THE HIGH COURT

ADMIRALTY

[2024] IEHC 182

[No. 2019/7993 P]

MV "HUA SHENG HAI"

MFV "KIRRIXKI"

BETWEEN

THE OWNERS AND ALL PERSONS CLAIMING AN INTEREST IN THE MV "HUA SHENG HAI"

PLAINTIFFS

AND

THE OWNERS AND ALL PERSONS CLAIMING AN INTEREST IN THE MFV "KIRRIXKI"

DEFENDANTS

AND

THE HIGH COURT

ADMIRALTY

[No. 2019/8027 P.]

MV "HUA SHENG HAI"

BETWEEN

ROCHELAISE DE PECHE S.A.

PLAINTIFF

AND

THE OWNERS AND ALL PERSONS CLAIMING AN INTEREST IN THE MV "HUA SHENG HAI"

DEFENDANTS

JUDGMENT of Mr. Justice Denis McDonald delivered on 26th March 2024

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Introduction

1. Both of these proceedings are concerned with a collision between two vessels which occurred off the southwest coast on 11th October 2019 at 23:51:04 or 23:51:05 UTC. The difference in timing is inconsequential. It arises from a slight difference between the views expressed by the experts retained on behalf of the parties. Both of the experts agree that the difference between them is of no significance. The collision occurred in international waters between a bulk carrier vessel, namely the *"Hua Sheng*

Hai" and a fishing trawler known as the *"Kirrixki"*. The location of the collision lies about 24 nautical miles WNW of Inis Taraght Lighthouse on the Blasket Islands. The approximate coordinates for the location of the collision are 52º 09.2 North, 011º 18.3 West.

2. The *Hua Sheng Hai* is a bulk carrier registered in Hong Kong and flying the flag of Hong Kong. The vessel was built in 2017 at the Chengxi Shipyard, Jiangyin, China. The owners and managers are Hua Sheng Hai Shipping Ltd and COSCO Bulk Shipping Company Ltd. The vessel has a gross tonnage of 44,103 tonnes and is 229 metres long. The beam is approximately 33 metres. On the night of the collision, the master of the *Hua Sheng Hai* was Mr. Chen Zhengfai. He was not on the bridge at the time of the collision and did not give evidence. At the time of the collision, the *Hua Sheng Hai* was in the course of carrying a cargo of 619,915 tonnes of bauxite from Port Kamsar in Guinea to Aughinish, County Limerick. In common with vessels of this size, the *Hua Sheng Hai* is fitted with a Voyage Data Recorder (*"VDR"*) and the records available from the VDR have been of considerable assistance in reconstructing the events leading to the collision on 11th October 2019.

3. In contrast, the *Kirrixki* is a much smaller vessel with a gross tonnage of 363 tonnes. The *Kirrixki* is a motor fishing trawler built in 2000. In 2019, the trawler was sailing out of the port of Bayonne and flying the French flag albeit that, on the day of the collision, the trawler had commenced the day's operations in Dingle, County Kerry. The *Kirrixki* is 37.25 metres in length with a beam of approximately 8.4 metres. At the time of the collision, most of the crew of ten on the *Kirrixki* were Spanish and the skipper was Captain Joaquin Maria Antelo Malabe, who is also Spanish. The *Kirrixki* was engaged in demersal (i.e. bottom) trawling which involves the lowering of the trawl net to the seabed across which it is dragged with the intention of scooping up the

available fish. The *Kirrixki* was not equipped with a VDR (and was not obliged to be). But the trawler was equipped with radar and an automatic identification system (*"AIS"*) which is designed to transmit information about the vessel's location, identity, course and speed. It also permits a vessel to transmit information about its activities although the skipper of the *Kirrixki* did not avail of this facility. The information transmitted by the AIS is picked up by other vessels (and also by satellite and ground stations). As a consequence of a fire on the trawler some weeks after the collision, the information stored on the AIS equipment of the *Kirrixki* was not available at the trial. It does not appear to have been downloaded prior to the fire. However, the AIS information transmitted by the trawler was nonetheless available at the trial both because it was recorded by the VDR on board the *Hua Sheng Hai* and because it was available commercially from businesses which routinely collect such information about vessels and sell it for a fee.

4. Both vessels contend that the other vessel was responsible for the collision. The owners and operators of the *Hua Sheng Hai* commenced proceedings on 15th October 2019 as against the *Kirrixki*, while the owners of the *Kirrixki* commenced proceedings against the *Hua Sheng Hai* on 16th October 2019. Both proceedings were subsequently the subject of a single trial which took place before me. The trial took place on a hybrid basis with witnesses as to fact participating remotely both from China and from Spain and the experts attending in person. The trial was confined to issues of liability only. It is intended that any issues of quantum will be addressed at a later stage. There is no dispute that both vessels suffered physical damage as a consequence of the collision.

5. In advance of the trial, the parties had agreed that the witnesses of fact called on behalf of the *Hua Sheng Hai* should go first, followed by the witnesses of fact called

on behalf of the *Kirrixki*, followed by the expert witnesses on behalf of the *Hua Sheng Hai* and concluding with the expert witness called on behalf of the *Kirrixki*.

The case is to be resolved by reference to the Irish law of torts

6. Although the collision occurred in international waters, the parties are agreed that Irish law applies to the respective claims advanced by the parties as against each other. In this context, both parties have referred to *Marsden & Gault "Collisions at Sea"*, 15th Ed., 2021, at para. 5-003, where the authors say:-

> *"Apart from certain special rules, there is as far as English law is concerned no transnational or global maritime law of wrongs. Admittedly the High Court of Admiralty once affected to apply a kind of transnational civil law independent of national rules. But the modern view is strongly against the idea that there is any such overarching lex maritima to be applied in the place of national law. On the contrary: Admiralty claims now emphatically reflect the practice of the English admiralty court, and of other English courts exercising parallel jurisdiction. Brett LJ expressed what has become the modern view in 1882, when he said:*
>
> > *'Now the first question raised on the argument before us was what is the law which is administered in an English Court of Admiralty, whether it is English law, or whether it is that which is called the common maritime law, which is not the law of England alone, but the law of all maritime countries. About that question, I have not the smallest doubt. Every Court of Admiralty is a court of the country in which it sits and to which it belongs. The law which is administered in the Admiralty Court of England is the English maritime law.'*

Thus in England today the law of tort is generally applicable to collisions at sea in the same way as it governs torts on dry land. To succeed in an action in tort for damages arising out of a collision at sea, a claimant must prove the facts giving rise to the tort on which he relies. He must also prove that he has suffered the damage complained of, that the damage was caused by the tort and that it is not too remote a consequence of the breach of duty."

7. As noted above, each party blames the other for the collision. Both parties contend that the collision was caused by negligence, breach of duty and breach of statutory duty of the opposing party. Both parties accept that negligence and breach of duty are the principal torts in issue and that the conduct of those navigating a ship involved in a collision will be judged by the standards of prudent seamanship. Both parties also accept that an important element of any assessment as to whether the parties complied with those standards will be the extent to which the Collision Regulations have been complied with. These are the International Regulations for Preventing Collisions at Sea 1972 made by the International Maritime Organisation (*"IMO"*) as amended by Resolutions A.464(12), A.626(15), A.678(16), A.736(18), A.910(22) and A.1004(25) which have been implemented in Ireland under the Merchant Shipping (Collision Regulations) (Ships and Water Craft on the Water) Order 2012 (S.I. No. 507 of 2012) (*"the 2012 Regulations"*). Regulation 5 of the 2012 Regulations applies the Collision Regulations to all States listed in Schedule 2. Both France and Hong Kong (being the flags under which the *Kirrixki* and the *Hua Sheng Hai* sailed) are included in Schedule 2. Although both parties, in asserting their claims, rely on the provisions of the Collision Regulations, they do not contend that, in advancing a cause of action, a breach of the Regulations gives rise to a breach of statutory duty enforceable by them

independently of the law on negligence. This is consistent with the approach suggested by the authors of *Marsden & Gault, op. cit.*, at para. 5-007.

8. Notwithstanding the views expressed by the authors of *Marsden & Gault*, the *Hua Sheng Hai* also seeks to rely on s. 419(3) of the Merchant Shipping Act 1894 (*"the 1894 Act"*) which deals with wilful default. Section 419(3) provides as follows:-

> *"If any damage to person or property arises from the non-observance by any ship of any of the collision regulations, the damage shall be deemed to have been occasioned by the wilful default of the person in charge of the deck of the ship at the time, unless it is shown to the satisfaction of the court that the circumstances of the case made a departure from the regulation necessary."*

9. In closing submissions, it was argued on behalf of the *Hua Sheng Hai* that the navigation of the *Kirrixki* by the skipper was so reckless as to constitute wilful default and that, by virtue of s. 419(3), the *Kirrixki* must be wholly liable for the damage suffered by the *Hua Sheng Hai*. However, that submission seems to me to involve a misreading of the effect of s. 419(3). All s. 419(3) does is to deem non-observance of the Collisions Regulations to have been occasioned by the wilful default of the person in charge of the deck of a ship unless it is shown that a departure from the Regulations was necessary. It does not create an independent cause of action. The purpose of the sub-section appears to be to provide a statutory presumption in the context of s. 419(2) which provides that:-

> *"If an infringement of the collision regulations is caused by the wilful default of the master or owner of the ship, that master or owner shall, in respect of each offence, be guilty of a misdemeanour."*

That sub-section must, of course, also be read in conjunction with s. 419(1) which imposes a statutory obligation on all owners and masters of ships to obey the Collision

Regulations. Section 419(3) is obviously of assistance in the context of a prosecution under s. 419(2) insofar as it deems non-observance of the Collision Regulations to be wilful default. But I cannot see that the subsection adds anything to the case sought to be made by the *Hua Sheng Hai* and I do not propose to consider it further in this judgment.

The claim made on behalf the *Hua Sheng Hai*

10. In the statement of claim delivered on behalf of the owners and operators of the *Hua Sheng Hai*, it was admitted that the *Kirrixki* was observed by radar at a range of 10 nautical miles. It was claimed that, thereafter, the *Kirrixki* was kept under close observation and that, when the *Kirrixki* was observed visually, the *Kirrixki* was displaying a confusing multitude of lights including deck lights. It was also claimed that the *Kirrixki* was stopped for a considerable period but that it subsequently started steaming slowly ahead, suddenly changing course and accelerating to 9 knots. This change of course taken by the *Kirrixki* is a crucial element of the case made on behalf of the *Hua Sheng Hai*. It is further alleged that, appreciating a danger of collision, the *Hua Sheng Hai* turned 10º to port and sounded the whistle prior to the collision but was unable to avoid the collision.

11. It was further alleged that the *Kirrixki* did not take any avoiding action and no sound signals were heard from the trawler. As it transpired in the course of the evidence, it is unsurprising that no such action was taken by the *Kirrixki* in circumstances where its skipper accepted that he was not keeping any lookout. It was alleged that, due to the relative difficulty in manoeuvrability of the *Hua Sheng Hai*, an adjustment of course and/or speed by the *Kirrixki* would have been a simple matter for the latter to have avoided the collision. It was specifically alleged that the *Kirrixki* was driven into the *Hua Sheng Hai* causing the bow of the trawler to come into contact with the starboard

quarter of the *Hua Sheng Hai* between holds nos. 6 and 7 causing damage to the shell plating between those holds. Among the allegations of negligence and breach of duty alleged against the *Kirrixki* are the following:-

(a) There was a failure to properly input correct information into the *Kirrixki's* AIS system with the result that this gave misleading information to all other vessels. In opening the case, counsel for the *Hua Sheng Hai* explained that the *Hua Sheng Hai's* case is that, at all times the AIS of the *Kirrixki* suggested that it was a vessel under way and that it did not say that it was a vessel engaged in fishing. It should be noted that the AIS will also give information in relation to the direction and speed of a vessel and this assists in identifying the predicted closest point of approach (*"the CPA"*) and the time of the closest point of approach (*"the TCPA"*). Counsel also explained that it is part of the case made on behalf of the *Hua Sheng Hai* that, although the AIS information being transmitted by the *Kirrixki* stated that the vessel was under way, the vessel was in fact stationary for a significant period of time and that the CPA shown suggested that the CPA between both vessels would be a nautical mile to the east of the *Hua Sheng Hai* as the latter tracked north;

(b) there was a failure on the part of the *Kirrixki* to keep and maintain any proper lookout and that the *Kirrixki* changed course and accelerated towards the *Hua Sheng Hai* in circumstances where it was clearly unsafe to do so. Reliance is placed on (among other things) Rule 17(a) of the Collision Regulations (addressed below);

(c) there was a failure to exhibit proper lights in accordance with the Collision Regulations.

(d) there was failure to reduce the speed of the *Kirrixki* or to alter course to avoid a collision with the *Hua Sheng Hai*.

The claim made on behalf of the *Kirrixki*

12. In contrast, in the defence and counterclaim delivered on behalf of the *Kirrixki* and in the statement of claim delivered in the proceedings taken by the owners of the *Kirrixki* against the *Hua Sheng Hai*, it is alleged that the latter was entirely to blame for the collision. In para. 44 of the defence and counterclaim, it is stated that the *Kirrixki* left Dingle at approximately 16:30 on 11th October 2019 and arrived at fishing grounds on 11th October 2019 at approximately 19:20[1] when fishing operations were commenced. It is contended that, at all times, the *Kirrixki* displayed the correct lights. The case is made that, at approximately 22:00 UTC, there was a problem with the engine which required it to be shut down and that, after hauling in the trawl lines, the engine was stopped at approximately 22:40 to effect the repairs. At that point, it is alleged that the two red *"Not Under Command"* lights were switched on. Subsequently, repairs were completed at 23:44 UTC and the *Kirrixki* resumed fishing, the *"Not Under Command"* lights being extinguished at that point and the green and white fishing lights being illuminated. It should, however, be noted that, although the pleading speaks of resuming fishing, the case made at trial was that, at the time of the collision, the *Kirrixki* was involved in lowering the nets and associated gear into the sea.

13. It is alleged that, under the Collision Regulations, the *Hua Sheng Hai* was required to keep out of the way of the *Kirrixki*. The allegations made by the owners of the *Kirrixki* against the *Hua Sheng Hai* include the following:-

[1] This equates to 18:20 UTC

(a) There was a failure to maintain any proper lookout by all means available including use of radar;

(b) There was a failure to take any proper steps to determine whether a risk of collision with the *Kirrixki* was developing;

(c) There was a failure to note that the *Kirrixki* was stopped or *"at least drifting"*;

(d) There was a failure to pass the *Kirrixki* at a distance of 2-3 nautical miles and a failure to note that the *Kirrixki* would be passed at a CPA of 0.9 nautical miles; in this context, is contended that the *Hua Sheng Hai* should have maintained a distance of at least 1.5 nautical miles from the *Kirrixki*[2];

(e) There was a failure to assess the lights on the *Kirrixki* and, in particular, the change in the lights at 23:44 UTC when the fishing lights were illuminated;

(f) A particular feature of the case made by the *Kirrixki* is that there was a failure on the part of the *Hua Sheng Hai* to have any proper regard (as required by the Collision Regulations) to the restricted manoeuvrability of a vessel engaged in trawl fishing albeit that, at the trial, the emphasis was on restriction in manoeuvrability arising from the activity of lowering the net;

(g) It is further contended that the *Hua Sheng Hai* created a close quarters situation and that there was a failure to make use or any proper use of any relevant communications system so as to avoid the collision or otherwise communicate its intention to the *Kirrixki*.

[2] At trial, the case was made that it should have maintained a CPA of more than 2 nautical miles.

14. As a consequence of the collision, the owners of the *Kirrixki* allege that five of the crew sustained personal injuries (three of which required medical treatment) and that there was damage to the bow of the *Kirrixki* affecting the panels of the hull on both tacks from the end of the bow to frame 60 on the port side and frame 62 on the starboard side as well as the main deck which, it is alleged, became *"significantly bent out of shape and perforated (with openings of up to 150 millimetres diameter) over an area of approximately 8 metres squared from the bow to frame 60"*.

