 15/11/18)

Many of these issues could be addressed by increased personal communications on a regional basis between AMSA representatives and fishers. The key focus that must be maintained is that in the interest of preventing harm, there is a need to maintain safety standards at all times, not just as demonstrated at the time of survey.

7.3.6. Unintended consequences of non-safety organisations

An unanticipated element arising from the survey comments, which came through strongly in the focus group and interview discussions, were the unintended safety consequences of, largely, fisheries management decisions. While it may be argued that many of the responses received - particularly in NSW - are likely push back exacerbated by recent changes in operating parameters (that more often than not experience a period of adjustment), the element of potential long-term truth to the perspectives presented should not be ignored.

Further, it may also be argued that fishers are 'consulted' about such changes for 'any' consequences of proposed changes, from the fisher's perspectives. However, when fishers are consulted about fishing rules and regulations they think about the fishing implications, not the safety ones. It is a whole different perspective that requires a conscious change of focus, and one which fishers appear unused to conceptualising in advance, but when they explicitly focus on it, are able to articulate these relatively clearly.

Such unintended consequences include:

The pressures that it places on fishers not to run over 'lines' of open/closed areas - distracting them from their focus on the fishing operation itself during trawling, or preventing them from catching a cat nap during a long shot, for example:

"We are... we are working unsafely. There're areas where we're working at the moment where I could get on that beach – every half an hour you gotta turn around. Either you're worried about going over a line, or you're worried about putting the boat on the beach. So, if I have a snooze for two minutes, we're in deep shit. ...Yeah well you do, you get forced into a corner in rough weather in an area like that..." (FG 2, Shark Bay, 2/10/18)

Effects of the required removal of equipment to make away for bycatch exclusion devices, which were used to gain safe access to the rigging;

"We've been trying to get them back on since they taken them (the gantries) off...They took 'em off because they were smashing on the grids, 'cause the grids were smashing when they, when we had to start putting turtle grids on." (FG 2, Shark Bay, 2/10/18)

The effects of the 'pressure to fish' created by quota changes - perceived or real - has been articulated to cause fishers to go out, or stay out, in potentially dangerous weather and conditions, or move out into deeper water to ensure the best catch for the time they are out. This results in a direct increase in risk due to operating conditions and potentially an indirect fatigue safety effect through longer than usual fishing trips. In addition, where such changes have been inadequately explained, they can cause mental distress and trauma, as articulated by this participant, who was just one of those who had mortgaged his house to participate in the fishery, prior to the rule changes;

"The regulations to do with fisheries - to do with you can't work with a partner unless you reinvest in your fishery.... That's dangerous 'cause like, I've got to work on the boat by myself on the night time, and you like you can't team up unless I go and fork out \$30K to buy more shares to work on the boat with me.... I'm not entitled to it unless I buy more shares. Quota for days is just....I don't have words for that ...it's just shit.. I used to be able to work 300 nights a year,... now I have to push in 300 days of work into 64 days now. ...And just the stress - oh jeez I'm working in the daytime...don't want to be working during the day cause people don't want to see commercial fishing or to see you pulling bream, flathead and dewfish and mullet out of the net in broad daylight like a recreational fisher...no one wants to see that...and then you're stressed that you're going to get in the poo at the boat ramp ... like it'sso much stress working in the daytime but they're forcing you to work in the day... work stupid hours 'cause you have to make the most of that one day. One day is 24 hours, one day should be 12 hours... that's netting, hand lining is different." (INT 6, Hawkesbury, 9/11/18)

"DPI have just put quota on us and we have to catch the quota (otherwise they take it off us) and it's blowing a 50-knot southerly but we have to go to sea... "They put all sorts of pressures on us." (FG 19, Newcastle, 15/11/18)

"The prawn boats are on nights and if it's too rough and they have to come home, it's a night lost... Young fellas don't know it's too rough and they'll just keep working... We warned them in every submission, you will put us in unsafe scenarios... we're just a number." (FG 19, Newcastle, 15/11/18)

"But as I said, we shoot the net away and then the wind comes away and a lot of times...you would normally come home, but now you won't...I'll shoot away again." (FG 19, Newcastle, 15/11/18)

"...or, it comes back to the safety side of it where people push to go to work in bad weather at sea because they've got these, you know, bills they can't pay. And then they're out there in silly season, you know? Like, don't need to be there. Next thing they're arse over head on the bottom, then they expect someone else go and get them. So, then it puts other people at risk." (FG 12, Maclean, 12/11/18)

"I would say that their management doesn't reflect safety - they're managing fish stocks - not the way we catch fish." (FG 5, Sydney, 9/11/18)

Or in regard to the layering of paperwork that is occurring in the multiple compliance requirements from different agencies, which also causes mental stress;

"I never went to schooling - and from my Dad, cousins and to deckhands - the more paperwork you give me, you put me at risk, because it takes away from my focus on crew." (FG 5, Sydney, 9/11/18)

While some didn't necessarily agree that it was increasing risk, they recognised the mental health impacts of the ways in which fisheries regulations were being implemented.

"It's not so much increasing risk it's increasing stress." (INT 15, Yamba, 13/11/18)

'DPI have blue uniforms now which means the public think they're police officers checking them out. Very bad public perception result.' (Public think fishers are being pulled up by the police) (Interviewer notes, FG 5, Sydney, 9/11/18)

And then there is the financial impost of fisheries regulations, that have potential safety ramifications, through the trade-off of utilising resources on quota to retain the business and as a result having to defer equipment upgrades.