15. In response to the defence and counterclaim delivered on behalf of the *Kirrixki* in the proceedings commenced by the owners and operators of the *Hua Sheng Hai*, the latter admitted in their reply that the *Kirrixki* was stopped for a period with its bow to the southeast but that, at approximately 23:44, it gathered speed and was brought onto a north-westerly bearing on a course which intercepted that of the *Hua Sheng Hai*. Essentially, the case made is that the *Kirrixki* created a close quarters situation. It is further alleged that, in the period prior to this change of course by the *Kirrixki*, the *Hua Sheng Hai* had, at all times, maintained a steady course of approximately 64º.

The Collision Regulations

16. Before considering the evidence in the case, it may be of assistance, at this stage, to identify some relevant provisions of the Collision Regulations which feature in the case. The Regulations deal, among other things, with the requirement to keep a proper look-out by sight and other means, the obvious need to avoid collision, the responsibilities that exist between vessels (including in a *"crossing situation"*), the lights that vessels are required to display and use, and the warning signals which vessels are required to deploy in certain circumstances.

17. The Collision Regulations are divided into five parts. Part A contains a number of general provisions. Rule 1(a) provides that the Collision Regulations apply to all

vessels on the high seas. There is no exemption for fishing trawlers. Rule 2(a) provides that nothing in the Rules shall exonerate any vessel from the consequences of the neglect of any precaution which may be required *"by the ordinary practice of seamen, or by the special circumstances of the case"*. Part A also contains a number of general definitions which I will come back to presently.

18. Part B of the Regulations contains rules dealing with steering and sailing. Rule 5 deals with the obligation to keep a proper look-out, not just by sight, but also by all other available and appropriate means. Rule 5 is of significant importance in this case. It provides as follows:-

> *"Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision."*

19. The wide language of Rule 5 should be kept in mind. The opening words of the Rule plainly require all vessels to keep a proper look-out at all times. Importantly, there is no exemption for fishing trawlers or any other type of vessel. Nor are there any exceptions for any particular maritime activities even where they restrict a vessel's manoeuvrability. Furthermore, the obligation to keep a look-out is not confined to a visual check; all available means must be used appropriate to the prevailing conditions so as to be in a position to assess the risk of collision. This obligation is amplified by the provisions of Rule 7 (addressed below).

20. For completeness, the provisions of Rule 6 should also be noted. Rule 6 provides that every vessel *"shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions…"*.

21. Rule 7 deals with the obligation of vessels to use all appropriate means to assess the risk of collision. Rule 7(a) provides as follows:-

> *"Every vessel shall use all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists. If there is any doubt such risk shall be deemed to exist."*

22. In turn, Rule 7(b) requires that any radar equipment fitted should be used appropriately. Rule 7(b) provides as follows:-

> *"Proper use shall be made of radar equipment if fitted and operational, including long-range scanning to obtain early warning of risk of collision and radar plotting or equivalent systematic observation of detected objects."*

23. Rule 8 contains detailed rules in relation to the action to be taken to avoid collision. Rule 8(a) provides that any action taken to avoid collision should be taken in accordance with the rules set out in Part B and *"shall, if the circumstances of the case admit, be positive, made in ample time and with due regard to the observance of good seamanship"*. Rule 8(e) also provides that, should it be necessary to avoid a collision or to allow more time to assess the situation, a vessel should slacken speed or *"take all way off by stopping or reversing her means of propulsion"*.

24. Section II of Part B deals with the conduct of vessels in sight of one another. This is confirmed by the terms of Rule 11. Rules 15 to 18 are potentially relevant to the circumstances of this case. All of them are contained in s. II. Rule 15 addresses a *"crossing situation"*. Rule 15 provides as follows:-

> *"When two power-driven vessels are crossing so as to involve risk of collision, the vessel which has the other on her own starboard side shall keep out of the way and shall, if the circumstances of the case admit, avoid crossing ahead of the other vessel."*

If this rule applied, it might be thought that, because the *Hua Sheng Hai* had the *Kirrixki* on the starboard side in the minutes before the collision, the *Hua Sheng Hai* was required to give way. But, in the closing submissions of counsel for the *Kirrixki*, it was expressly argued that Rule 15 had no application to cases involving trawlers which it was argued are covered by Rule 18. Reliance was placed on the observation to that effect made by Lord Briggs in the U.K. Supreme Court in *The Alexandra 1 and the Ever Smart* [2012] 1 Lloyd's Rep. 299, at p. 310. Moreover, the *Hua Sheng Hai* argues that Rule 15 is not relevant because, until the *Kirrixki* took a sudden turn to a north-westerly direction, there was no crossing situation. The case is made on behalf of the *Hua Sheng Hai* that, by taking this turn, it was the *Kirrixki* which generated a close quarters situation and caused the collision. In the closing submissions of counsel for the *Kirrixki*, it was argued that the *Hua Sheng Hai* was not entitled to make a case based on Rule 15 because such a case was not made in the pleadings. However, this submission seems to me to be based on a misunderstanding of the *Hua Sheng Hai's* case. The *Hua Sheng Hai* does not rely on Rule 15 in support of its own case; instead the case made on its behalf (which is reflected in the pleadings) is that the *Kirrixki* changed course and accelerated towards the *Hua Sheng Hai* when it was unsafe to do so, such that the *Kirrixki* cannot rely on Rule 15.

25. Rules 16, 17 and 18 are required to be read together. Rule 18(a) provides that a power-driven vessel is required to keep out of the way of certain categories of vessel, including a vessel not under command, a vessel restricted in the ability to manoeuvre, and a vessel engaged in fishing. Each of those categories is relevant here because the *Kirrixki* was for a time, not under command; the case is also made on its behalf that, at the time of the collision, it was engaged in the process of lowering the nets and related gear into the water such that it was either engaged in fishing or, at minimum, restricted

in the ability to manoeuvre due to the drag of the net. The term *"vessel engaged in fishing"* is defined by Rule 3(d) as follows:-

> *"any vessel fishing with nets, lines, trawls or other fishing apparatus which restrict manoeuvrability …"*[3]

26. The term *"vessel restricted in her ability to manoeuvre"* is, in turn, defined by Rule 3(g) as meaning:-

> *"a vessel which from the nature of her work is restricted in her ability to manoeuvre as required by these Rules and therefore is unable to keep out of the way of another vessel."*

Rule 3(d) gives a non-exhaustive list of examples of vessels which are restricted in their ability to manoeuvre. These include a vessel engaged in laying a submarine cable, a vessel engaged in dredging and a vessel engaged in certain towing operations. Having regard to the evidence given in this case (considered below), I believe that there can be no doubt that, if the *Kirrixki* had been engaged in lowering the nets into the water, it[4] would have been restricted in its ability to manoeuvre.

27. It was, therefore, argued on behalf of the *Kirrixki* that the *Hua Sheng Hai* was required under Rule 18 to keep out of the way of the *Kirrixki*. The *Kirrixki* also relies on Rule 16 in this context which provides that:-

> *"Every vessel which is directed to keep out of the way of another vessel shall, so far as possible, take early and substantial action to keep well clear."*

28. Rule 17 is also relevant. It deals with the action to be taken by the *"stand-on vessel"*, i.e. the vessel which has priority under Rules 16 and 18. The *Kirrixki* claims such priority. But the *Hua Sheng Hai* relies on Rule 17(a) which contains an important

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[3] The balance of the Rule is not relevant for present purposes.

[4] In this judgment, I have deliberately used the inanimate pronoun when referring to a vessel. I am not comfortable with the traditional use of the feminine pronoun.

rider on the priority available under the other Rules. It makes clear that the vessel which has priority is required to keep its course and speed. It will be recalled in this context, that it is part of the *Hua Sheng Hai's* case that the *Kirrixki* changed its course and accelerated towards the *Hua Sheng Hai*. As will become clear in due course, the *Kirrixki* made a dramatic change in course from a generally easterly drift at a low speed to a north-westerly course at a significantly higher speed. Even if one leaves aside the period of drifting, the trawler moved from a speed of 1.7 knots at a heading of 172° and a course over the ground of 112°.2 to a speed of 7.4 knots and a heading of 330° and a course over the ground of 298°. Rule 17(a) provides as follows:-

> *"(a) (i) Where one of two vessels is to keep out of the way the other shall keep her course and speed.*
>
> *(ii) The latter vessel may however take action to avoid collision by her manoeuvre alone, as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action in compliance with these Rules."*

29. However, the stand-on vessel is not without obligations. Rules 17(b) makes this clear:-

> *"When, from any cause, the vessel required to keep her course and speed finds herself so close that collision cannot be avoided by the action of the give-way vessel alone, she shall take such action as will best aid to avoid collision."*

30. Rule 17(c) is not immediately relevant but Rule 17(d) should be noted. Although Rule 17 envisages action being taken by the stand-on vessel, Rule 17(d) expressly provides that Rule 17 does not relieve the give-way vessel of the obligation to keep out of the way.

31. Part C of the Collision Regulations deal, *inter alia*, with the requirements in relation to lights. Rule 22(a) requires that, in the case of vessels of 50 metres or more in length (which would include the *Hua Sheng Hai*), such vessels are required to have the following lights which are required to be visible for the following distances:-

(a) a masthead light (namely a white light placed over the fore and aft centreline of vessel) so as to be visible for at least 6 miles;

(b) a sidelight (namely a green light on the starboard side and a red light on the portside) visible for at least a distance of 3 miles. In this case, the evidence is that the green starboard light of the *Hua Sheng Hai* would have been visible from the *Kirrixki* from a distance of slightly more than 5 miles up to the moment of the collision;

(c) a sternlight, an all-round light and a towing light all visible for at least 3 miles.

32. No issue was raised by the *Kirrixki* in respect of the lights on board the *Hua Sheng Hai*. There is, in any event, uncontradicted evidence that it was equipped with all prescribed lights and that they were functioning. In contrast, the *Hua Sheng Hai* does not accept that the *Kirrixki* was displaying the lights required for a vessel of the *Kirrixki's* size. The *Hua Sheng Hai* also claims that the lights of the *Kirrixki* were, in any event, obscured by the very bright deck lights that the skipper of the *Kirrixki* confirmed (in the course of his evidence) were always on. In the case of vessels of 12 metres or more in length but less than 50 metres in length (which includes the *Kirrixki*), they are required under Rule 22(b) to have the same lights as those required for a vessel the size of the *Hua Sheng Hai* save that the masthead light is required to be visible for a minimum of 5 miles (rather than 6) and all of the other lights are required to be visible for a minimum of 2 miles (rather than 3).

33. Rule 23 deals with the lighting requirements for power-driven vessels (such as the *Hua Sheng Hai* and the *Kirrixki*) which are underway but I do not believe that it is necessary to set out those requirements here. There are separate requirements in relation to lights on fishing vessels which are addressed in Rule 26. Under Rule 26(b), the lights to be shown while a vessel is engaged in trawling are as follows:-

(a) two all-round lights in a vertical line, the upper being green and the lower white, or, alternatively, a shape consisting of two cones with their apexes together in a vertical line one above the other. The *Kirrixki* maintains that these were lit at the time of the collision;

(b) a masthead light abaft of and higher than the all-round green light, save that this is not required in the case of a vessel of less than 50 metres in length such as the *Kirrixki*;

(c) when making way through the water, a fishing vessel, in addition to the lights outlined above, is required to also exhibit sidelights and a sternlight.

34. Rule 26(b) makes clear that it applies only to a fishing vessel engaged in trawling. The rule explains that trawling involves the dragging through the water of a dredge net or other apparatus used as a fishing appliance. The Rule therefore applies to the *Kirrixki*. But, when a vessel is not engaged in fishing, the lights prescribed by Rule 26(b) are not to be used. Instead, Rule 26(e) requires that, when not engaged in fishing, the vessel should only exhibit those lights prescribed for a vessel of that length.

35. Rule 27 is also relevant. It addresses vessels not under command or vessels which are restricted in their ability to manoeuvre. For present purposes, Rule 27(a) dealing with a vessel (not under command) is relevant. It requires that the vessel should exhibit two all round red lights in a vertical line. The *Kirrixki* contends that these were

lit while it was drifting for a period but the *Hua Sheng Hai* does not accept that the trawler was fitted with these lights. Alternatively, it says that no such lights were lit on board the trawler.

36. Part D of the Collision Regulations deals with the rules in relation to sound and light signals. These Rules are of some relevance in circumstances where the evidence shows that the whistle on board the *Hua Shen Hai* was sounded just seconds before the collision. There is nothing to suggest that the *Kirrixki* deployed a whistle to warn of its approach. Under Rule 33, a vessel of 20 metres or more (which would include the *Kirrixki*) is required to be equipped with both a whistle and a bell. The same rule requires that a vessel of 100 metres or more (which would include the *Hua Sheng Hai*) must also be equipped with a gong, the tone and sound of which cannot be confused with that of the bell. Rule 34 deals with the manoeuvring and warning signals that must be given by one vessel to another. Rule 34(d) deals with circumstances where one vessel cannot understand what another vessel is doing. The Rule is potentially relevant in circumstances where the *Hua Sheng Hai* makes the case that the *Kirrixki* was behaving erratically in the moments before the collision. Yet, the *Hua Sheng Hai* did not immediately give either the sound or light signals prescribed by this rule. Rule 34(d) provides as follows:-

> *"When vessels in sight of one another are approaching each other and from any cause either vessel fails to understand the intentions or actions of the other, or is in doubt whether sufficient action is being taken by the other to avoid collision, the vessel in doubt shall immediately indicate such doubt by giving at least five short and rapid blasts on the whistle. Such signal may be supplemented by a light signal of at least five short and rapid flashes."*

The evidence of the witnesses as to fact on behalf of *Hua Sheng Hai*

37. The first witness called on behalf of the *Hua Sheng Hai* was Mr. Xu An. He gave his evidence remotely in Mandarin Chinese which was translated into English by an interpreter. Mr. Xu has been employed as an able seaman with COSCO since 2001 and has always sailed in Panamax vessels and has taken navigational watch on the bridge of vessels for about sixteen years. He joined the crew of the *Hua Sheng Hai* on 22nd June 2019. He explained that his watch was the noon to 16:00 watch and again from midnight to 4:00. He further explained that, in the course of the voyage to Aughinish, he was always on watch with the second officer, Mr. Zhang Ying Zhou. I should explain that, although a witness statement had been provided by Mr. Zhang, he was not called to give evidence. Mr. Xu said that, on 11th October 2019, he came up to the bridge at 23:45 (ship's time) along with the second officer, Mr. Zhang. This equates to 22:45 UTC. He said that visibility was good. There was no rain and no fog. Mr. Xu said that the steering was his responsibility and that Mr. Zhang monitored the radar. He explained that the *Hua Sheng Hai* uses the ARPA system. This is an acronym for automatic radar plotting aid. Mr. Xu said that the *Kirrixki* was detected on the radar at 10 nautical miles. Although he was not trained to use the radar, he said that he had personally viewed the radar and seen the *Kirrixki* represented on screen. He also said that the *Kirrixki* was stopped. Furthermore, notwithstanding that he was not trained in the use of the radar, he said that he and Mr. Zhang, the second officer, took turns to monitor the radar. He said that no one had instructed him to monitor the radar but that *"when there is any problems, we always monitor the radar"*.

38. According to Mr. Xu, both he and the second officer, used binoculars to look at the *Kirrixki*. He had no memory of discussing the distance between the two vessels with the second officer, but he said that the second officer instructed him to keep looking at

the *Kirrixki*. Mr. Xu could not recall when he first saw the *Kirrixki* but he thought it was at an approximate distance of 5 nautical miles. At that time, he said that there were two lights which he described as the navigational lights and the deck lights. In light of the fact that the *Kirrixki* was stationary at that time, Mr. Xu did not understand why the navigational lights were on. He described the navigational lights as red and grey. He said that the deck lights were white. He also said that the deck lights remained on up to the moment of the collision. Although Mr. Xu confirmed that he saw both navigational and deck lights, he could not recall where on the *Kirrixki* the navigational lights were located.