"You might spend that money (that's now been invested in quota) on the boat and instead of making it better - like a lot of people - that can't do it because they've had to do the other. ..."(FG 12, Maclean, 12/11/18)

'The restrictions that are coming into place are really going to make people think twice you know, ...You're going to have to buy more quota,...Instead of spending \$10,000 on maintenance, you might decide to spend \$10,000 on quota,..' (Interviewer notes, FG 5, Sydney, 9/11/18)

Or rules and regulations don't allow for the mentoring and training of new entrants into the industry by experienced operators with good safety records, and which appeared to be particularly pertinent in the meshing sector;

"...I said (to Fisheries) this young fella's going to start up, you know, wanna give him a bit of training before he jumps on. (Fisheries) said 'Oh he's not allowed to get on your boat because you haven't got the number of shares'. Said 'Well how do we get around that, how do we teach him, to get him in?'" (FG 8, Hawkesbury, 10/11/18)

Fisheries compliance surveillance was another area where actions had significant potential to have safety consequences.

"I've had Marine Park Authority and Fisheries and Water Ways and Customs board me off the Cape in 35 knots. I don't know how the hell they ever got on the boat. I mean it was just dangerous. Why would you want to do that? I wasn't doing anything wrong anyway. ... and the next week everyone's talking about safety! ... they can wait for ya outside the opening or outside the ... or something like that, come in the next morning and grab ya you know, what are you likely to do, if you're like, obviously not in any closure? So, there's

no need to board. A hand-held GPS will tell you that. ... If you've got something wrong or you've got something illegal on board, then you know, you can't do anything with it until ...you're back in the moor. So, you can't over govern compliance ...but put compliance over safety,... then you're just running into the other door." (FG 12, Ballina, 12/11/18)

Communication between fisheries and safety agencies regarding compliance was another area that fishers bear the brunt of a directives which are not well thought through in blanket applications, and which, as a result, usually disengages fishers from bureaucratic attempts to communicate with them.

"There's' major confusion! Between the pair of them - and fisheries... we don't know whether to put a LFB on the boat or put a bloody AMSA number on it - Fisheries tells you one thing AMSA tells you another. ...I get nothing back at all from them." (FG 17, Port Stephens, 15/11/18)

However, there are occasions where if they know the right person to contact, exceptions or changes are made, as articulated by two different fishers in NSW.

"What happened is - ...you've got to pre-nominate a fishing zone so if I was fishing in the bigger fishing zone I've got to prenominate that's where I'm going. ... So, I rang up the compliance guy I speak to and he was in a meeting and I said (Name), I'm down at Green Cape, (Name)'s rung me to say big weather warning, I'm going to change, I'm not going to fish the big fish zone, I'm going to go into Disaster Bay where its safe.' And he said, 'Ah, ok...do you realise you still have to fish the big fish zone in Disaster Bay?' ... I had to fish the bigger size limit, in a small fish zone, and I said, 'Well that's not going to work', and he goes, 'Well that's the law, that's what the ap says and the management plan is and you've have to fish the big fish zone'. And I said 'yep no worries'. So, I said to the deckie 'what do you want to do? And he said 'oh fuck it, let's just go down there and work, and we'll be right 'and I said 'yeah we'll be right and I went. ... it was horrendous I fished until quite late once the front came through the wind backed off and it wasn't too bad and then we went home.... we got back safe but we had a shit boat ride home. ... I was really angry with myself that I made a decision to go where I really shouldn't have gone, that I put myself (and my crew member) in danger,... so I spoke to the AMSA boat surveyor about it when he came to survey my boat a week later, and he said 'well..., you need to understand something, you're the skipper, you're liable and the master has authority over any of those stupid bullshit ap rules, and he said 'you could have exercised your right as a master to go in a different location because of safety and I doubt they would be able to prosecute you on that, because maritime law would stand up for you, AMSA would stand up for you on that occasion.' I don't know if he's just shooting from the hip or what, but I rang up my ...manager and I said '(Name) I put myself in a position I shouldn't have gone to because of an ap and I said there's a problem we need fixed.' And she said, 'oh (Name) has rung me about that and told me what happened', so he had the sense to follow it up for me and I followed it up and she's fixed it and amended it, so it has been fixed so you can change it within an hour of being lodged. So, ... there are instances where DPI install regs which don't support best practice for safety" (INT 18, Port Stephens, 15/11/18)

In summary, there are a number of areas, where, other agencies (fisheries and customs primarily) are having an impact on the safety climate of the fishing industry, either creating conditions that pressure fishers into unsafe operating situations, or confuse them through conflicting or lack of information, to the point where fishers disengage from all sources of 'authority' and bureaucratic information. The majority of fishers will maintain the amount of connection with government agencies, (and therefore the information they can provide) only necessary to keep them 'legal' and to minimise their stress.

7.4. Other Issues

The following two issues were explored with participants where time and inclination permitted. While methods of learning was not a primary area of concern, it is an area that was recognised as a potential facilitator or barrier to learning depending on how it is received, and was pertinent given the work being undertaken by the SeSAFE project.

The second, more cursory theme, that was explored was the value perceived by fishers, of using VMS as a safety tracking system for vessels, per the discussions and research commenced in 2016⁸. This again, was opportunistic, to provide support to current FRDC research in this area.

7.4.1. On line Learning

On line learning was opportunistically explored with participants bearing in mind the development of the SeSAFE program (FRDC 2017-194), in light of potential opportunities to increase its effectiveness. A proportion of participants were not overly willing to endorse on line learning as a primary or the most beneficial form of learning for new crews, however, the issues identified mostly related to the perceived need to be able to touch and feel the processes of individual operations to really learn them comprehensively, and that 'book/on line' learning did not achieve this.