39. Mr. Xu dealt with the moments before the collision in his witness statement in the following terms:-

> *"13 The Second Officer was in control and gave me the instructions. I was, at all times, standing by the wheel under the direction of the Second Officer and I recall seeing the fishing vessel turning but still moving slowly.*
>
> *14 We could then visually and on the radar see that the fishing vessel was accelerating towards us. I would estimate that it was approximately half a mile away when the Second Officer started to sound the whistle, but he witnessed no change in course by the other vessel. The fishing vessel simply kept on coming at the same course.*
>
> *15 The Second Officer ordered me to steer to port by 10 degrees which we did. Our vessel was slowly moving to port but it was simply too late for us to take avoiding action.*
>
> *16 The fishing vessel was still displaying navigational lights and deck lights and didn't make any change of course before striking us.*

17 We were correctly displaying our navigation lights and sounding the whistle."

While Mr. Xu said that he was *"at all times"* standing by the wheel under the direction of the officer of the watch, there is no dispute that the *Hua Sheng Hai* was on automatic steerage up to moments before the collision. The first turn to port to avoid the collision was made at 23:49:03 and it therefore appears that the decision to move to manual steering was taken just seconds before that time. It should also be noted that, in the joint memorandum of Captain Walton and Captain Simpson of 17th February 2023, it was expressly agreed that the officer of the watch (i.e. Mr. Zhang) and Mr. Xu were chatting during the approach of the *Kirrixki*. While the topic of conversation could not be identified by the translator from the relevant recording, both experts were agreed that the tone used *"does not appear to indicate panic on the bridge"*. It should also be noted that Mr. Xu was mistaken in his estimation that the *Kirrixki* was as much as half a mile away when the *Hua Sheng Hai* sounded the whistle. As appears from para. 147 below, it appears more likely that the vessels were about 0.125 nautical miles apart at the time the whistle was sounded.

40. In the course of his direct examination, Mr. Xu was asked whether he saw any fishing nets but he could not say whether there were any fishing nets. Mr. Xu also said that he did not hear any whistle being sounded or any other alarm being sounded by the *Kirrixki*. In contrast, he said that the second officer, Mr. Zhang, sounded the whistle a number of times on the *Hua Sheng Hai*. While he could not recall how long before the collision the whistle may have sounded, it later emerged in the course of the expert evidence that the relevant records of the *Hua Sheng Hai* show that the first blast of the whistle was sounded at 23:50:31 which was approximately 33 to 34 seconds before the collision. As noted above, Mr. Xu confirmed that Mr. Zhang ordered him to steer to

port by 10º in order to avoid the collision. Although not addressed in Mr. Xu's evidence, it is clear from the expert report of Captain Paul Walton that there were, in fact, two turns to port executed by the *Hua Sheng Hai*. The experts for both sides agree that, at 23:49:03, there was a turn to port of 10º (when the vessels were 0.565 nautical miles apart) and that there was a subsequent turn to port at 23:50:54 when the vessels were only 0.083 nautical miles apart. Captain Walton said that the second turn to port was of 20° but Captain Simpson (the expert for the *Hua Sheng Hai*) said it was of 10°. Thus, the first turn occurred approximately 2 minutes before the collision while the second turn occurred only 10 to 11 seconds before the collision. Mr. Xu was asked whether Mr. Zhang was calm and whether there was any panic on deck. He could not remember whether Mr. Zhang was calm but he said that there was no panic. This is consistent with the recording of the conversation between Mr. Zhang and Mr. Xu. Other than the instruction to steer to port, Mr. Xu said that he received no other commands from Mr. Zhang.

41. Mr. Xu was also asked, in the course of his direct examination, what the second officer, Mr. Zhang, was doing minutes before the collision. Mr. Xu explained that the second officer was monitoring the *Kirrixki* by means of the radar and binoculars. He was asked whether the second officer was operating the AIS system, but Mr. Xu said that he was not paying attention to that.

42. According to Mr. Xu, the *Kirrixki* accelerated towards the *Hua Sheng Hai*. Mr. Xu said that a situation like this had never happened to him in the course of his experience as an able seaman and he was very surprised to see the *Kirrixki* behave in this way. Mr. Xu said that Mr. Xu tried to contact the *Kirrixki* before the collision, but he could not recall how long before the collision this occurred. He maintained that this was done by means of VHF radio but neither of the experts who reviewed the records

of the *Hua Sheng Hai* suggested that there is any record of any such attempt to make contact with the *Kirrixki* by VHF radio in advance of the collision. I therefore do not believe that this aspect of Mr. Xu's evidence is accurate.

43. Under cross-examination, Mr. Xu was unable to say why Mr. Zhang had not been called to give evidence. It was put to Mr. Xu that it was the master of the *Kirrixki* who sought to make contact with the *Hua Sheng Hai* (albeit that this occurred after the collision) and that, ultimately, contact was established by Valentia radio, approximately 30 minutes after the collision. This appears to be consistent with the relevant records reviewed by the expert witnesses in the case.

44. Mr. Xu was also asked about the master's standing orders which provide, *inter alia*, that the watch on board should keep a sharp look out at all times and keep clear of other objects, including large vessels and fishing boats, and that any action taken to avoid collision should maintain a CPA of more than 2 nautical miles in a calm sea. It further provides that, if the CPA is less than 2 nautical miles, the vessel should move to hand steering. Mr. Xu confirmed that he was familiar with this document. He was then asked why the *Hua Sheng Hai* was on autopilot in circumstances where the CPA between the *Kirrixki* and the *Hua Sheng Hai* was less than 2 nautical miles. Mr. Xu was unable to answer that question.

45. In the course of his cross-examination by counsel for the *Kirrixki*, Mr. Xu was also unable to say how often the radar was monitored in advance of the collision. He was asked whether he was aware that a fishing vessel must show green and white lights while engaged in fishing. He said that he did not know this. He was also not familiar with how trawlers engage in fishing. When asked whether he was familiar with the fact that a fishing trawler has to cast its nets in order to catch fish, he again said that he did not know this. Counsel for the *Kirrixki* put it to him that the *Kirrixki* had to propel fast

forward in order to spread its nets. But, again, Mr. Xu was not familiar with that concept. Counsel for the *Kirrixki* put it to Mr. Xu that he and his colleagues on board the *Hua Sheng Hai* failed to notice the *Kirrixki* changing its lights from double red to green and white. Mr. Xu's response was to say that he did not remember that. It was then put to him that, when a vessel is engaged in fishing, this affects its manoeuvrability. Mr. Xu's response was that he was only an able seaman and that he did not know this.

46. The next witness called on behalf of the *Hua Sheng Hai* was Mr. Wang Daoping, the third officer. Mr. Wang confirmed that he had occupied that position on board the *Hua Sheng Hai* for three years prior to the collision. Mr. Wang also confirmed that he had prepared the English language version of his witness statement. Mr. Wang said that, on the night of the collision, he had been on the watch from 20:00 to 24:00 ship's time (i.e. 19:00 to 23:00 UTC). He confirmed that, on the night in question, the weather was cloudy but with good visibility. He also confirmed that there were two radars on the bridge, one set on 6 miles and the other set on 12 miles. He also stated that the equipment and lights were functioning well and had been checked when he handed over the watch to the second officer. Mr. Wang also explained that, once a vessel becomes a *target* on the ARPA radar, the system will display both the CPA and the TCPA. This will also be displayed on the ECDIS which is an acronym for electronic chart display and information system which provides digital charts and navigational information for mariners. Mr. Wang confirmed that the AIS information about vessels targeted was displayed both on the ECDIS unit and the ARPA unit.

47. Counsel for the *Hua Sheng Hai* put a number of provisions of what was described as the Ship Management System (*"SMS"*) to Mr. Wang. These are contained in a section described as *"Instructions for Pilot and Navigation Watch"*. Paragraph 2.4.1 is in the following terms:-

> *"Strictly follow the requirements of the '1nternational Regulations Preventing Collisions at Sea'. follow the avoidance principle of 'early, large, wide and clear' and take effective avoidance actions to ensure that ships pass at a safe distance. It is recommended that if the environment and conditions at the time permit. when turning and avoiding, the distance between the encounter with the big boat during the day should not be less than 1 nautical mile as much as possible. and at night, strong winds and waves, especially when the visibility is poor. try not to be less than 2.0 nautical miles. The encounter distance between small boats in the daytime should not be less than 0.5 nautical mile, the encounter distance between night and strong wind and waves should not be less than 1 nautical mile, and should not be less than 2.0 nautical miles when the visibility is poor. if the ship or other ships are large ships, appropriate increase the meeting distance…"*

48. Mr. Wang confirmed that he was familiar with this guidance and that it forms part of COSCO company policy in respect of collision avoidance. Mr. Wang also confirmed that, in clear conditions at night, meeting a vessel of less than 50 metres, the recommended distance in 2019 was 1 nautical mile. Mr. Wang said that he was in his quarters at the time of the collision but he went up to the bridge afterwards. He was asked whether he saw any cables, ropes or anything *"coming off the end"* of the *Kirrixki* and going into the sea. in response, Mr. Wang said that he did not see anything such as a cable or ropes. Mr. Wang also said that the *Kirrixki's* navigational lights and deck lights were both on at the time. He was asked to describe the navigational lights he saw on the vessel. His response was that the lights were *"red for the left side and the green for the right side of the vessel"*. He expressed the view that these navigational lights indicated a motor vessel rather than a fishing vessel.

49. In the course of his cross-examination by counsel for the *Kirrixki*, Mr. Wang confirmed that he had seen the *Kirrixki* while on watch. He had seen it with the use of binoculars. He also confirmed that it was captured by the radar, but he said that there was no AIS information. When asked when he first saw the *Kirrixki*, Mr. Wang said that it occurred in the course of the takeover at 22:45 UTC. At that point, he suggested that the *Kirrixki* was more than 10 nautical miles away. Mr. Wang estimated that, at that point, the CPA was approximately 3.5 to 4 nautical miles. This was on the basis that the *Kirrixki* was stationary. Mr. Wang expressed the view that the *Hua Sheng Hai* could safely pass the *Kirrixki* when the CPA was of the order of 3.5 to 4 nautical miles. It should be noted, however, that Captain Simpson, the shipping expert called on behalf of the *Hua Sheng Hai* confirmed that the CPA could never have been of that order. He said that there was nothing in the data that indicated that the CPA could have been so large. Instead, he calculated that the CPA was of the range of 1 to 1.2 nautical miles. Mr. Wang also said that, at this point, it was not known whether the *Kirrixki* was a fishing vessel. However, it is clear from the radar screenshots discussed in paras. 76 and 132 below, that the AIS information from the *Kirrixki* (as picked up by the radar of the *Hua Sheng Hai*) identified the vessel as a fishing boat. Mr. Wang was asked whether there were other fishing vessels in the vicinity, but he said there were none. However, it should be noted that the radar screenshots taken from the VDR of the *Hua Sheng Hai* identify that there was, at least, one other fishing boat in the vicinity. Mr. Wang was asked whether he accepted that the *Kirrixki* was in *"fishing grounds"* but Mr. Wang said that he did not know that and that there was no information in the ECDIS to that effect. Counsel for the *Kirrixki* also put it to Mr. Xu that the *Kirrixki* was *"propelling fast"* in order to spread the nets and that the *Hua Sheng Hai* had failed to alter course when that happened. However, Mr. Xu responded that he did not pay attention to what

the fishing vessel was doing. My understanding of what he intended to convey was that he did not pay attention to the specific activity of the fishing vessel. I did not understand him to suggest that he did not pay any attention to the *Kirrixki* at all. Counsel for the *Kirrixki* put the Master's Standing Orders to Mr. Wang. This is the provision addressed earlier that requires the master to keep a CPA of more than 2 nautical miles in calm seas and more than 2.5 nautical miles in bad weather and, where it is not possible to do so, to revert to hand steering. However, Mr. Wang maintained that this was not correct and that what was required by COSCO in 2019 was that, when the weather was not good, the CPA should be over 2 nautical miles but that, when the weather was good, it should be over 1 nautical mile. On re-examination, Mr. Wang maintained that he believed that he was bound to follow an order from COSCO. In my view, this is clearly incorrect. In subsequent evidence, both Captain John Simpson (the expert called on behalf of the *Hua Sheng Hai*) and Captain Paul Walton (the expert called on behalf of the *Kirrixki*) agreed that the master's orders take precedence.

50. At the conclusion of his re-examination, I asked Mr. Wang whether there had been any discussion, in the course of the handover, between him and Mr. Zhang in relation to the *Kirrixki* which he had observed with his binoculars during the course of that handover. Mr. Wang responded to say that they noted that the *Kirrixki* was stopped and that there was a wide distance between both vessels and *"also there was only one vessel, so please pay attention to that"*. Following my exchange with Mr. Wang, counsel for the *Hua Sheng Hai* asked Mr. Wang whether he was sure that the vessel that he had seen with the binoculars was the vessel that collided with the *Hua Sheng Hai*. Mr. Wang said that he could not confirm this because there was no AIS information. Although two other members of the crew had provided witness statements, they were not called to give evidence. One was Mr. Liu Baocheng, the chief officer of

the *Hua Sheng Hai*. Significantly, the other witness who was not called was the second officer, Mr. Zhang Ying Zhou, who was the officer of the watch at the time of the collision. For that reason, significant elements of the report of Captain John Simpson (the expert called on behalf of the *Hua Sheng Hai*) had to be excised to the extent that Captain Simpson had relied on elements of Mr. Zhang's witness statement.

51. At the beginning of Day 3, counsel for the *Hua Sheng Hai* indicated that his side was taken by surprise by the suggestion put to Mr. Xu that the *Kirrixki* had been propelling fast in order to spread its nets. On that basis, he indicated that the *Hua Sheng Hai* intended to call a new witness, namely Mr. Noel McGettigan, a fisheries expert. In this context, it should be noted that, in the statement of claim delivered in the proceedings instituted on behalf of the *Kirrixki*, the case made was that the *Kirrixki* had been engaged in fishing at the time of the collision. It was not explicitly stated anywhere in the statement of claim (or in the defence and counterclaim delivered in the proceedings taken on behalf of the *Hua Sheng Hai*) that the *Kirrixki* was engaged in the preparatory steps of releasing and spreading the nets. It is true that, in particulars furnished in July 2021 in response to a request for particulars served on behalf of the *Hua Sheng Hai*, there was reference to streaming of the lines and net and other elements of that process, but there was no explicit allegation that the *Kirrixki* had to proceed at a fast speed in order to spread its nets. Similarly, although there was a reference in the witness statement of the skipper of the *Kirrixki* to the speed at which the *Kirrixki* would proceed when laying nets, it was not clear from the witness statement that this is the activity that was being undertaken at the moment of the collision.

The evidence of the sole witness as to fact on behalf of the *Kirrixki*

52. The master of the *Kirrixki*, Captain Antelo Malabe, commenced his evidence on the afternoon of Day 3. He gave his evidence remotely through a Spanish-to-English

interpreter. Captain Antelo Malabe confirmed that he had been working on the *Kirrixki* for approximately one year prior to the collision. At the time of the trial, he was working on a different vessel, namely the *Bikan*. He explained that he changed vessel in circumstances where the *Kirrixki* caught fire during the course of repairs in Spain following the collision. According to Captain Antelo Malabe, the *Kirrixki* had basic navigational equipment onboard. In his direct evidence, he described it as two radars and GPS. However, in para. 5 of his witness statement, he said that the *Kirrixki* was equipped with what he described as two GPS systems namely Sinmate-Simrad and Furuno. As I understand it, the latter is the AIS system on board.

53. While Captain Antelo Malabe could not recall the full complement of crew onboard the *Kirrixki* on 11th October 2019, he thought that there were ten or eleven. He confirmed that the *Kirrixki* left Dingle with the intention of going out 12 miles and commencing fishing in a fishing zone near Skellig Michael. In his witness statement, he said that he fished in *"Zone VII areas j and b".* While Captain Antelo Malabe did not elaborate on this in his evidence, Captain Walton (the expert retained by the *Kirrixki*) provided more detail in his report. In para. 5.1.2, Captain Walton stated that the *Kirrixki* arrived in the fishing zone 7.j.2 at 18.15 on 11th October. This is a reference to a fishing zone off the south west coast designated by the International Council for the Exploration of the Sea (*"ICES"*). It should be noted that, in para. 2.10.3 of his report, Captain Walton also said that the *Kirrixki* was in the same fishing zone at the time of the collision. This was not contested by the principal expert retained by the *Hua Sheng Hai*, Captain Simpson.

54. Captain Antelo Malabe said that, normally, the vessel would stay at sea for seven days before returning to Dingle with the catch. On the evening of 11th October, he said that the vessel developed a problem with the cooling of the engine. His direct

evidence was that, at that point, the *Kirrixki* hauled all the gear onboard and that he stopped the engine. He said that the nets were 120 metres long and that they were hauled in hydraulically. While the crew were attempting to fix the cooling problems, Captain Antelo Malabe said that they turned off the fishing lights (green over white) and that they turned on the *"all round – the not under command lights"* which he said were two red lights, one on top of the other. As noted in para. 34 above, that is a requirement of Rule 26(e) of the Collision Regulations. He also explained that they permanently had the white deck lights on. His explanation for having the deck lights on was that, normally, the crew would be working on deck or the engineer might be working on the engine. He said that the crew must be able to see at all times.

55. Captain Antelo Malabe could not recall exactly how long it took to fix the cooling problem, but he thought that it was less than an hour. When the engine was restarted, he said that they turned off the *"not under command"* lights and turned on the *"green lights"* for fishing, but he then clarified that the fishing lights were *"one green on top of a white one"*. As noted in para. 33 above, it is a requirement of Rule 26(b) that such lights be displayed when a fishing trawler is engaged in fishing.

56. In the course of his direct examination, Captain Antelo Malabe was asked to describe what was happening on board the *Kirrixki* in the minutes prior to the collision. It has to be said that his evidence is somewhat unclear. The interpreter had difficulty in finding English words for some of the technical Spanish words used by Captain Antelo Malabe. I found his evidence somewhat difficult to follow. This was partly due to the difficulties in translation. It was also partly due to the way in which the skipper gave his evidence. At time, he was not very forthcoming. His oral evidence (as described below) should be considered in conjunction with what he said in his witness statement where he said that the speed of the *Kirrixki* when *"laying out the nets"* was 6-8 knots

and where he said that it takes approximately 15 to 20 minutes to stream the nets, He also said that the speed when trawling would be 3.5 knots.

57. Captain Antelo Malabe was asked to describe what occurred after the engine had been restarted. His evidence was that, at that point, they started the process of shooting the nets. At my suggestion, he was asked to describe each of the individual steps in this process. For this purpose, although it was not explained in this way by Captain Antelo Malabe, it should be noted that the nets are stored on net drums on deck. As I understand it, they are essentially coiled around that drum. They are unwound from the drum and shot from the stern of the trawler into the water. This process involved several of the crew on deck and an officer (in this case, Captain Antelo Malabe) in command of the controls at the rear of the wheelhouse. As I understand the steps described by Captain Antelo Malabe in the course of his direct evidence, the first step involves letting the net down on the deck. He then said that *"we hook the 'disparo'"*and a crewman starts to *"pull the sack towards the water"*. Although this was not explored in his evidence, it seems likely that the reference to the *"sack"* refers to the *"cod end"* of the net which, as described in para. 110 below, is designed to hold any fish caught. As the crewmen pull it towards the water, Captain Antelo Malabe said that he would let more of the net down onto the deck *"so we won't have too much pressure"*. He was asked to describe the speed at which the vessel was moving at this point. His response was: *"normally 4 or 5 miles"*. He was asked the confirm whether he meant knots, but his response was *"miles… it's the same"*. Captain Antelo Malabe also described that, at some point which is not very clear from his evidence, the crew are involved in hooking the nets to a cable that is covered with rope. It subsequently emerged from the evidence given by the *Hua Sheng Hai's* fishing expert, Captain McGettigan, that this cable is known in Ireland as a *"sweep"* and I will therefore use that term even though

it was not used by the interpreter in seeking to translate Captain Antelo Malabe's evidence into English.

58. Captain Antelo Malabe said that when the sweep has been secured to the nets, the nets are released into the water. While it appears from his evidence that this is a mechanical process that can be controlled by the skipper from the rear of the wheelhouse, there are four or five crewmen on deck to make sure that the net does not become entangled and that it goes into the water without any tangles. He was asked to describe the speed at which the vessel moved as the net is thrown into the water. His response was *"2 – just under 3 miles"*. He then said that, after that, the vessel would reach a speed of *"about 6 miles"*. He confirmed that the vessel increased speed *"when we see that there is no entangles and we see the net on the water…"*. At that point, he said that they start throwing the *"cable with… a rope around them"* onto the water. As I understand it, this is the cable that was previously hooked to the net by the crewmen and which is known in Ireland as the sweep. He said that, for this purpose, the speed could be four or five miles depending on the waves and the weather but, normally, it was *"6 miles"*. He then described that, when there is 50 metres of cable left, they reduce speed to *"3 or 4 knots"*. In response to a leading question, he said that, at this point, the vessel was not manoeuvrable for fear of entangling or breaking the net. As I understand the evidence given by Captain Antelo Malabe at this point, the next step in the process is the lowering of the *"doors"*. These are large metal wings which are heavy and which assist in keeping the net open on the seabed. He said that: *"If we were going too fast, that could damage someone or something. It could actually injure a crew member."* He did not, at that point, give an estimate of the speed of the *Kirrixki* during that element of the process. His evidence was that the next step is:-

"the doors open the net so that it reaches the seabed… Then, according to the weather conditions, we increased to 7 to 8, 6 to 8 knots so that the doors will open and open the net. And when we have we start to throw… the trawl line into the water, about 650 metres of cable… they are there in order to keep the net open and for the net to work on the seabed."

59. Captain Antelo Malabe added that the doors weigh about 1,200 kilogrammes each and that the doors are on the stern of the vessel during the manoeuvre of lowering the nets but, as described above, they are then lowered to the seabed and normally rest on the seabed about 400 metres from the net. Captain Antelo Malabe then described that, once that process has been finished:-

"then we pick up speed, trawling speed. We reach trawling speed… 3.2, 3.3 knots, depending on the seabed. That's why I was saying that we have a restricted manoeuvring because the amount of gear we have, the amount of metres of cables and nets, that really restricts our movements."

60. In the course of his direct examination, Captain Antelo Malabe was asked whether, at any stage, he saw the *Hua Sheng Hai*. In response, he said that he saw the *Hua Sheng Hai*, at about 7 miles, but he assumed that it would take evasive action. This contradicts what he said in his written witness statement where he said that he did not see the vessel at any point. In his written witness statement submitted in English, Captain Antelo Malabe simply stated that, once the repairs to the engine were finished, *"I was starting the rig at the controls of net razors looking aft and I did not see the Chinese ship"*. Rather remarkably, he also said that: *"I was focused on the trawling operations and did not see the Chinese vessel at any point. Had I seen the vessel I would have slowed down or tried to alter course. I did not however see the vessel."* That

statement correctly describes the consequences of his failure to keep a look-out; i.e. the action he would have taken to avoid the collision if he had been keeping a look-out in accordance with the requirements of Rule 5 of the Collision Regulations. The oral evidence given by him that he had seen the *Hua Sheng Hai* when *"setting the gear"* makes his failure to subsequently monitor it or keep any look-out all more remarkable. He, therefore, paid no further attention to it. His evidence to this effect is important. For that reason, I set it out in full as follows:-

"A. I saw them -- when we were setting the gear I saw the ship at about 7 miles.

Q. 7 miles.

A. And because I was -- when I was setting the gear, I was looking towards the stern, so I assumed they were going to manoeuvre. I stopped paying attention.

Q. This was 7 miles away, was it?

A. Correct.

Q. And how long before the accident was that, approximately?

A. We were already setting the gear. 15 or 20 minutes.

Q. So you say you expected the Hua Sheng Hai to manoeuvre, was it?

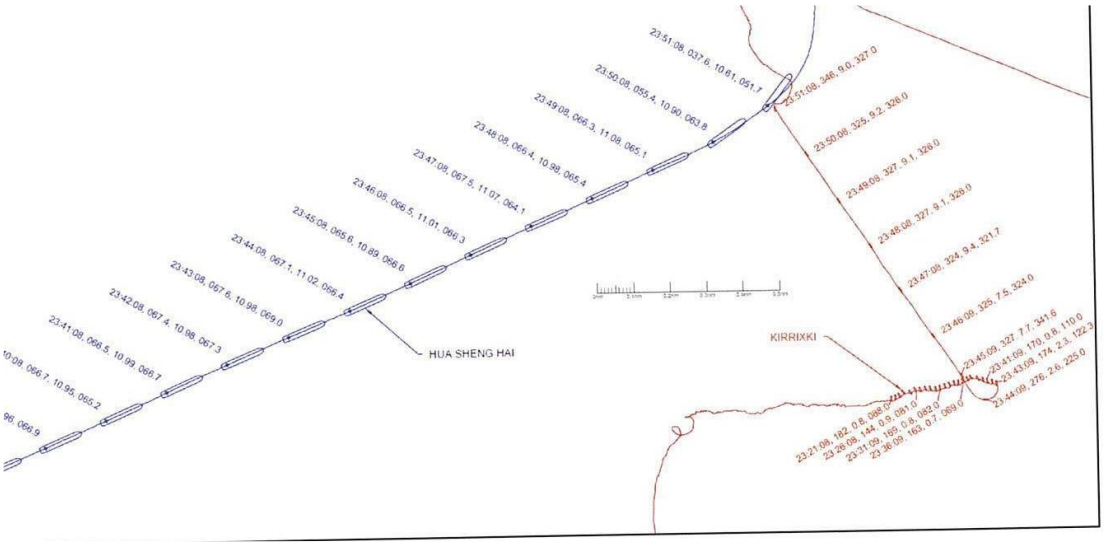
A. The speed they were going at and with our fishing lights on, I assume they would manoeuvre.

Q. Did you assume they would manoeuvre when you were not under command?

A. I didn't see them when we were stopped, but when we were with the "not under command lights", it must have been 15 miles or something when we saw on the radar."

It should be noted that, although this evidence is not consistent with the witness statement, it is consistent with para. 5(a) of the response on behalf of the *Kirrixki* to a notice for particulars delivered on behalf of the *Hua Sheng Hai* on 28th May 2021.

61. Counsel for the *Kirrixki* then asked Captain Antelo Malabe a number of questions by reference to the information recorded in a collision plot chart prepared by Solis Marine Consultants (under the direction of Captain John Simpson) (*"the collision plot chart"*) in which the speeds of the *Kirrixki* are shown at a number of specific points in time in a 30-minute period immediately before the collision. This showed that, at 23:36, the speed for the *Kirrixki* was no more than 0.7 knots. Captain Antelo Malabe said that, at that point, the vessel *"We must have been drifting"*. It was then put to him that, at 23:43, the *Kirrixki* was travelling at 2.3 knots. At that point, Captain Antelo Malabe said that: *"We must have been hooking the cable with the rope to the net."* Counsel did not advert to the fact that, at that moment, the trawler was still completing a looping turn which would be inconsistent with the process of casting the nets and related gear. For convenience, I include an extract from the collision plot chart here:



62. This illustrates the movement of the *Kirrixki* in the period from before 23:21:08 to the moment of the collision and the movement of the *Hua Sheng Hai* from 23:40:08.

I have not included the full collision plot chart but I hope this extract will be sufficient to give a flavour of the respective positions of both vessels at specific points in time in the period before the collision[5]. At 23:45, the *Kirrixki* was shown to be proceeding at 7.7 knots. At that point, Captain Antelo Malabe said, in response to a question from counsel for the *Kirrixki*, that: *"We must have been throwing the cable into the water."* That is not entirely consistent with what he said previously (as recorded in para. 57 above) that it *"could be 4 or 5 miles… but normally about 6 miles"*. Then, at 23:47, the *Kirrixki* had increased speed to 9.4 knots. Captain Antelo Malabe was asked what was going on at that point. His answer was: *"We must have been letting the doors and the cable into the water."* It should be recalled that, in his evidence a little earlier, he had suggested that they would increase the speed to 6-8 knots to undertake this element of the process. He was then asked what was the vessel doing at the time of the collision at 23:51 when, according to the collision plot chart, it was travelling at 9 knots. His response was that, most probably, the vessel was still involved in the process of letting the doors and the cable into the water. It should be noted that, subsequently, Captain McGettigan (the fishing expert called by the *Hua Sheng Hai*) gave evidence that it would be very dangerous to proceed at that speed when lowering the doors. Captain Antelo Malabe was also asked whether he heard any whistles from the *Hua Sheng Hai*. He said that he did not hear anything. He also said that he received no radio communication from the *Hua Sheng Hai*, although *"our channel no. 16 VHF was on"*. After the collision, he explained that he tried to establish communication with the *Hua Sheng Hai* both on channel 16 and channel 2272 (which he said was an international communications channel). He made four or five attempts to make contact with the *Hua Sheng Hai* but there was no response until he got in touch with Valentia Coastguard.

[5] As will become clear, there was a greater variety in the speed of the trawler than is shown in the chart.

He then explained that three crewmen suffered injuries. He also confirmed that he did not see any other fishing vessels on the night in question. He was asked whether he was familiar with the Collision Rules, but he said that he was not sure he could remember them and that it has been many years since he studied them. He was then asked a leading question as to whether he had expected the *Hua Sheng Hai* to give way and he confirmed that he had.

63. Under cross-examination, Captain Antelo Malabe accepted that there was no look out on the *Kirrixki*. He said that he was fully engaged in the wheelhouse in connection with setting the gear. He said that this was the way they had always done it and that *"We don't do duties on the Bridge."* He said that everyone was needed for setting and hauling the cable and the doors and the nets. He maintained that there were "*no boats at all in front of our vessel before we started setting the gear, and when we started setting the gear we focused our attention on that."* He cannot, however, have looked to the northwest. It is clear from the expert evidence discussed below that, had he done so, he would have seen the green starboard light of the *Hua Sheng Hai*. He would also have seen it had he checked the radar.

64. While he maintained that he could not remember what the visibility was at the time, it was put to him that, in the statement of claim delivered in the proceedings against the *Hua Sheng Hai*, visibility was stated to be five miles at the time of the collision. It was therefore put to him that, if he had looked, he would have seen the *Hua Sheng Hai*. Notwithstanding what he had said in his witness statement, he reiterated, under cross-examination, that he had seen the ship at about seven miles. He sought to suggest that, when he said in his witness statement that he did not see the *Hua Sheng Hai*, he meant that he did not see it *"when it was coming on top of us"*. In my view, it

is impossible to reconcile this explanation with the very clear language in his witness statement that he had not seen the *Hua Sheng Hai "at any point"*.

65. Captain Antelo Malabe confirmed that the *Kirrixki* was on automatic pilot from 23:44:09 onwards. This evidence is inconsistent with the response given on behalf of the *Kirrixki* to the request for particulars served on behalf of the *Hua Sheng Hai* on 28th May 2021. In para. 5(j)(b) of that response, it was explicitly stated that the vessel *"needed to be manually steered to stream the line and the net"*. In his evidence, Captain Antelo Malabe stated that the entire process of shooting the nets must be done in a straight line. He explained that this was done because *"if we veer at all, even 15 degrees, the doors might close and it would be -- the net might be entangled and it would be dangerous for people. It might break the net as well"*. When, he came to give evidence later, the fishing expert for the *Hua Sheng Hai*, Captain McGettigan, agreed that a trawler would need to move forward in a straight line but he stressed that this process would be undertaken under manual steerage. He also suggested that a trawler's heading would have to veer to some extent while setting the nets as it might be necessary to move, from time to time, to one side or the other in order to relieve jamming of the net.