"You've got to see it to know it ..." (FG 2, Shark Bay, 2/10/18)

"...just for me, I see that as irrelevant. Just be better off if you could spend some time with someone. ... learn how you're doing it and you learn from your mistakes ..." (FG 9, Hawkesbury, 10/11/18)

"Oh, I don't think so. I wouldn't look at 'em to tell you the truth it doesn't interest me. I need – really I'd need my skipper to hand it down than it to be learnt that way, or you know, someone – someone like that....for young people that would be alright. I think as a young kid before I start out I would have been interested in it, but I do think if I had'a walked up to a boat with it, they would have laughed at it and been a bit like – 'It's just paper'. 'Cause in hindsight until you're here and until you're doing it you really have no idea. It's not something you can learn theoretically." (INT 14, Yamba, 13/11/18)

⁸ 'Fisheries go on the record', (2016) FISH Vol. 24, 3 (<http://www.frdc.com.au/media-and-publications/fish/fish-vol-24-3/fisheries-go-on-the-record> Accessed: 1/2/19)

"I don't think so, because you need real life... you can't duplicate online what happens in the real – in the estuary, and even – always changing. ... Every day's different. Yep and the same, even motoring your boat, like one day it'll be blowing a gale and the next it'll be dead calm, you know? Like so the wind will be blowing this way one day then it'll be blowing this way the other day, you know? So you're getting the waves over the back of the boat and waves over the front of the boat. You've gotta understand actually pulling in the net ... like if you're meshing, you can't bend over and pull your net in, you have to stand up, you know? ... Then you've got a sting ray in your net, how do you get that out? You know you can't teach that online." (INT 13, Maclean, 13/11/18)

"...I've done a lot of online stuff and it's just tick and flick and off you go, but if it's one of them it's not good – it actually has to have sustenance to it. If you've got sustenance to 'em and actually step by step doing it then, I'm all for it. But if it's not step by step and is just a group of information and you've just gotta have it to be on there, like the Blue Cards and all that stuff, then I can't see it being just another arse covering..." (FG 2, Shark Bay, 2/10/18)

"...you couldn't really do a blanket one (training). You'd nearly have to do one for the specific fishery. Because okay, even with fish trawling, you've still going to have winches and capstans okay? But your layout's different." (INT 15, Yamba, 13/11/18)

"Unable to train those who aren't 'employees' as they're not paid to participate and are therefore difficult to get a hold of; Online training may be useful... but it'd need a staged approach (i.e. several modules) and won't work in scenarios where skippers are recruiting at the last minute (i.e. backpacker from the pub)" (INT 4, Shark Bay, 2/10/18)

" it has to be vessel specific.. ...you can train someone in trawling but he's going be on a lobster boat, so the bottom line, to make it practical and work, it's got to be specific." (FG 17, Port Stephens, 15/11/18)

As mentioned previously, these responses were on the basis of experiences with existing Maritime General Hands and Masters certifications which are generic to all commercial sea faring, and not at all specific or considerate of fishing operations.

A further, and persistent issue, is the itinerant nature of crews that made it most difficult to engage in training them. This may be because deckhand work is perceived as unskilled labour and therefore no effort should be required to engage in formal training.

"Yeah that sounds reasonable... it sounds fair, but the deckhands they don't stay for long - the deckies you get are probably not... well they're very hard to educate some of 'em." (FG 17, Port Stephens, 15/11/18)

"I think it's a good idea to a certain point, but its up to that individual how serious he is you know, as far as continuing in that profession. I suppose ... can be like a driver's license or a confined space ticket or a green card ticket or your first day, it's just something you can have under your banner. If he wants future employment and stuff like that, ... if he

does it now and he goes to someone else in six months' time and says 'Look I done this course over the internet as far as safety on boats is concerned' it might help your cause I suppose, in a job application for bigger companies" (INT 10, Ballina, 12/11/18)

Alternatively, it was regarded with a degree of scepticism as another way of divesting responsibility, from the industry or regulator and pushing all responsibility back onto the individual, and that without the hands-on training that was an unreasonable expectation.

So with E learning ... I really feel that it's designed to ensure the staff have accomplished all these different modules and if there's an audit or an investigation about an issue, they design a E learning module around that issue, and so long as every staff has been inducted on that issue through the e learning on a computer, it protects the boss...it protects the owner it protects the industry, and it puts the onus back on the person who actually (is doing the work)... and I don't think that's achieving enough. Because at the end of the day all your doing is saying well you've done that e learning app, or e learning module, and you've passed it so you're responsible. And what I think needs to happen with ...traineeship built around the fishing industry is Ok you've been awarded this ticket but you're not competent. You've accomplished the necessary book learning but now we need to assess you in the work place,...I think a coxswains, or a GPH, or even a ... it doesn't prepare you for different operating environments, I think there's got to be this idea that I hold this ticket but I've still got to get fully competent." (INT 18, Port Stephens, 15/11/18)

Others, however did see that it did offer the potential to provide a base platform of knowledge of that equipment that was generic to every operation.