66. During the course of his cross-examination, the speeds of the *Kirrixki* recorded on the collision plot chart were also put to Captain Antelo Malabe. It was put to him that at 23:44:09 the *Kirrixki* was travelling at 2.6 knots; yet, one minute later, at 23:45:09, it was travelling at 7.7 knots. Captain Antelo Malabe answered that this was when they were setting the nets and he suggested that this involved tripling the speed over the course of one minute. It was put to him that, in the course of his direct evidence, he had said that the initial phases were carried out at 4 to 5 knots and then 2 to 3 knots and that it was impossible to reconcile this evidence with the figure of 7.7 knots recorded in the table. He responded: "*Maybe we had the current - the tide and the*

current in our favour". He was then asked when he would drop the speed to 2-3 knots. His response was that this was when they would start putting the net in the water following which they would pick up speed. It was suggested to him that his earlier explanation for reducing speed to 2-3 knots was to allow the crew to tie the cables to the net and throw them into the water. Captain Antelo Malabe maintained that this was a "*a very, very fast activity, it takes a few seconds, 30 seconds, and then we pick up speed again".* In fairness to Captain Antelo Malabe, his evidence on p. 106 of the transcript of Day 3 suggests that the trawler would go at a speed of 2-3 knots when the net was being lowered into the water while, a little later, at pp. 112-113, he said that, at 23:43 (when a speed of 2.3 knots was recorded) they must have been hooking the cable with rope to the net.

67. With reference to the collision plot chart, it was put to Captain Antelo Malabe that the *Kirrixki* could not have been travelling at 9 knots while shooting the nets. His response was that the *Kirrixki* could have been travelling at that speed but that he doubted it. It was then put to him that the fishing expert retained on behalf of the *Hua Sheng Hai* would say that shooting nets at a speed of 9 knots is not regular practice. Captain Antelo Malabe agreed that the nets could not be set in the water at 9 knots but that "*you have to pick speed up to probably 9 knots afterwards*." At that speed, he said that the *Kirrixki* must have been setting the cable. He was asked whether, in the minutes immediately before the collision, the *Kirrixki* was still involved in shooting the nets. His response was that he was setting the cable. He said that "*for the cables you need to go full speed so that the doors will open."* He explained that this involves letting 700 metres of cable go through the stern and into the water. It should be recalled that, when he originally dealt with this element of the operation in his direct evidence (as recorded

in para. 58 above), he said that the *Kirrixki* would proceed at a speed of between 6 and 8 knots.

68. The cross-examination of Captain Antelo Malabe continued on Day 4 of the hearing. In the course of his cross examination that day, it was put to him that he had previously told Niall O'Hara who attended the vessel on behalf of insurers that, at the time, of the collision, the *Kirrixki "**was preparing to shoot nets** travelling at approximately 8 knots"* (emphasis added). In response, Captain Antelo Malabe suggested that the inconsistency may have been down to the use of the Spanish word "*largar"* which I understand loosely translates as *"to let go"* or *"to release"*. It was then put to him that, six days after the collision, he met Mr. Paul Rossiter, a claims manager retained on behalf of the *Kirrixki*. In Mr. Rossiter's report, it was stated that when it collided with the *Hua Sheng Hai*, *"The Kirrixki was preparing to shoot nets and travelling at a speed of approximately 8 knots".*

69. Captain Antelo Malabe confirmed that, in the course of the earlier part of 11th October 2019, the *Kirrixki* was engaged in fishing. It was put to him that, during that time, there was nothing to show that the *Kirrixki* approached a speed of 9 knots. It was put to him that the records showed that between 18:08 and 18:12 the speeds were 5.3 knots, 5.1 knots and 5.1 knots. Immediately after that, the *Kirrixki* slowed down to a speed of 4.6 knots, 4.5 knots, 4.4 knots and then settled at 3.1 knots. It was suggested to him that these were normal trawling speeds. Given the significant difference between those speeds and the much higher speeds recorded at the time of the collision, it was put to Captain Antelo Malabe that the *Kirrixki* was not engaged in fishing in the few minutes before this collision but, by contrast, was speeding towards fishing grounds. The skipper's response was to say that, if they had been going to fishing grounds, they would not have been setting their gear.

70. Under further cross-examination, Captain Antelo Malabe was unable to say for how long the engine had been turned off while under repair. He said that he could not remember. He thought it might have been 50 minutes or an hour. It was then put to him that the engineer of the *Kirrixki* had informed the *Kirrixki's* insurance claims manager that the engine was turned off for no longer than 15 minutes. His response was that he could not remember whether it was 15 minutes or 50 minutes or an hour. He was asked to confirm whether all of the deck lights of the *Kirrixki* had been on during this time. His response was that those lights were never turned off, day or night. According to Captain Antelo Malabe, this was for two purposes: first, so that the *Kirrixki* could be seen; and, second, for the benefit of those working on deck. It was then put to him that no one would have been working on the deck while the engine was being repaired. His response was that the crew were working on a net they had to repair. He confirmed that the "*not under command"* lights were on during the period of repair as were the lights inside the wheelhouse.

71. When the repairs were complete, Captain Antelo Malabe said that he turned off the not under command lights and turned on the green and white lights and that this was the only change that he made to the lighting. Captain Antelo Malabe disagreed with the suggestion that it would be normal to keep the wheelhouse lights off when a vessel is about to engage in fishing. Captain Antelo Malabe explained that he needed to be able to see the controls for all of the manoeuvres. It was put to him that his visibility was "*dramatically reduced"* because the wheelhouse lights were on. While that proposition seems to me to be correct, I cannot see that it is relevant in circumstances where Captain Antelo Malabe candidly admitted that he did not keep any lookout at all. Captain Antelo Malabe was also questioned about the AIS system. He was asked why the *Kirrixki* did not change the information available on the AIS system when the vessel commenced

fishing. His response was that they had switched on the fishing lights and that they were not required to use the AIS system. He also said that the systems used on a fishing vessel are different to the systems used on a merchant ship. He said, for example, that a merchant ship will have a watch system and that "*we don't have that".* He said that the AIS system was used for navigating but not for conveying information. He said that they had been *"forced to have it on board"* as a consequence of the compulsory requirements imposed by the French government (which he appeared to regard as unwelcome and unnecessary).

72. Captain Antelo Malabe was also cross-examined as to why the *Kirrixki* had not set an alarm on the radar for other vessels. He confirmed that no alarm was set before the collision. His explanation for not setting the alarm was: *"With any weather event, with any rain or anything, the alarm -- it will set off the alarm all the time."* It was put to him that it would be usual to calibrate the alarm at 12 miles. He confirmed that they would set it to 12 miles *"normally"* but it is clear that he did not do so on the evening of the collision.

73. At the conclusion of his evidence, I asked Captain Antelo Malabe whether, in the light of the collision, he now thought that it was necessary to have a lookout. His response was: *"when we're working on the ship, we are carrying out the tasks that I explained. The engineer and I don't see it necessary for someone to be on the lookout."* I then asked Captain Antelo Malabe whether, in the period subsequent to the collision, he had changed his practice in any way. His response was to confirm that it has changed and he is now constantly looking to the bow.

The expert evidence

74. After the witnesses as to fact were called on both sides, Captain John Simpson was called on behalf of the *Hua Sheng Hai* as an expert. Captain Simpson is a master

mariner with extensive shipping experience as a ship's master prior to becoming a consultant in 2003. Captain Simpson prepared a report dated 26th October 2022. That report was based on a number of sources of information. In addition to the documents disclosed by both parties in the course of discovery, he also relied on the data available from the VDR of the *Hua Sheng Hai*. Captain Simpson explained that there is no equivalent data available for the *Kirrixki* as a vessel of its size is not required to use a VDR. However, Captain Simpson was in a position to obtain AIS data for the *Kirrixki*. As noted earlier, such data is commercially available from a number of commercial operators who record AIS data transmitted by ships and store that data and then sell that data commercially. Captain Simpson also said that he had relied on the witness statements delivered on behalf of both sides. This included the statement made by Mr. Zhang, the officer of the watch at the time of the collision. As noted above, Mr. Zhang did not give evidence at the trial. For that reason, it was emphasised to Captain Simpson by counsel for the *Hua Sheng Hai* during the course of his direct examination that, in giving evidence, he should ignore anything that was contained in the witness statement provided by Mr. Zhang.

75. Captain Simpson explained that the VDR data in respect of the *Hua Sheng Hai* was available at one-second intervals. Because the data available for the *Kirrixki* came from the AIS, it was recorded at less frequent intervals. He said that the intervals varied but, in the period between the restarting of the engine of the *Kirrixki* and the collision, he estimated that the intervals were down to 10 seconds. He also expressed the view that he would have expected to have better data available from the *Kirrixki* including chart plotter and fishing plotter data. However, that data was not available as a consequence of the fire. While the *Hua Sheng Hai* has complained that the data should have been downloaded prior to the fire, I am not convinced that I can attribute any fault

to the *Kirrixki* on that score. There is nothing to suggest that the fire was deliberate and, on Day 10, this was accepted by counsel for the *Hua Sheng Hai* albeit that he stressed that his side had understood that the record would be downloaded before the trawler left port in Ireland for repairs in Spain. In any event, the AIS data for the *Kirrixki* is available and has been very helpful in recreating what occurred on the night in question.

76. By reference to the VDR data, Captain Simpson said that he was able to confirm that the officer of the watch of the *Hua Sheng Hai* had identified the *Kirrixki* as a target on the radar by 22:23:15 (at the latest) on 11th October 2019. In this context, Captain Simpson referred to a radar screenshot taken from the VDR data of the *Hua Sheng Hai* which shows the *Hua Sheng Hai* and all vessels in the vicinity including the *Kirrixki*. The screenshot shows that the *Kirrixki* has been identified as AIS target *"A"*. The screenshot also displays the information transmitted automatically by the AIS of the *Kirrixki* as picked up by the *Hua Sheng Hai*. Captain Simpson explained that the process of acquiring a vessel as a target requires the manual intervention of the crewman monitoring the radar at that time. The information available from the AIS of the *Kirrixki* identified it as a fishing vessel underway using engine. The information displayed also included the course over ground, the CPA and the TCPA. Captain Simpson explained that this information is calculated by the radar. It is not transmitted by the AIS of the *Kirrixki*. At that point, the distance between the two vessels was 15 miles and the CPA was identified to be 86 minutes 30 seconds away. Captain Simpson also explained that the navigation status of the *Kirrixki* is inputted manually by the transmitting vessel on its AIS. The information transmitted from the *Kirrixki* did not identify that, for a period, the vessel was not under command. Nor did the AIS information change when the *Kirrixki* is said to have recommenced operations after the engine had been repaired. Captain Simpson referred to a further radar screenshot, taken from the VDR on board

the *Hua Sheng Hai* at approximately 46 minutes before the collision. This showed that, at 0:07 local time on 12 October 2019 (which was 23:07 UTC), the crew of the *Hua Sheng Hai* had acquired an additional target which was identified as AIS *"B"*, the *Nuevo Confurco*. In contrast to the *Kirrixki*, the AIS information available from that vessel showed its navigational status as *"engaged in fishing"*. The screenshot shows that, at this time, the *Kirrixki* was 7.78 nautical miles away, while the *Nuevo Confurco* was 8.865 nautical miles away. The screenshot also shows that, at this point, the *Kirrixki's* speed over the ground was 0.7 knots and the heading of the *Kirrixki* was easterly. Captain Simpson described the course of the *Kirrixki* as *"drifting towards the east away from the heading line"* of the *Hua Sheng Hai*. Captain Simpson suggested that the fact that both the *Hua Sheng Hai* and the *Nuevo Confurco* had been manually acquired as targets by the *Hua Sheng Hai* suggests that the crew were keeping a radar lookout.

77. Using the VDR data available in respect of the *Hua Sheng Hai* and the AIS data available in respect of the *Kirrixki*, Captain Simpson plotted a reconstruction of the course of both vessels in the 30-minute period before the collision. This led to the creation of the collision plot chart which had been put to Captain Antelo Malabe in the course of his evidence[6]. The chart shows the *Hua Sheng Hai* moving in a north-easterly direction at a speed of approximately 11 knots in a relatively straight line until moments before the collision. Captain Simpson said that the records show that, at, 23:40:08, the *Hua Sheng Hai* was proceeding at a speed of 10.95 knots with a course over the ground of 0.652 which Captain Simpson described as just east of north-easterly. The heading of the *Hua Sheng Hai* at that time was 066.7. Captain Simpson explained the difference between these two factors. Captain Simpson explained that the heading is the direction

[6] See the extract from the collision plot chart in para. 61 above.

in which the ship is pointing and the course over the ground is the direction that the vessel is proceeding on the ground. To explain the point, he drew an analogy with swimmer attempting to swim across a fast-flowing river. The swimmer might be pointing directly at the other shore but the swimmer's course over the ground would be downstream. Captain Simpson said that he would always look at both the heading and the course over the ground in attempting to understand the way a vessel has moved and this is particularly so when a vessel is turning.

78. The collision plot chart also shows the course of the *Kirrixki* during the same period. In contrast to the *Hua Sheng Hai*, the course of the *Kirrixki* was much less consistent. In particular, it shows that, during the period from 23:21:08 (when the engine was under repair), the vessel appeared to drift eastwards at a speed of 0.8 knots. The heading recorded at 23:21:08 was 182°. At that point, the bearing or passing distance between both vessels was opening (i.e. increasing). Next, the *Kirrixki* turned to starboard in a south-easterly direction for a very brief period before looping around at 23:44:09 in a north-easterly direction, looping further around in a circular motion, heading briefly in a westerly direction, until it steadied in a north-westerly direction which set it on a collision course with the course of the *Hua Sheng Hai*. This circular movement was described in simple language by Captain Simpson as *"looping the loop"*. However, after completing this circular movement, the *Kirrixki*, during the period from 23:45:09 to 23:51:08, moved in a relatively straight line north-westerly and at speeds which (according to the collision plot chart) varied between 7.7 knots and 9.4 knots. The speeds of the vessel recorded during this period are at one-minute intervals.

79. The collision plot chart shows that, at 23:21:08, the speed over the ground of the *Kirrixki* was 0.8 knots. At 23:26:08, the speed was 0.9 knots. In addition, the chart shows that, between 23:21:08 and 23:43:09, the vessel, although pointing in a southerly

direction, was moving eastwards which Captain Simpson also suggested that the vessel was drifting during that time. The collision plot chart shows that, at 23:43:09, the speed of the *Kirrixki* had increased to 2.3 knots suggesting that the *Kirrixki* was probably no longer drifting. Captain Simpson was of opinion that, at that point, the *Kirrixki* was making way through the water. At 23:44:09, the *Kirrixki* had a speed of 2.6 knots and the course overground was 225º and a direction of 276º which Captain Simpson characterised as *"more or less west"* following which the vessel completed the turn described in para. 78 above.

80. Having come out of the turn, the *Kirrixki* picked up speed. By 23:45:09, the speed of the *Kirrixki* had increased to 7.7 knots. By this point (if not slightly before), the trawler commenced to move forward to a steady heading on a relatively straight north-westerly track. It should be noted that it is part of the case made on behalf of the *Kirrixki* that the *Hua Sheng Hai* should have taken evasive action. The picture which emerges from the collision plot chart certainly suggests that, once the *Kirrixki* commenced to move forward on a north-westerly track, it was inevitable that there would be a collision with the *Hua Sheng Hai* unless either or both vessels took action to avoid it.

81. At 23:46:09, the speed of the *Kirrixki* decreased slightly from 7.7 knots to 7.5 knots. Captain Simpson stressed that these readings are *"snapshots"* such that the speed of the *Kirrixki* could vary in the period between one reading and the next. Based on the track of the *Kirrixki*, Captain Simpson confirmed that, in his view, the vessel must have been on autopilot as it moved forward along this relatively straight north-westerly track. This is consistent with the evidence given by Captain Antelo Malabe but it is inconsistent with the case made in a response to a request for particulars raised on behalf of the *Hua Sheng Hai* in which it was suggested that Captain Antelo Malabe was

manually steering at this time. Captain Simpson went so far as to say that the track of the vessel was *"impossibly straight"* for a vessel under manual steering where the skipper was also involved in the tasks that Captain Antelo Malabe contended he was doing at the time.

82. At 23:47:08, the speed of the *Kirrixki* (as recorded on the collision plot chart) was 9.4 knots. Captain Simpson expressed the view also that, at such a speed, the vessel could not have been engaged in fishing. However, he qualified this evidence on the basis that he had not personal experience of trawling and that his evidence was based on his experience of towing vessels. Captain Simpson also said:-

> *"well apart from the fact that a ship that's only capable, or a vessel that's only capable of proceeding at 11 knots, it can't have been towing a trawl net ... plus doors, and achieving that speed. What I would say is that if she was achieving that speed, I would be horrified, I would be – I would be very worried for the safety of the crew and for the safety of the vessel that you would tow something through the water at that speed."*

83. Captain Simpson was asked by counsel for the *Hua Sheng Hai* why this would horrify him. His response was:-

> *"It's just the sheer drag effect of a trawl net ... if the doors were in the water ... you've got two large steel structures that are deliberately designed to hold the net open. So they are veins, essentially, and if you simply proceed at a very high speed without having first got everything into a reasonable tension, the risk of a shock load coming on to a part of the towing equipment, the wires, the cables from the winch, or the shackles that join the cables together, any failure there would be instantaneous, and we're talking about trawl wires that are in excess*

of 30mm in diameter, they'd slice through steel ... So they ... could cause considerable damage. And that's without putting a person in the way."

84. In the meantime, the *Hua Sheng Hai* continued on a north-easterly course at a speed of approximately 11 knots. As noted earlier, the *Hua Sheng Hai* had been operating on autopilot, albeit that the officer of the watch was on duty together with Mr. Xu. According to the collision plot chart, the speed of the *Hua Sheng Hai*, at 23:49:08, was 11.08 knots. In para. 4.14 of his report, Captain Simpson estimated that, at about 23:49 (roughly two minutes before the collision), the officer of the watch ordered an alteration of course of 10º to port. This could only have been achieved by changing from autopilot to manual steering. This manoeuvre occurred after the *Kirrixki* had been on a steady north-westerly heading since 23:45. The VDR data available in respect of the *Hua Sheng Hai* also records that the whistle was sounded at 23:50:30. While Captain Antelo Malabe contended that he did not hear any whistle from the *Hua Sheng Hai*, Captain Simpson said that a whistle onboard a vessel the size of the *Hua Sheng Hai* is required to be heard in normal conditions of atmosphere at a distance of at least 2 nautical miles. His evidence was that, at the time the whistle was sounded, the vessels were no more than a quarter of a mile apart and he could not imagine how anybody could not hear the whistle at that distance.

85. Captain Simpson explained that it was not possible to precisely identify the exact time of collision from the AIS data. He explained that the intervals between the data points collected from the AIS were not close enough. Nonetheless, as noted earlier, Captain Simpson and the expert retained on behalf of the *Kirrixki*, Captain Walton, were agreed that the collision occurred at either 23:51:04 or 23:51:05. Captain Simpson said that the collision was *"pretty much a T-bone"*. He said that the damage to the *Hua Sheng Hai* (namely the damage to hold numbers 6 and 7 towards the stern of the *Hua*

Sheng Hai) arose as a consequence of the *Kirrixki* puncturing the side of the *Hua Sheng Hai*. Captain Simpson described it as a *"penetrative blow"*.

86. On Day 5, Captain Simpson addressed a table in appendix E to his report. Captain Simpson explained that the purpose of the table was to harmonise the timing with a view to assessing what each ship could see of the other during the period before the collision. The table is based on data derived from the VDR on the *Hua Sheng Hai* and the AIS data available in respect of the *Kirrixki*. The table demonstrates that, for much of the period between 23:21:08 and 23:43:38, the green sidelight of the *Kirrixki* should have been visible from the *Hua Sheng Hai*. During the same period, the green sidelight on the *Hua Sheng Hai* should have been visible from the *Kirrixki*. In the period from 23:44:38, the red sidelight on the *Kirrixki* should have been visible from the *Hua Sheng Hai*. During the same period, the green sidelight on the *Hua Sheng Hai* should have been visible from the *Kirrixki*. The table also shows that, at 23:44:08, the *Kirrixki* was 1.75 nautical miles from the *Hua Sheng Hai* and the CPA, at that moment, was 1.04 nautical miles while the time to the CPA was 06:16. Approximately one minute later, at 23:45:08, the distance between the two vessels had reduced to 1.52 nautical miles, while the CPA had reduced very considerably to 0.08 nautical miles. By that time, the *Kirrixki* had emerged from the *"loop"* described earlier and commenced a steady north-westerly course. Thirty seconds later, at 23:45:38, the distance between the two vessels had reduced further to 1.42 nautical miles while the CPA was now 0.22 and the time to *CPA* was 06:03. Captain Simpson confirmed that, by this stage, the *Kirrixki* was actually on a steady heading. By 23:46:08, the distance had reduced to 1.28 nautical miles and the CPA had reduced to 0.09 and the time to the CPA was now 05:15. Three minutes later – namely at 23:49:08 – the distance between the two vessels

had reduced to 0.51 nautical miles and the CPA was now 0.01 while the time to the CPA had reduced to 01:59 (i.e. roughly two minutes).

87. In the course of his direct examination on Day 5, Captain Simpson was asked by counsel for the *Hua Sheng Hai* to identify the point in time when he considered there was an obligation on the officer of the watch on the *Hua Sheng Hai* to adjust the course of his vessel. Captain Simpson responded as follows:-

> *"Well the obligation of the officer on the watch is to determine whether a risk of collision exists. So, first of all, he has to decide that the two vessels are converging, because up until just before -- at around, sorry, 23:45, the vessels were diverging, that is the bearing of Kirrixki was increasing, opening, and the closest point of approach calculated for the two vessels was also increasing. So thereafter, with Kirrixki on a steady course, the two vessels were converging, and in my opinion, risk of collision was then developing. And … the officer of the watch then has to satisfy himself that Kirrixki is on a steady course and that he is reducing that closest point of approach to there being a risk of collision."*

88. On the basis that the officer of the watch had directed Mr. Xu to turn to port by 10º at 23:49:03 (which was two minutes before the collision), Captain Simpson was then asked by counsel whether that was the right time to seek to avoid the collision or whether he thought it should have occurred earlier. Captain Simpson's response was as follows:-

> *"I would like to think that I would have turned earlier, but I'm not the officer on the watch and I know what happened. So, I think the period of evaluation from 23:44, when Kirrixki was coming out of the turn, to 45 when she steadied, the officer of the watch then has to have that period where he has to convince himself, or make the assessment that the Kirrixki is actually maintaining that*

course and not going into another turn or indeed turning to port, perhaps around Hua Sheng Hai's stern, so he needs to be able to say he is still coming at me, he is still coming at me. So I think … it would be reasonable to take a couple of minutes to do that evaluation of the course of Kirrixki. So, after 23:47, if you were on your toes and you were the best and all the rest of it, that would be about the earliest… Without the benefit of hindsight."

89. Captain Simpson was then asked by counsel for the *Hua Sheng Hai* to put himself in the position of the officer of the watch faced with the action taken by the *Kirrixki* from 23:21:08 up to the point it began to maintain a steady course at some point between 23:45 and 23:46. Captain Simpson responded that:-

"Well, I have watched the reconstruction many, many, many times and I have put myself on the Bridge of Hua Sheng Hai to try and think what you would expect, and it is so difficult to even imagine that a vessel would take a turn like that and head directly into your path whilst also increasing speed. It's the worst situation that you can possibly imagine I think as a seafarer, or one of the worst, let me say…

I have a lot of experience of close quarter situations with fishing vessels in all parts of the world, and other vessels…

I have never come across a situation where anybody's headed in that direction. The only, the only comparison I can make is to an attack by pirates or a similar terrorist sort of situation. The idea that in European waters … a fishing vessel would behave like that, I … find very difficult to accept."

90. Captain Simpson was then asked to consider the evidence given by Captain Antelo Malabe that he had in fact seen the *Hua Sheng Hai* at 7 nautical miles, 30 minutes before the accident. Captain Simpson responded to say that it was very disturbing that the skipper had not kept a proper lookout in those circumstances and monitored the progress of the *Hua Sheng Hai*. He said that this was especially so in circumstances where, during the period the *Kirrixki* was drifting, the skipper had every opportunity to check the progress of the *Hua Sheng Hai*. Captain Simpson said that, while it might be permissible in good weather during the day to avoid having someone on lookout, that was not the position at night time and his evidence was that *"the ordinary practice of seamanship is that you have somebody available to look out for you"*. Insofar as the deck lights are concerned, Captain Simpson accepted that it was not unusual, in the case of fishing trawlers, that these lights would be kept on. However, he also stressed that the lights used should not interfere with the visibility of the navigation lights.

91. Captain Simpson also expressed a concern that Captain Antelo Malabe had not considered it appropriate to input information about the *Kirrixki's* activities on the AIS system onboard. Captain Simpson expressed the view that the AIS is a very helpful source of information to other mariners which assists in identifying vessels in the vicinity as opposed to merely seeing an echo on a radar screen. One can see the heading of the vessel without having to rely on the radar to calculate that from the echoes that appear on the radar screen. Captain Simpson further said that it was *"quite concerning"* that Captain Antelo Malabe did not appear to be aware of the alarm system on the AIS and he said that it would be *"it would be reasonable of any mariner, and prudent for them to make themselves familiar with the advantages that the AIS offers"*.

92. In his direct evidence, Captain Simpson also expressed similar concern in relation to Captain Antelo Malabe's view that he did not consider it appropriate to set the alarm on his radar. Captain Simpson rejected the suggestion made by Captain Antelo Malabe that the weather might set the alarm off. His evidence was that it would require a *"firm echo"* such as a ship to set it off and that weather would not provide a sufficient target to trigger the alarm. Captain Simpson also rejected the suggestion made by Captain Antelo Malabe that the *Hua Sheng Hai* should have turned to the stern of the *Kirrixki*. Captain Simpson said that, as a rule of thumb, a vessel would not normally pass astern of a trawler unless it could do so by a significant distance. He made the fairly obvious point that a ship would not wish to risk the fouling of the nets of the trawler or risk fowling the ship's own propeller and potentially dragging the trawler under.

93. At the conclusion of his direct examination, Captain Simpson reiterated what he had said in para. 3.14 of his report:-

> *"The OOW also had to try to make sense of what was happening. A drifting vessel which was set to pass clear had suddenly made a complete turn and was approaching at a close distance that gave little opportunity for action to be taken. There could be no certainty that another manoeuvre might not be carried out by Kirrixki so that any action taken would have to result in avoiding collision. There was also no reason to assume that following the unexpected turn that a steady heading would be maintained."*

94. He also reiterated what he said in para. 3.14.7 of his report where he said:-

> *"As the OOW first had to monitor the inexplicable actions of Kirrixki some time would have to elapse before deciding what action to take. In my opinion that point would have been reached by about 23:48… three minutes after the vessel*

steadied on course. The OOW took action by altering course to port one minute later. However the distance between the ships was then down to less than 0.8 nm, only six ship lengths of Hua Shen Hai. A reduction in speed was not a viable option as there was insufficient time to have enough effect to allow Kirrixki to pass ahead."

95. Captain Simpson also echoed what he said in para. 3.14.8 of his report where he drew attention to the fact that, in an emergency situation, the officer of the watch is required to make decisions without the benefit of the automatically calculated information from the radar. He explained that the process for the radar to calculate a revised CPA and TCPA will take up to three minutes and, if the officer of the watch had waited for radar confirmation, it would only have become available in the final minute before the collision.

96. Against that backdrop, Captain Simpson was asked by counsel for the *Hua Sheng Hai* whether he thought the actions of the officer of the watch, insofar as they are recorded electronically and on the basis of the evidence of Xu, were reasonable in the circumstances. Captain Simpson replied:-

"His actions were reasonable. Well, they were the only actions that he could take really, given the circumstances. An alteration of course was the only possibility that he could -- the only actions that he could realistically take."

97. Under cross-examination, Captain Simpson accepted that the officer of the watch at the time of the collision was a critical witness whose evidence was absent in this case. Captain Simpson also accepted that certain parts of his report could now be excised as a consequence of the absence of evidence from the officer of the watch. Captain Simpson also accepted that there was no evidence as to what use the officer of the watch of the *Hua Sheng Hai* made of the information that was displayed on the radar

screen. He also agreed that Mr. Xu, the able seaman (who was on duty with the officer of the watch), would not be sufficiently well versed in radar data to interpret everything that was seen on screen. He confirmed that Mr. Xu could not be considered to be an additional officer of the watch.

98. Captain Simpson also accepted that, when a vessel was passing through an area where fishing vessels were operating, those in charge of the vessel should monitor the progress of the fishing vessels and take action as required by the Collision Regulations. Captain Simpson accepted that there was no evidence as to the frequency with which the officer of the watch and/or Mr. Xu looked at the radar or monitored the progress of the *Kirrixki* through binoculars.

99. In the course of cross-examination by counsel for the *Kirrixki*, Captain Simpson was asked about the statement in his report to the effect that the *Kirrixki* was *"the catalyst for creating the risk of collision and the collision, and thereby carries substantially more of the blame"*. Captain Simpson was asked for his view as to the *Hua Sheng Hai's* culpability. Captain Simpson was initially reluctant to answer that question but was pressed to do so. Captain Simpson expressed the view that the *Hua Sheng Hai* could not have reduced speed in the timescale that was available. Captain Simpson agreed that a larger angle of rudder could have been used and that the whistle could have been sounded at an earlier time. Captain Simpson confirmed that the whistle of the *Hua Sheng Hai* was powerful enough to be heard by the *Kirrixki* from the moment the *Kirrixki* completed the turn of the vessel which occurred between 23:44:09 and 23:45:09. Captain Simpson suggested that the whistle should probably have been sounded sometime after 23:47.

100. Among the matters which Captain Simpson conceded was no longer in evidence was the suggestion made in the written witness statement of the officer of the watch,

Mr. Zhang, that the *Kirrixki* displayed a confusing array of deck lights and navigation lights and that, accordingly, he could not say (as he had done in his report) that the floodlights used on deck of the *Kirrixki* should not mask the navigation lights. Captain Simpson also accepted that, based on the master's standing orders, the officer of the watch onboard the *Hua Sheng Hai* at the time of the collision should have directed hand steering of the vessel once the CPA was reduced to 2 nautical miles. However, although this was accepted by Captain Simpson, the cross-examination did not explore the difference this might have made. That said, it is reasonable to suppose that, if the *Hua Sheng Hai* had been steered by hand, the seaman in control of the wheel would have been looking forward.

101. Captain Simpson also reiterated his evidence that the AIS of the *Kirrixki* was transmitting the wrong information in that it suggested that the *Kirrixki* was underway using engine throughout. He that the skipper of the *Kirrixki* should have amended the AIS to inform other vessels that the *Kirrixki* was not under command during that period. However, he conceded that, if the officer of the watch had been observing the radar, he would have seen that the *Kirrixki* was drifting. He explained that the relevant radar screenshots during this period do not have the *"telltale green smudge behind"* which signifies a wake demonstrating that a vessel is moving. Captain Simpson also expressed the view that, based on the material available to him, it was likely that the *Kirrixki* was drifting for about 40 minutes. Captain Simpson agreed with counsel for the *Kirrixki* that, while the *Kirrixki* was not under command, the *Hua Sheng Hai* was required, under the Collision Regulations, to keep clear of the *Kirrixki*. Captain Simpson confirmed that, at that point, the vessels were within 2 nautical miles CPA.

102. Captain Simpson confirmed that, at the time the *Kirrixki* made a round turn to starboard (i.e. the looping movement described earlier), the *Kirrixki* would have been

visible by sight without binoculars. Captain Simpson went further and confirmed that the *Kirrixki* would have been visible to the *Hua Sheng Hai* without binoculars throughout the period from 23:21:08 which was when the distance between the two vessels reduced to 5 nautical miles. Binoculars would have given greater definition, but the *Kirrixki* would, nonetheless, have been visible to the naked eye. This was when the *Kirrixki* was drifting. At that point, he said the deck lights would have been clearly visible but he could not say whether the not-under-command lights, the sidelights or the stern lights would have been visible. However, Captain Simpson said that there was no reason for the officer of the watch onboard the *Hua Sheng Hai* to have any cause for concern at that point. While he was required, under the master's orders, to revert to hand steering, Captain Simpson expressed the view that fishing vessels very often drift and that: *"you very often find a stationary fishing vessel. So, I wouldn't be at all surprised."*

103. Captain Simpson insisted that there was no need for the *Hua Sheng Hai* to alter course while the *Kirrixki* was either stationary or drifting. At that point, the *Hua Sheng Hai* was going to pass the *Kirrixki* on the *Hua Sheng Hai's* starboard side at a passing distance of over 1 mile. The CPA was increasing and Captain Simpson reiterated his direct evidence that the bearing was opening. In his opinion, that indicated that the risk of collision *"did not exist"*. In his view, passing a stationary drifting vessel at just over 1 mile was *"reasonable"*. He was pressed as to the extent of the increase in the CPA. His response was that, based on the calculations carried out by the radar, the CPA increased from about 1 mile to 1.2 miles. Counsel for the *Kirrixki* suggested that this was a minimal increase. Captain Simpson responded to say that, in circumstances where the *Kirrixki* was drifting eastward, it was unsurprising that the increase in CPA was minimal. If, however, the *Kirrixki* had been drifting towards the *Hua Sheng Hai*, those

onboard the *Hua Sheng Hai* might consider taking action. Counsel for the *Kirrixki* put it to Captain Simpson that, at that stage, the *Kirrixki* was *"a danger zone"* and that that the *Hua Sheng Hai* should have manoeuvred in accordance with the directions given in the master's orders. This was rejected by Captain Simpson who stressed that a drifting vessel has no propulsion.