"Certainly (online learning would work), because there's some people who come over here, from, you know different nationalities and they go 'yep, I want to do this, I'm going to try this, or I'll go out here, hard work I don't care"

"It's a good thing to get a general understanding of something, so long as the pay attention to it and don't just click through it. On line courses are good in theory, but I've yet to see one that's good in practice" (FG 19, Newcastle, 15/11/18)

"Yeah probably would be (useful for someone who's a new entrant to the industry). Just general sort of stuff, you know like there's stuff on there that's going to hurt ya. Winches. Capstans. Anything that's moving, anything that's spinning, anything that's hydraulic. Things weigh a lot, like boards. They weigh a lot! And they can kill ya, if you've got your hand in the wrong place...you couldn't really do a blanket one. You'd nearly have to do one for the specific fishery. Because okay, even with fish trawling, you've still going to have winches and capstans okay? But your layout's different." (INT 15, Yamba, 13/11/18)

7.4.2. VMS as a safety measure.

In relation to the FRDC project 2018-106 (Identifying electronic platforms to increase safety at sea in the Australian commercial fishing fleet), which is specifically looking into the use of VMS equipment to improve safety through tracking vessels at sea, generally,

there was not much regard for the use of the VMS system for safety purposes. This was largely due to the frequent patchiness of its coverage. In the majority of cases discussed, the VMS system only tolls vessels every three hours (due to costs), and the system was well reported amongst fishers to fail to work at all, with in some cases, fishers only contacted after their vessel had not showed up on monitoring systems for one or two days.

"I don't think it works as a safety thing... because we've had VMS on our boat for 20 odd years and it was watched by AMFA in Canberra and they would poll the boat a few times a day; and if the boat didn't poll it was for a whole bunch of reasons; it could be satellites not lining up - nothings guaranteed, no satellites' guaranteed, no batteries guaranteed - nothing on a boats guaranteed, so it's only after a fair while like a day or two they'd ring and say 'oh, your VMS isn't working, can you flick it on and off' and then 'Oh it's back' so they're not reliable like an EPIRB is - that's the thing that's going to save you when your boat goes down... and it's the same with the AIS as well, that's only it's only as good as the signal that bounces back. So, an AIS or VMA isn't going to save you - it's too intermittent. The only thing is an EPIRB cause when the boats gone down and you all float away, how are they going to know that the boat isn't polling..." (FG 17, Port Stephens, 15/11/18)

"that's a joke that thing...I had one bloke, and he sunk, and it was three days... three days later - like he was home in bed and they rang him up and said why is it turned off? I'd much rather see those man overboard things your crew have to wear, and alarm goes off in the cabin when your crew goes outside, that'd be much better ... My biggest worry is if you're tired, 'cause you get tired and you're having a lay down and the crew are on their watch and the other deckhand might be in bed and you know ...just go and do a wee wee, and falling over the side... so I would welcome that" (FG 19, Newcastle 15/11/18)

However, some fishers did see, that while not perfect, the VMS and AIS systems did provide coverage that, when working, offered more than they might otherwise have - particularly in the absence of personal or float free EPIRBS.

"Yeah, it's not exact. So we go off of Fisheries data with the vessel tracking, which only polls every three hours and that's how the VMS system has always worked, because Fisheries has got a limited budget, so if they were to poll every vessel every minute, it'd cost them an absolute fortune. So, they only set polling to every three hours. So we know their position at around about every three hours. There are some vessels with AIS, the problem with AIS is there's no receiving station in Carnarvon which is strong enough to receive the boats when they're halfway out, yeah. We get 'em when they're inshore (describes location of boats per the map on the wall / where they get mobile reception etc)"

It was also recognised that if all other radio communications went down, the VMS systems was useful for messaging which is a safety benefit that was only raised by one individual.

"And also communication wise, you can always send a message – an email VMS message – to anybody through a VMS message ... and it's probably about a half hour delay. Most of them – well, they all have HF radio, and they've got VHF radio and they've all got UHF radio." (INT 4, Shark Bay, 2/10/18)

It would appear from this very brief and superficial exploration into the safety benefits that might be derived from the VMS system, that greater education of fishers has to occur both as to the broader uses it has, but also in terms of generating a level of assurance regarding the system's safety capabilities.

8. Preliminary Recommendations

The current safety climate amongst fishers in the Australian fishing industry, is summed up well by one fisher;

"I just hope we have a good outcome. I hope that bureaucrats will listen to what (we're saying) – because fishermen are not being listened to. Doesn't matter what agency it is. Government bureaucrats are not listening to fishers, so you're finding that I think there's a lot of mental health issues out there that fishermen are dealing with ... And that I think's going to linger for a long time, I reckon years, because of what these fishermen are going to have to try and deal with, with their lives to pay their bills or mortgages or whatever they're going to do to try and survive, or whether they get out of the industry, and it's also going to impact any future people wanting to get in to the industry because of, umm, the fear of not knowing what your future is. You don't have any security. That's one of the big issues with the whole AMSA thing coming on at the moment, and getting those fishers to have to deal with this sort of stuff ... so how it's on the ground and dealt with by AMSA officers out there in the field when they decide to jump and climb onto some blokes boat and tell him that he's whatever's, whatever – and he's, the fisherman's ready to throw him in the river." (INT 7, Hawkesbury, 9/11/18)

This research has identified that many of the barriers to improving the safety climate in the industry, are underpinned by a lack of fisher understanding as to 'why'⁹ they are being asked to do paperwork which they do not perceive or understand the relevance of, to being safer at work. Currently, the research indicates, fishers are responding to the operating environment in which they exist, where if the 'why' and benefit of adopting new or different safety action is apparent, they will adopt the behaviour or equipment, if at all possible. However, the regulatory and communications actions, of safety and other agencies interacting with fisheries, don't currently make a high degree of safety sense to fishers.