104. Captain Simpson was then asked by counsel for the *Kirrixki* when the *Kirrixki* commenced to move in a circular motion. Captain Simpson estimated that this would have occurred at 23:42 or 23:43. As noted in para. 88 above, he accepted that the turning of the *Kirrixki* would have been observable by the *Hua Sheng Hai* at 23:44. It was put to him that Captain Walton (the expert retained on behalf of the *Kirrixki*) was of the view that this gave the *Hua Sheng Hai* time to manoeuvre. Captain Simpson replied that there was no indication at 23:44 as to what the *Kirrixki* might do next. It was put to Captain Simpson that a reasonable or prudent officer of the watch would be aware that a fishing vessel could be in the process of casting nets. Captain Simpson accepted that this process was capable of being observed through binoculars but he added that: *"What would not be expected would be that she was steady upon a course that was going to directly get towards your track."*

105. It was also put to Captain Simpson that the speeds recorded for the *Kirrixki* in the period when Captain Antelo Malabe said that they were casting the nets were likely to have been increased by virtue of a north-westerly current. Captain Simpson thought that this was a highly unlikely scenario. Earlier, he had drawn attention to the fact that, while the repairs were being carried out, the *Kirrixki* had drifted in an easterly direction which was not indicative of a north-westerly current. He also rejected the suggestion put to him that the weight of the doors (approximately 2.4 tonnes) would not significantly affect the operation of a *"big fishing vessel"* such as the *Kirrixki*. Captain

Simpson accepted that fishing vessels have to be powerful in order to drag a trawl net and the trawl doors. However, he said that the problem is not the weight; *"it's the drag that they impart on the towing gear"*.

106. Captain Simpson agreed, however, with the view expressed by the authors of a UK P&I document entitled *"Reducing the Risk of Collisions With Fishing Vessels, Guide For Masters and Their Bridge Teams"* published on 31st May 2017, that fishermen sometimes concentrate more on catching fish than on safe navigation and *"It may be best to assume that they are not aware of your presence"*. However, he added that he would not: *"expect to have somebody totally concentrating on catching fish on a vessel in European waters, a large sophisticated trawler. It doesn't sit very well… with me."* He also accepted that manoeuvres to avoid collision should start well in advance and should be large enough to ensure that a vessel passes clear of a fishing boat with adequate CPA.

107. On re-examination, Captain Simpson confirmed that, insofar as attempts were made by the *Hua Sheng Hai* to avoid collision, the VDR records showed that the *Hua Sheng Hai* applied 10º to port at 23:49:03 and a further 10º at 23:50:54. When the re-examination was completed, I had a number of questions for Captain Simpson. I first asked him to identify the point at which it was still possible for the *Hua Sheng Hai* to have taken a manoeuvre that would have avoided the collision. In response, Captain Simpson confirmed that the *Hua Sheng Hai* could have made an alteration of course to port at 23:44:08. Similarly, the *Hua Sheng Hai* could have done so at 23:45:08 and at 23:46:08. I then asked at what stage the *Hua Sheng Hai* would lose the ability to avoid the collision, having regard to the level of its manoeuvrability. Captain Simpson replied: *"I think we're probably looking at 23:47, 23:48, we're getting to the point where,*

whatever he did, the two vessels were going to meet, or they would have been very close to each other at least."

108. Captain Noel McGettigan also gave evidence on behalf of the *Hua Sheng Hai* on Day 6 of the hearing. He is a certified master, classes 2 and 3, and he is also a qualified marine surveyor. In addition, he holds a fishing captain's licence. He commenced work in the fishing business at age sixteen. He qualified as a fishing captain when he was 21 and he was actively involved in demersal trawling which is the form of trawling undertaken by the *Kirrixki*. As previously noted, this involves bottom trawling.

109. Captain McGettigan gave very helpful evidence as to the steps involved in lowering nets and associated gear into the water in the case of demersal trawling. He explained that the net is stored onboard the fishing vessel on hydraulic net drums. Captain McGettigan emphasised that, before setting the nets, it is essential to look to make sure that there was a clear path ahead of the vessel. He said:-

> *"You always want to know that you're not going to turn your vessel. Fishermen don't like to set their nets and then realise, oh, there is a boat ahead of me, now I have got to turn. They don't like to do that for the simple sole reason once you turn your vessel, as the Master of the Kirrixki also made note to, it distorts the fishing. The doors close in and the net closes in and the net stops fishing. So, they don't like hard alterations or they like to tow in a straight line."*

110. Captain McGettigan said that the first phase is to *"shoot the cod end"*. This is the end of the net into which the fish are funnelled and is closed tight with a special knot to stop the fish escaping. In the first place, the cod end is lowered from the net drum to the ramp, ready to go over the side. He said that this process would take approximately two to three minutes. The cod end is then released into the water with

the aid of winches and mechanical wires. This is because it is physically too heavy to manhandle. Captain McGettigan estimated that the weight of the cod end alone was of the order of 150 to 200 kilogrammes**.** Captain McGettigan estimated that the total time taken to lower the cod end into the water from the net drums (including first lowering the cod end onto the ramp) would be somewhere between four and five minutes. He also estimated that a trawler would proceed at approximately 5 knots for this purpose. Captain McGettigan also said that, during this process, the skipper of the trawler would keep everything under close observation and would *"never take… eyes off it"*. This is because it is possible that a crew member could stand in the wrong position at the wrong time while the net is going out and be dragged over the stern.

111. The second phase of the operation, after lowering the cod end into the water, is the unspooling of the remainder of the net that is stored on the net drum. The time taken to undertake this task depends on the vessel and the type of gear and the length of the net. Captain McGettigan confirmed that this goes *"straight out into the water"*. The net does not have to be gathered on the deck itself before lowering into the water. The drag of the cod end already in the water creates a drag on the net which pulls the net off the boat and the net moves across the deck slowly and lowers into the water. For this purpose, the crew will stand to one side. It would be very dangerous to get entangled in the net as it is going out into the water. Captain McGettigan estimated that, for a net of 120[7] metres long, this process could take six to seven minutes, or it could take longer if there were any problems encountered. He explained that, occasionally, the net may get entangled on the net drum and the process has to be stopped to allow the net to be freed. He explained that, when the net is being lowered into the water in this way, a safe

[7] The length mentioned by the witness in evidence was 1,200 metres but I believe that the correct length was 120 metres.

speed would be 4 to 5 knots. Captain McGettigan strongly expressed the view that an average speed of 9 knots was a very unsafe speed for the purposes of releasing nets.

112. Captain McGettigan explained the third phase involves attaching the *"sweeps"* to the wings of the net. For this purpose, the hydraulic winches are stopped for the duration of the process which is done very quickly. Captain McGettigan said that it takes approximately 30 seconds. The sweeps are the wire cables that have rope wrapped around them as described by Captain Antelo Malabe. They connect the wings of the net to the trawl doors. They are attached to the net manually. While this aspect of Captain McGettigan's evidence (as recorded on p. 125 of the Day 6 transcript) is somewhat unclear, it seems to me that, notwithstanding his evidence (as summarised in para. 111 above) that the nets have already been lowered into the water, the wings of the nets must necessarily still be on the deck at the point the sweeps are attached to the nets. For the purpose of attaching the sweeps to the net, Captain McGettigan expressed the view that it is necessary to slow the vessel down to about 2 knots.

113. Thereafter, the next phase (phase 4) involves the unwinding of the sweeps. Captain McGettigan said that he understood that the sweeps on the *Kirrixki* were of the order of 400 metres. He suggested that, as a rule of thumb, between 50 and 100 metres would unwind per minute. That means that this step could take between four minutes and eight minutes. These cables are kept on trawl winches which are separate from the net drum. For the purposes of laying the sweeps, a vessel would proceed at approximately 5 knots.

114. Phase 5 involves the deployment of the trawl doors (sometimes referred to as otter boards). These are held on a chain at the stern of the vessel, one on each side. These assist in keeping the net open. Phase 5 involves attaching them to the sweeps at one end and to warp wire (which keep them attached to the trawler) at the other. This

is done manually and, according to Captain McGettigan, this takes between 30 seconds and one minute. Four men would be needed for this procedure. Captain McGettigan said that, for this purpose, the speed of the trawler would be slowed down to between 2 and 3 knots. He said that it would be dangerous to proceed at 9 knots for that purpose as the doors would be *"over and back real hard and violently swinging…"*.

115. Phase 6 involves the careful lowering of the doors into the water. Captain McGettigan estimated that this takes approximately 30 seconds. As the vessel is propelling forward, the drag of the net assists in pulling the doors into the water. As the doors hit the water, the fins in the doors open and spread out and that assists in opening the net. At that point, Captain McGettigan said the vessel would proceed at about 5 knots to open the net fully. On the basis that the *Kirrixki* had 650 metres of warp wires, Captain McGettigan estimated that it would take in the region of fifteen minutes to have the full length of those wires unspooled off the winches. This is the final phase of the operation. Captain McGettigan estimated that this would take approximately fifteen minutes. For that purpose, he said that a trawler would travel at 5 knots. He also explained that, when the net reaches the bottom, the normal towing speed would be between 3 knots and 3.5 knots. He said that that was sufficient speed to keep the mouth of the net open. He explained that a vessel does not have to go fast in order to achieve this. He also expressed the view that, if a vessel was shooting nets at 9 knots, the net is being towed more quickly behind the vessel and, therefore: *"you are towing it quicker behind you and therefore it's rising up, it's never going to get down, it's going to rise. So if you slow your speed down, the net will go down."*

116. On Day 7, Captain McGettigan confirmed that the entire procedure of setting the nets and laying the cables would take in the region of 30 to 33 minutes. He said that the steps involved in setting the nets up to the point of laying the cables would take

between 15 and 18 minutes, while the laying of the cables would take approximately 15 minutes. Captain McGettigan was then taken to the collision plot chart prepared by Solis Marine Consultants (about which Captain Simpson had given evidence) which showed that the *Kirrixki* took a steady course from approximately 23:45:09 in a north-westerly direction[8]. Captain McGettigan expressed the view that, up to that point, the *Kirrixki* could not have been engaged in setting the nets. He agreed with Captain Anetelo Malabe that one would not start shooting the nets until the vessel is able to proceed forward in a straight line. Captain McGettigan noted that there was only a period of six minutes between 23:45:09 and the moment of the collision at 23:51:08. Given the relatively short interval between both points in time, Captain McGettigan expressed the view that it would not be possible for Captain Antelo Malabe to be laying the cables by 23:51:08. In this context, it should be recalled that, as noted in para. 62 above, Captain Antelo Malabe gave evidence that, at the moment of the collision, the trawler was still in the process of letting the doors and the cable into the water. But Captain McGettigan expressed the view that, in the period of 6 minutes between 23:45:09 and 23:51:08, it was *"near impossible"* to carry out each of the steps that would have to be undertaken before the cables could be lowered. These included letting the code end out followed by the rest of the net out, attaching the sweeps, laying the sweeps, attaching the trawl doors, lowering the doors into the water and beginning to lay the warp wire cables.

117. Captain McGettigan rejected the suggestion that the relatively high speeds shown for the *Kirrixki* between 23:47:08 and 23:51:08 (which varied between 9.4 knots at the earlier time to 9 knots at the later time) were influenced by the current or the

[8] For reasons which I will address at a later point in my judgment, it should be noted that I take the view that the trawler commenced on this north-westerly course a little earlier than 23:45:09.

wind. In this context, Captain McGettigan drew attention to the way in which, prior to restarting the engine, the vessel was drifting eastwards which suggests that the wind was pushing the vessel sideways. Consistent with the view expressed by Captain Simpson, Captain McGettigan said that this would not have increased the speed of the vessel on a north-westerly course. Insofar as currents are concerned, Captain McGettigan drew attention to the 21st Edition of the Admiralty Sailing Directions: Irish Coast Pilot (NP 40) which suggests that, for 82% of the time, the current in this area of water is less than half a knot and that the current runs to the northeast. Captain McGettigan said that, in such circumstances, the current would not push the *Kirrixki* to the northwest (which was the heading of the trawler during this period).

118. Captain McGettigan also addressed the spreadsheet prepared by Solis Marine Consultants showing, by reference to the AIS data transmitted by the trawler, the progress of the *Kirrixki* from the moment it left Dingle at 14:29:34 to 22:00:11 on the day of the collision. At periodic intervals, the spreadsheet shows, among other things, the speed of the trawler over the ground and its heading. As noted in para. 69 above, Captain Antelo Malabe confirmed that, in the early part of the evening of 11th October 2019, the *Kirrixki* had been engaged in fishing. Captain McGettigan drew attention to the fact that, at 17:30:12, the *Kirrixki* had a speed over the ground of 8.5 knots. At 18:00:18, the speed over the ground had reduced to 4.7 knots. By 18:30:25, the speed over the ground had reduced to 3.1 knots. At 18:59:31, the speed was 3.3 knots. Captain McGettigan expressed the view that the shooting of the nets had been completed by that stage and that the vessel was now trawling with the nets on the bottom. The vessel continued at speeds that varied between 3.4 knots and 2.8 knots in the period between 18:59:31 and 22:00:11. Captain McGettigan expressed the view that this is the *"exact desired speed"* for trawling. That is also reasonably consistent with what Captain

Antelo Malabe had said to the effect that the normal trawling speed of the vessel was 3.2 knots to 3.5 knots.

119. Captain McGettigan highlighted the variation in the heading of the *Kirrixki* in the period after leaving Irish territorial waters at approximately 18:00:18. He examined the AIS records of the vessel's heading during the period immediately after that time when, in his opinion, the *Kirrixki* was in the course of shooting the nets. He drew attention to the fact that, throughout the period between 17:58:17 and 18:08:20, the heading of the vessel varied from time to time. For example, at 17:55:17, the heading of the vessel was recorded as 264°. At 17:56:18, the heading was 268°, while at 17:57:18, the heading was 280°. One minute later, at 17:58:18, the heading was 284°, but one minute later than that, it had reduced to 280°. At 18:01:19, the heading was 276°. It remained at that heading for three minutes, but at 18:04:20, the heading was 284°. Captain McGettigan expressed the view that this was consistent with how he would expect a vessel to behave when setting the nets. This is because the nets may jam from time to time as the net unspools with the result that the vessel may have to move somewhat either to port or starboard from time to time depending on how and where the net is jammed. He explained that, during that process, contrary to the evidence given by Captain Antelo Malabe, the vessel would not be on autopilot. His evidence was that the crew on deck would alert the skipper to any problems and inform him when the trawler needed to move to port or starboard, as the case might be, to relieve a jam or assist in unknotting an entanglement.

120. Thus, Captain McGettigan was of the view that the changes in heading (which are apparent during the earlier part of the evening between 17:58:17 and 18:09:21) were consistent with shooting the nets. The heading deviated between 264° and 282°. At the slowest speeds shown during certain points of the operation, he said that the *Kirrixki*

was likely to be hooking on the sweeps and the doors. Thereafter, the speed of the vessel increased to 4.4 knots at 18:08:20 and to 5.3 knots at 18:09:21 which Captain McGettigan said was consistent with the speed at which a vessel would spread the nets.