There are three main categories however of what could be done to improve the safety climate of the industry and support the further development and embedding of the industry's safety culture as it continues to evolve and develop. The first of these are actions that can be taken by the safety agency - this will have the most direct and positive effect on the climate of safety in the industry. The second is those that can be undertaken by the industry to increase the 'value' of safety and engagement with safety discussions - ideally this could, in part, be undertaken in collaboration with the safety agency, building on the initiatives and new and alternative approaches demonstrated by the regulator. Lastly, awareness building amongst other agencies interacting with fishers, as to the potential safety consequences of rules and regulations and behaviours of their staff, with the objectives of sharing the responsibility of keeping fishers safe,

⁹ 'Simon Sinek 'Start with Why' (2009) https://www.youtube.com/watch?v=u4ZoJKF_VuA (Accessed 5/2/19)

rather than relying on fishers to 'push-back' on regulations and activities when they have been demonstrated to be unsafe.

8.1. Agency Opportunities

This component of the work clearly identified that leaders in the industry, and fishers generally, see little relevance in the current paper-based compliance approaches to improving safety on the water.

An opportunity exists to reposition the understanding of regulatory requirements from being a bureaucratic requirement, to that of actions that generate benefit to the industry. This reflects the results of the survey where management was perceived as only 'talking the talk' and not taking the safety of fishers as individuals, as seriously as do fishers themselves. To that end the areas where AMSA and safety agencies could significantly contribute to improved safety outcomes, are;

- Communications;
- Focussing on the 'safety of work' (not 'safe work') activities.
- Collaboration on addressing issues of primary importance

8.1.1. Communications

Improving the fractured and conflicting communications from the safety agency and its delegates regarding safety requirements - explaining the 'why' and keeping it consistent - will increase engagement of fishers and decrease the partitioning of their approach to safety; wharf side and supportive conversations which focus on education, collaborative problem solving and forward notice of compliance actions are very positively received by the industry and are most likely to assist in decreasing the partitioning of the industry's approach to safety. These should be maintained where they are occurring and increased in geographic coverage and consistency where they are currently not occurring.

A key element in changing up the culture of communication in the industry is for regulatory agencies to adopt a collaborative and open-door approach on communication and education, with the means for fishers to easily engage with the agency on issues. While communications via social / experiential interactions should be the focus, New Zealand's Safety4Sea campaign outlines an approach that provides sound insights that resonate strongly with the current Australian commercial fishing safety climate and the accidents/incidents that do continue to occur¹⁰.

¹⁰ *Safe Crews Fish more*, (2017) (<https://safety4sea.com/fishing-safety-campaign-launched-in-new-zealand/>; Accessed: 3/2/18)& *Campaign Improving Commercial Fishing Safety* (2018) (<https://www.maritimenz.govt.nz/public/news/media-releases-2018/20180927a.asp> Accessed: 3/2/18). For a full analysis report of the impact of this and other educational activities of Maritime New Zealand are detailed in Chapter 7 of the report '*Health and Safety Attitudes and Behaviours Survey. Commercial Fishing Report. (A report to Maritime New Zealand)*', (Nielsen 2018)

A further communication element that may be worth considering in the 'Working Boats' Magazine or a similar one just for commercial fishing, may be a section on lessons learnt from accidents/incidents, similar to the Civil Aviation's Flight Safety Magazine articles of this nature. Building trust and collaboration with the industry could be developed by offering incentives for stories often shared on private forums such as Face book, Instagram and elsewhere to be sent to AMSA and collated for all to access into a fisher's magazine/on line video link, with a further commentary both from the fisher and the agency of lessons learnt.

8.1.1.1. Consistency and clarity of messages across AMSA and delegated agencies

This is a fundamental requirement to engage fishers with safety messages. The consistency is not in making a one size fits all set of communications, but rather in the way that regulations are applied; that is, all vessels undertake a risk assessment and develop an SMS or other mitigation measure to address the relevant risks - rather than everyone have to meet exactly the same set of guidelines - which is the current perception.

Information that is generated by AMSA needs to be easy to access, and the way it is interpreted needs to be consistent, between every delegate of the agency and through every forum. It would be advisable to engage a retiring or other fisher to assist with language and advice on navigating access to AMSA information systems.

8.1.1.2. Improve relevance of protocols to industry sectors

Reviewing communication materials for relevance to industry sector is key to gaining engagement of the industry with not only regulations but, more importantly, educational information about safety and how to further improve the outcomes for the industry. For example, having the same communications for commercial seafarers as commercial fishermen, or trawl vs estuary vs hand collection; on shore vs inshore vs off shore etc, all mean that large amounts of information are being sent out by the agency but have very little to no relevance to a large proportion of the recipients.

Furthermore, a focus on administration or 'safety work', and personal protective equipment¹¹ may be less effective risk control measures compared to taking a holistic approach that integrates equipment, with robust risk assessment leadership, and operational or workflow reviews. The effect of a focus on equipment only, may be a distraction from the industry's efforts to improve safety in ways which have a higher likelihood of actually preventing injuries. Either way, one size fits all regulations may mean that regulations to make one sector safer,

¹¹ See Safe Work Australia's Model Work health and Safety Regulations (2012) section 36. Hierarchy of control measures, where personal protective equipment is identified as a last line of defence

may inadvertently increase safety issues for other sectors, and the opportunity to identify and amplify 'what good looks like' in the context of each industry sector may remain untapped.

8.1.1.3. Utilise communication methods suitable to the skill sets of fishers

Further to the points raised above, providing information in communications that are non-confrontational and before an event are key aspects to engaging fishers (e.g. wharf side conversations; return of annual surveys instead of spot checks). AMSA may consider an award for AMSA staff or representatives, as nominated by fishers, for positive and collaborative engagement, that results in proven safety outcomes.

In addition, the AMSA Community / Industry Feedback Line is currently a seven-step survey which doesn't distinguish between commercial fishing, charter or commercial seafarer - quite different activities: or a very bureaucratic form to provide public comment (AMSA 246) which needs to be downloaded and then emailed. These are very alienating to the average fishermen, who is likely to have limited reading/writing and computer literacy, consequently consideration being given to providing a safety hot line (phone number) for the commercial fishing industry may be of significant value given the feedback received by fishers.

8.1.2. Focus on the 'safety of work' not 'safe work' activities

As raised earlier, the safety of work is a focus on how work is actually undertaken safely, which more often than not is demonstrated through 'hands on' activities. This compares to 'safe work' activities which focus on *documenting how* work is done safely - or as a fisher would put it; "*arse covering*" (FG 2, Shark Bay, 2/10/18).

Methods of doing this could include, for example, utilising wharf side talks and joint reviews of current and new equipment available to work with fishers about the types and purposes of different EPIRBs or PFDs for example, and why or why not they may be appropriate to different situational uses; how to manage maintenance safely without gantries; and/or initiating or encouraging conversations about preventing slips trips and falls (e.g. regular washing of decks to avoid slip hazards of fish and 'bits') that are the primary causes of injuries and over boards.

8.1.3. Collaboration on addressing issues of primary importance to fishers

Engaging with industry to develop collaborative solutions to current and emerging safety issues and assist in industry promotion of those solutions. Often these are best shared via stories of why there are benefits both safety and no business down time of adopting new or different ways of doing things. These have to be stories of fishers told by fishers, articulating when things have worked to keep them safe and when they

haven't (as tested and recently proving to have traction by NZ Maritime in their Safe Crews Fish More campaign¹²).

A key element here is that, according to the data collected here, such safety information has to come from Skippers who are well regarded as 'safe' operators in each fishery, or at least be in their language. Further to this, the dissemination of this information has to broaden to encompass formats suitable to Twitter and Snapchat - not just Facebook or print media - and other emerging media that is being engaged with by younger fishers - who may still not be comprehensively literate.

Lastly, clearly identifying an agreed safety outcome and pathway to it, for each sector, would not only clearly articulate for the industry what an outcome that is relevant to them, would look like, but would set an agreed supportive pathway to get there.

8.2. Industry Opportunities

The industry also has opportunities to work with and alongside safety agencies to break down the partitioning between safety work (bureaucratic requirements) and the safety of work (industry motivated activities).

Industry members and the associations can focus on:

- Initiating and participating in feedback on regulatory changes, and understanding the relevance of them to fishers in different sectors, or communicating the lack thereof to AMSA, along with suggested means to address the intent of the changes.
- Strengthening conversations between skippers/owners to encourage safer work practises, for example having pieces in industry newsletters showcasing positive, proactive action taken by fishers to improve work health and safety on their vessels; the learnings from incidents and accidents (including, aside from the human injury cost, the amount of lost time and income from accidents and incidents), information about new/improved safety equipment (such as the differences between PFDs with fisher's positive experiences of utilising them or of the different types of EPIRBs and the costs associated with getting them,) and/or reward/acknowledgement for safe behaviour.
- Collaborating with other sectors, initiatives and agencies to create relevant sector specific videos and media on basic activities like preventing going overboard, and methods for reboarding.

¹² See 'Safe Crews Fish More' August 2017, <https://www.maritimenz.govt.nz/magazines/safe-seas-clean-seas/issue-52/issue-52-1.asp> (Accessed: 3/2/18)

- Industry support for an AMSA or delegate agency award for those representatives who are great to deal with and encourage them to be adopt safer practices (providing examples); and
- An industry award for adoption of improved safety practices - one for a skipper as nominated by crews and one for crew members for safety initiatives nominated by Skippers, to be awarded by State annually and a national award presented at the Seafood Directions industry conference, with a suitable 'reward' that may be negotiated on the suggestions received from industry, as to what would have value for them.
- There is also an opportunity to explore safety programs similar to those existing for safety in the recreational sector, but tailored to commercial fishing (give away PFDs, safety kits, training programs etc., done in such a way as to encourage general conversations about risks and improving workflow practices to increase safety).

8.3. Other Agency interactions

Across all respondents in this research - and reinforced by voluntary advice provided to researchers from fishers in other locations - were the feelings of overwhelming reporting responsibilities across the variety of agencies that fishers have to deal with in their day to day operations. This means that while these agencies may rely on fishers to identify safety implications of rules and regulations, they are not always able to achieve such a multiplicity of focus, and that to keep them safe, this needs to be a community effort of agencies working with fishers.

It is essential that agencies interacting with the fishing industry be encouraged to review rules and regulations for potentially unintended safety consequences of interacting with fishers. Given AMSA's lead role in safety in the maritime sector, it would be a natural fit for AMSA to lead such conversations, potentially in collaboration with Seafood Industry Australia.

- AFMF may consider co-ordinating a review of safety implications of fisheries management rules and regulations and where there is commonality across the states work with AMSA to identify a potential mitigation measure that does not compromise ecological management objectives. Such rules and regulations include mandating of equipment (removal/modifications); safety implications of share fishing requirements (WA) etc.
- State agencies interacting with fishing, such as transport, influence safety on board vessels. AMSA may consider developing a dialogue with such government agencies to review incidents and accidents for where they may positively collaborate to improving safety outcomes for the industry and simultaneously support AMSA objectives.

- Misalignment between the model work health and safety legislation of SafeWork Australia, which is more contextual in the identification, assessment and control of risks to health and safety¹³ and the AMSA Marine Order 504¹⁴ is a clear opportunity for agencies to resolve perceived conflicting directives. The (potential) intent of AMSA's requirements to be tailored to specific operations (the 'safety of work') has been lost amidst the emphasis on administrative risk control measures ('safety work'), for example, in the requirement for health and safety related documents and records as outlined in Schedule 1, of the AMSA MO 504.

An opportunity exists for AMSA to review this alignment, in collaboration with national and state SafeWork agencies, to clarify and resolve a lack of consistency in approaches between the two national bodies and therefore the state safe work agencies in their application of these requirements.

- Alignment of incident reporting processes between AMSA and their delegated regulators (State Worksafe and Roads and Maritime Safety for example) to ensure consistency of information, compliance processes and implementation.

¹³ Chapter 3, General Risk and Workplace Management, Sections 35- 36. *Model Work Health and Safety Regulations* (2016) (<https://www.safeworkaustralia.gov.au/doc/model-work-health-and-safety-regulations> Accessed 5/2/19)

¹⁴ AMSA Marine Order 504 (Certificates of operation and operation requirements — national law) 2018 (<https://www.legislation.gov.au/Details/F2018L00809> (Accessed 5/2/19))

9. References

- Besharov, Marya L., Wendy K. Smith (2014) MULTIPLE INSTITUTIONAL LOGICS IN ORGANIZATIONS: EXPLAINING THEIR VARIED NATURE AND IMPLICATIONS. *Academy of Management Review* 39(3): 364–381.
- Brooks, K (2011) *Health and Safety in the Australian Fishing Industry*. Collaborative Partnership for Farming and Fishing Health and Safety. Canberra: Rural Industries Research and Development Corporation.
- Jarrett, A., A Laird (2017) *Reducing Rates of Death and Injury In the Australian Fishing Industry*. Canberra.
- Nielsen (2018) *Health and Safety Attitudes and Behaviours Survey*. Commercial Fishing Report. (A Report to Maritime New Zealand). Maritime New Zealand, Wellington, New Zealand. <https://www.maritimenz.govt.nz/commercial/safety/health-and-safety/documents/MNZ-commercial-fishing-report-2017.pdf>, accessed March 2, 2019.
- Prochaska, James O., & Wayne F. Velicer (1997) The Transtheoretical Model of Health Behavior Change. *American Journal of Health Promotion* 12(1): 38–48.
- Rae, Andrew, and David Provan (2018) *Safety Work versus the Safety of Work*. *Safety Science* In Press.
- Sallis, James, F., Neville Owen (2015) Ecological Models of Health Behaviour. *In Health Behaviour, Theory, Research and Practice*. Fifth. Karen Glanz Barbara K. Rimer, and K. Viswanath, ed. San Francisco: Jossey-Bass: A Wiley Brand.
- Seo, Dong-Chul (2005) An Explicative Model of Unsafe Work Behavior. *Safety Science* 43(3): 187–211.

10. Appendices

9.1. Focus Group Location and Dates

FOCUS GROUP REFERENCE SUMMARY:

REF.	LOCATION & DATE	Participant #	REF NOTED ON T/SCRIPT
FG 1	Shark Bay offshore Trawl 2/10/18	Approx. 7 Pax	Yes
FG 2	Shark Bay offshore Trawl 2/10/18	Total 5 Pax	Yes
FG 3	Shark Bay offshore Trawl 2/10/18	Total 10 Pax	Yes
INT 4	Shark Bay offshore Trawl 2/10/18	1 Pax	Yes
FG 5	Sydney offshore Trawl 9/11/18	Approx. 7 Pax	Yes
INT 6	Hawkesbury Mesh netting 9/11/18	1 Pax	Yes
INT 7	Hawkesbury Estuary Trawl 9/11/18	1 Pax	Yes
FG 8	Hawkesbury Estuary Trawl 10/11/18	2 Pax	Yes
FG 9	Ballina Estuary and Offshore Trawl 12/11/18	2 Pax	Yes
INT 10	Ballina Offshore Trawl and Beach Seining 12/11/18	1 Pax	Yes
INT 11	Ballina Spanner Crab Fishery 12/11/18	1 Pax	Yes
FG 12	Maclean Estuary and Offshore Trawl 12/11/18	2 Pax	Yes
INT 13	Maclean Mud Crab Fishery 13/11/18	1 Pax	Yes

INT 14	Yamba Offshore Trawl Fishery 13/11/18	1 Pax	Yes
INT 15	Yamba Offshore Trawl Fishery 13/11/18	1 Pax	Yes
FG 16	Coffs Harbour Offshore Trawl Fishery 14/11/18	Approx. 9 Pax	Yes
FG 17	Port Stephens Inshore and estuary trawl and seining 15/11/18	Approx. 8 Pax	Yes
INT 18	Port Stephens Hand Collection fishery 15/11/18	1 Pax	Yes
FG 19	Newcastle Inshore and Offshore Trawl 15/11/18	Approx. 7 Pax.	Yes
FG20	Shark Bay offshore Trawl 2/10/18	1 Pax	
Total =20		Total = 69 people	

FOCUS GROUP GUIDE:

Project Purpose:

To find ways to keep fishers safer - as there are serious concerns that you are 20 times more likely to be injured or killed at work than in any other industry in Australia. And no one wants that to continue!

Purpose today:

We want to check and see if the results that we got from the survey ring true with you. So, we're going to ask you, generally about how you operate, to put some more context around the results. And then we want to talk about the specific elements of management and your participation in the development of safety rules and procedures.

How we're going to do this:

We're going to try and record this, but no one will be identified, as we're not interested in who said what -we're just trying to get more insight as to why we received the responses we did in the survey.

Also - this discussion is completely confidential, not only as far as we're concerned, but we also ask that you treat it as confidential and while you might use some of the information from today to help you improve things at work, don't attribute anything you hear today to any other individual, or give it any specific context that could identify who it comes from.

Lastly, we plan on taking no more than an hour of your time.

Is that all OK with everyone - or are there any questions?

OK - So what the survey said, which we want to check with you and then get more information about, is:

1. Fishers think that 'management' (Mareterram, or for others, AMSA, WorkSafe WA, and those that make the decision on how the industry or business is run) only think about safety in terms of paperwork and compliance, and that those with a real focus on safety are you guys and skippers.
2. That fishers' participation - or say - in the development of safety programs (i.e. the paperwork or processes that you have to comply with) is less than it could be, given how important you think safety is; (Show bar chart)
3. Fishers think/get the feeling that there is a 'one size fits all' approach to safety (i.e. SMS, procedures and 'paperwork'), which they believe (in some cases) may be increasing work place risks/decreasing safety;

4. Some fishers think the rules and regulations made by AMSA, WorkSafe, and/or fisheries management may or do actually makes things more dangerous, e.g. you guys not being able to modify the grids, or having to fish hard because of temporal management of the fishery.

We also want to find out:

5. The elements of 'safety' that fishers are most concerned about and why (i.e. what are you most scared of at sea? What could go wrong, and how?)
6. Ways that you/fishers want to get more involved in the development of safety programs next season, so safety systems and processes are more useful/make more sense to you. (i.e. how do you think we could make SMS etc more relevant / people more interested in working with them?)
7. The key barriers to that involvement. (i.e. what's stopping people from wanting to or getting involved?)
8. Training - what do you think of having online training modules?

Focus Group Questions:

Safety Culture:

1. What does 'doing the job safely' - look like (or mean) to you?
2. When I say 'risk' - what do you think of in relation to work?
3. How do you identify what's 'risky' to do at work?
4. Can think of some examples of 'risky behaviour' and how they've been managed? (e.g. hanging off the trawl arms to fix things / working on your own in the dark....) Why were they managed that way?
5. The survey found that the majority of people felt that skippers and co-workers were those who have the best focus on safety. What makes a good skipper or co-worker... What is it about how they behave that makes you feel safe(r) at work?
6. When does safety take priority over getting the job done?
7. Do any jobs ever get done regardless of how safe it might be to do it at the time? Why was the safety element ignored? (Cost, imposed designs...)
8. Are there any operating conditions, apart from weather, that you feel particularly make your work risky?
9. Do you think those who have been in the industry longer, think about risk differently? If yes, what do they do differently?
10. What do you think about the issue of fatigue? How do you manage it?
11. Are you proud to be a fisher? IF so, what do you think makes you a 'fisher' or 'professional fisher'? (Core values)

- a. Do you share those core values with newbies to the crew? If so, in what ways?

Management: (Identify a common 'who' when talking about management)

1. The majority of people in the survey thought management see safety as being really important...but then didn't think they are willing to spend money on safety. What's your take on that - and why? What are they willing to do to support you in being safe?
2. Where do you get your information/ or think the information comes from, about safety management and regulations? How 'useful' is it and why or why not?
3. If you're a crew member do you know anything about safety and fisheries management regulations and guidelines - or do you just leave that to the Skipper and do what they say?
4. How do you go about interpreting those safety and fisheries management regulations and guidelines that you get?
5. What do you think about SMS's?

Participation:

1. If someone talks about a safety program or induction training - what does that mean to you? Would it involve you?
2. What do you think are the missed opportunities in improving safety in fishing? (i.e. of things you know (other) fishers already do really well to keep people safe that perhaps aren't being used generally?).
3. Would you like to gain a greater say in making your work safer? If so, How? What might stop you or others getting involved that way?
4. Do you think that there is any way of reassuring your family and loved ones you're your work place is as safe as it can be, so that you'll be coming home - in one piece?
5. How do you communicate about safety with those you work with?
6. Is there any need for safe behaviour to be recognised positively? Either amongst or beyond your crew - Why/ Do you think there would be any benefit in it?
7. Training - what do you think of having on line training modules?

Closing:

Is there anything that we missed that you would like to talk about?

[open feedback]

Of all that we've talked about - what is the most important point in your experience?
[open feedback]

OK - We're done - thank you so much for your time, thoughts and input. If you feel that there is anything that you would like to clarify after the session, please feel free to contact myself or Alex - our contact details are there on the table.

Also, if there is anything that has been raised for you today that's raised 'challenging stuff' for you, please let whoever of us that you feel comfortable to approach, know, and we'll organise the right person for you to talk with.

Thanks so much for your time.

9.3. Focus Group Notification



HEY!

Remember the safety survey you might've completed for either one or both of these two - Dr Kate Brooks and Alex Thomas some months ago?

YOU HAVE BEEN HEARD!

...And your feedback is being channelled back to the right people... but we want to double check with you that we have it right!

We're coming to a wharf near you and we'd love you to join us for a chat to check the results. We're asking for an hour of your time in groups of 6 - 8 of you, and will try our darndest to make it at time that suits you!

DATES

- SYDNEY Friday 9th November
- HAWKS BURY Saturday 10th November
- BALLINA Monday 12th November
- McLEAN & ILLUKA Tuesday 13th November
- COFFS HARBOUR Wednesday 14th November
- PORT STEPHENS Thursday 15th November
- NEWCASTLE Thursday 15th November

Confidentiality is GUARANTEED

If you're interested in participating, please contact **Kate Brooks** on kate@kalanalysis.com.au