121. In contrast, Captain McGettigan suggested that the records showed that there was much less deviation in the heading of the *Kirrixki* in the minutes prior to the collision. At 23:45:09, the heading was 327°, at 23:46:09, the heading was 325°, at 23:47:08, it was 324°, and at 23:48:08, it was 327°, and it remained at 327° at 23:49:08. It decreased slightly to 325° at 23:50:06. At the moment of the collision, the heading was recorded as 346:9:0°. Presumably, the more significant change in heading at that time is attributable to the impact of the collision.

122. Captain McGettigan also produced a photograph of the *Kirrixki* which he had downloaded from a site on the internet and which he suggested showed that the trawler was missing at least one of the required lights. I do not believe that I can have any regard to the photograph. First, it was not proven in evidence. Second, it does not establish the position as of the date of the collision. For similar reasons, I do not believe that I can have regard to the additional photographs which were put to Captain McGettigan on cross-examination on the same day.

123. It was also put to Captain McGettigan, in the course of cross-examination, that the *Kirrixki* may have commenced the process of casting its nets in advance of leaving Irish territorial waters at the 12-mile point. Captain McGettigan conceded that this might be the case. As I understand it, these questions were put to Captain McGettigan with a view to suggesting that the speed of the *Kirrixki* in the minutes leading up to the collision was not inconsistent with the process of lowering of the nets and related gear into the water. It may be the case that the *Kirrixki* had started the process prior to leaving Irish waters. I do not think that there was anything illegal in that as there is no evidence

that the trawler commenced fishing within the territorial limit. However, as I will explain, it seems to me that the process did not begin until after 17:53:17 when the speed of the trawler began to slow down. In para. 168 below, I explain that, up to that time, the trawler was travelling at a relatively constant speed of 8 knots or more which, even on the basis of Captain Antelo Malabe's evidence, significantly exceeded the speed at which the process could begin.

124. Counsel for the *Kirrixki* also put a further document created by Solis Marine Consultants to Captain McGettigan, namely a pictorial representing the changes in the speed over the ground of the *Kirrixki* in the period between 22:00:08 and 23:49:59. It was pointed out that, in this pictorial, the speed of the *Kirrixki* at 23:49:59 was stated to be 8 knots and that this is not shown on the collision plot chart. Captain McGettigan responded to say that, whether the speed was 8 knots or 9.2 knots, it made no difference to his view that, at such speeds, it would be unsafe to attempt to shoot a net. However, counsel also referred to the underlying table of data compiled by Solis Marine Consultants showing the speed of the *Kirrixki* at various points of time during the evening of the collision. That table shows that, as of 23:50:59, the speed of the *Kirrixki* over the ground was 8 knots. Yet, counsel for the *Kirrixki* drew attention to the fact that the table of data shows that, at 23:50:08, the *Kirrixki* was proceeding at a speed over the ground of 9.2 knots and he suggested that the difference in speed of 1.2 knots in such a short interval of time required explanation. Captain McGettigan said that he could not explain it. Counsel suggested that this cast a *"large doubt"* over the reliability of the data recorded. Captain McGettigan responded that whether the speed was 8 knots or 9 knots did not matter; both were unsafe speeds in his view. As explained further below, the speed readings from the *Kirrixki* were the subject of further evidence and analysis by Captain Simpson on Day 8 of the hearing.

125. Mr. Frank Jackson gave evidence on behalf of the *Hua Sheng Hai* in respect of the navigation equipment and lighting onboard the *Kirrixki*. Mr. Jackson is an experienced marine surveyor. Following the collision, he carried out an inspection of the *Kirrixki* under conditions of darkness on 18th October 2019 in order to observe (*inter alia*) the lighting arrangements. He confirmed that, at the top of the mast of the *Kirrixki*, the vessel was equipped with green over white fishing lights. He provided two photographs showing the fishing lights in question, one with the deck lights on and one with the deck lights off. However, the quality of the photographs provided to the court was very poor. His evidence was that, when the deck lights were switched on, the glare from those lights appeared to dim the intensity of the fishing lights at the top of the mast. He suggested that, at sea, one would only see the glare of the working lights and that it was unlikely that one could see the lower navigation lights unless the vessel was turned towards the observer and the working lights were away from the observer. He observed that there were no mitigation measures on the vessel to minimise glare from the working lights. In his report, Mr. Jackson said that the red side light and the stern light were *"not visible"*. However, he did not address in his report or in his evidence whether the *Kirrixki* had the two red *"not under command"* lights. In his evidence on Day 3, He merely said that, at the time of the inspection, the *Kirrixki* had put on the green and white lights only and the side light and that *"they didn't put up double red lights"*. Mr. Jackson does not appear to have investigated whether the latter lights were absent. It should also be noted that, notwithstanding Mr. Jackson's view that the red side light of the *Kirrixki* would not have been visible, it was, in fact seen by Mr. Xu, the able seaman on duty with the officer of the watch on the *Hua Sheng Hai* on the night of the collision.

126. Mr. Jackson also dealt with the currents in the waters off the Dingle Peninsula. He confirmed that he had sailed in those waters and was surprised by the suggestion made in Captain Walton's report that the current was of the order of 1 knot. he said that he had never observed anything that fast on the occasions when he had been in those waters. His evidence was that the current was *"quite hard to detect"*. Mr. Jackson was also asked about the Admiralty Sailing Directions relevant to the waters off the Dingle Peninsula. The provisions of para. 1.11 were drawn to his attention by counsel for the *Hua Sheng Hai*. Paragraph 1.11 states that: *"Vessels should keep at a distance of at least one cable from trawlers engaged in fishing."* Mr. Jackson confirmed that a cable equates to 185 metres which he said was *"that's far too close to be passing to a fishing vessel"*. He said that he would not pass any closer than a nautical mile. In so far as the deck lights are concerned, Mr. Jackson accepted, under cross-examination, that, when a fishing trawler is shooting nets, the deck lights will be switched on as well as the navigation lights.

127. After Mr. Jackson concluded his evidence, Captain Simpson was recalled. This arose because it had become clear, in the course of Captain McGettigan's evidence, there were lower speeds recorded for the *Kirrixki* in the minutes before the collision than had been identified on the collision plot chart about which Captain Simpson had given evidence. Some of these were identified on the pictorial described in para. 124 above. In addition, the pictorial in question was not one of the annexes to Captain Simpson's report and had never been proved in evidence. Unlike the collision plot chart, the pictorial showed a speed over the ground for the *Kirrixki* of 8 knots at 23:49:59. The collision plot chart suggested that, in the period between 23:49:08 and 23:51:08, the *Kirrixki* was travelling at a speed over the ground of between 9.0 and 9.2 knots.

There was no suggestion on that plot that the speed during that period had ever reduced to 8 knots.

128. Captain Simpson was recalled at the end of Day 7. He explained that the pictorial and the collision plot chart had been prepared on the basis of the VDR data available from the *Hua Sheng Hai*. That data included the AIS data transmitted by the *Kirrixki* which was received by the *Hua Sheng Hai* and recorded on its VDR. Captain Simpson said that the pictorial was intended to represent the changes in speed over the ground for both the *Kirrixki* and the *Hua Sheng Hai*. It was put to Captain Simpson by counsel for the *Kirrixki* that the collision plot chart had suggested that, from 23:47 onwards, the speed over the ground of the *Kirrixki* was 9 knots or more and that it had not been disclosed by the *Hua Sheng Hai* that, at 23:49:59, the speed over the ground of the *Kirrixki* was lower, namely 8 knots. Captain Simpson responded to say that the pictorial only shows the data for the timestamps that were chosen, and he emphasised that, in the case of the *Kirrixki*, the speed over the ground is only available at ten-second intervals. Captain Simpson characterised this as a *"snapshot"* of the speed. It was then put to him that the *Kirrixki* could not have increased its speed by approximately 1.2 knots in the period between 23:49:59 (i.e. the time shown on the pictorial when the speed over the ground was 8 knots) and 23:50:08 when the speed was recorded as 9.2 knots. That represents a time difference of only nine seconds. Captain Simpson replied:-

> *"you only have the information for one second, the speed was X and ten seconds later the GPS said the speed was Y. So you only have the speed at X and the speed at Y…*
>
> *What I was going to say was if you had the speed at every second, you could do that. But then you just have to go back through the data tables and say during*

that period the speed was between -- or approximately… you have these fluctuations in speed… It's just the nature of GPS…

I have never tried to express my, or come to an opinion based on snapshots. My opinion has been based on the -- well, the average, if you like. I have never tried to say that Kirrixki was doing anything other than a general trend...".

129. Captain Simpson accepted that the *Kirrixki's* speed over the ground fluctuated in the minutes leading up to the collision and that it would not be correct to suggest that it had a consistent speed over the ground of 9 knots or more. At the conclusion of his evidence, I asked Captain Simpson to provide a table showing the speeds of the *Kirrixki* over the ground at each ten-second interval between 23:44:09 and 23:51:08. Such a table was duly prepared overnight by Solis Marine Consultants under Captain Simpson's direction. On Day 8, Captain Simpson provided the table requested by me. He confirmed that the table records each of the timestamps on which AIS data is available for the *Kirrixki* in the period between 23:40:01 on 11th October 2019 and 23:51:08 on the same day. He confirmed that the data was extracted from all of the AIS messages that the *Kirrixki* transmitted during that period as recorded on the VDR of the *Hua Sheng Hai*. Captain Simpson explained that the accuracy of the data depends on the accuracy of the GPS and that the readings given for the speed over the ground of the *Kirrixki* represent snapshots from the GPS. The speed is calculated by the GPS. In addition, he noted that, while there was a ten-second gap between most of the timestamps, there was some variation arising from the fact that AIS messages would be transmitted more frequently where a vessel is turning than when a vessel is on a prolonged straight course. Captain Simpson said that the reason for this is to assist other vessels that are receiving the information so that they can assess the movement of the

vessel under observation. He also explained that in respect of some timestamps, the GPS did not transmit any information in relation to the speed over the ground.

130. However, the speeds over the ground of the *Kirrixki* were recorded for each timestamp during the period between 23:44:21 and 23:51:08. At this point, I do not believe that it is necessary to set out each of the times recorded. It should be noted, however, that at 23:47:48, the speed was recorded at 9.6 knots but it had dropped to 9.1 knots at 23:47:59 and the speed recorded at the next two timestamps was the same. The speed went up to 9.3 knots at 23:48:28 but reduced again to 9.1 knots at 23:48:37 and the same speed was recorded at each of the next four timestamps. Thereafter, the time recorded at both 23:49:28 and 23:49:37 was 9.2 knots, while the speed recorded at 23:49:48 was 9.4 knots. As previously noted, the speed recorded at 23:49:59 was 8 knots and, at 23:50:08, it was 9.2 knots. From then on until the collision, it varied between 9.1 knots and 8.2 knots. During that period, there were two readings of less than 9 knots, namely 8.2 knots at 23:50:28 and 8.3 knots at 23:50:38. Captain Simpson said that the speed that is calculated by the GPS will be affected by the movements of the vessel and also by the accuracy of the GPS position itself and the previous GPS positions that had been used to calculate the speed. Furthermore, because it is taken at ten-second intervals, one cannot know at the snapshot point whether it has just jumped a little bit or dropped a little bit. For that reason, Captain Simpson said that it was necessary to look at the trend. With regard to the jump in speed from 8 knots to 9.2 knots between 23:49:59 and 23:50:08, he said:-

> *"going back to what I was saying about snapshots, if that snapshot was taken at the lowest speed when the GPS flashed up and the next one was taken at the highest speed, it will appear as a large change, but looking at the general trend in the whole of the speeds of that page over a short period of time, you*

can see that it's 9.1, 9.1, 9.1, and hence the reason I have always tried to refer to these speeds as being about 9 knots or slightly more than 9 knots, rather than giving a specific decimal figure."

131. Captain Simpson was cross-examined by counsel for the *Kirrixki* who put it to him that there was plainly a margin of error in the speeds recorded at the time of each of the *"snapshots"*. Captain Simpson replied that the margin of error arises within the GPS system but the figures provided in the table correctly record what is available from the GPS data. It was then put to Captain Simpson that he had never made this clear, either at the time he made his report or at the time he gave his evidence. However, Captain Simpson drew attention to para. 3.14.16 of his report where he had referred to *"inherent minor errors with GPS…"*. Moreover, when the *Kirrixki's* expert Captain Walton gave his evidence on the same day, he acknowledged that there are inherent errors in the GPS data which can be affected by the motion of a vessel. He also agreed that a vessel of 37 metres operating on a one-metre Atlantic swell would likely encounter a slight slowing down as a vessel went up a wave and an increase in speed coming down a wave. Importantly, Captain Walton also accepted that GPS was generally accurate about 95% of the time.

132. I should explain that Captain Walton was called as an expert witness on behalf of the *Kirrixki* on Day 7 of the hearing. Captain Walton is a well-known expert with extensive practical experience. He first went to sea in 1974 as a cadet and became a master in the early 1990s. Captain Walton confirmed that the VDR data available from the *Hua Sheng Hai* had been made available to him for review. He noted that the *Kirrixki* first appeared on the ECDIS at 22:06 at a distance of approximately 18.5 nautical miles. He explained that, in addition to the ECDIS, the officer of the watch of the *Hua Sheng Hai* had both radars operating. The X-band radar was set at 6 nautical

miles and the S-band radar was set at 12 nautical miles. Captain Walton said that it was not until 22:14:42 that the *Kirrixki* appeared on the 12 nautical mile radar screen at an approximate distance of 16.8 nautical miles. Later, at 22:23:31, the officer of the watch, utilising the 12 nautical mile radar's ARPA capability, acquired the *Kirrixki* as a target at a range of 15.1 nautical miles. At that point, Captain Walton said that the officer of the watch had an obligation to monitor the *Kirrixki* on the radar to assess whether there would be an eventual risk of collision. Captain Walton expressed the view that, between 23:21 and 23:41 approximately, the *Kirrixki* was drifting. On the basis of Captain Antelo Malabe's evidence that the not-under-command lights had been switched on during this period, Captain Walton expressed the view that the *Hua Sheng Hai* was obliged to keep out of the way of the *Kirrixki*. He said that the officer of the watch should have been closely monitoring the *Kirrixki* during this time on the radar. In this context, it should be recalled that the AIS of the *Kirrixki* suggested that the vessel was underway. It did not reveal that the *Kirrixki* was not under command. Captain Antelo Malabe did not input that information into the AIS. That said, as noted in para. 101 above, Captain Simpson had previously conceded that it would have been apparent from the radar screenshots of the *Hua Sheng Hai* that the *Kirrixki* was drifting at that time.

133. Captain Walton confirmed that the *Kirrixki* would not have been visible by sight at a range of 15.1 nautical miles. However, at the time the *Kirrixki* was acquired as a target, the CPA was 0.873 miles. On that basis, Captain Walton expressed the view that the officer of the watch had to be aware that there could be a close quarters situation developing in circumstances where the CPA was less than 1 nautical mile. He did not, however, suggest that any change in course should have been undertaken at that time; merely that an *"eye"* should have been kept on the *Kirrixki*. He said:*" Personally I*

think at that point I would continue monitoring. I mean normally in a situation when you are on passage you would look at possibly continuing on until around… 4, 5 or 6 miles and if the CPA doesn't change then, then you would consider making an alteration of course." He suggested that the need to alter course would *"click in"* when the *Kirrixki* became visible by sight. He said that, at 5 or 6 miles away, it would be prudent to consider opening the CPA to a distance of 2 miles as indicated in the master's standing orders.

134. Based on his review of the AIS data available for the *Kirrixki*, it was 23:42:59 when the *Kirrixki* resumed operations after the repairs to the engine. On the basis of Captain Antelo Malabe's evidence that, at that point, he switched off the not-under-command lights and switched on his fishing lights, the *Kirrixki* was now a fishing vessel for the purposes of the Collision Regulations. At that time, the *Hua Sheng Hai* was still maintaining the same course and speed and was only 1.994 nautical miles away from the *Kirrixki* with a CPA of 1.111 nautical miles. His evidence was that, at that point, the *Kirrixki* was observable by binoculars from the *Hua Sheng Hai*. Captain Walton expressed the view that the *Hua Sheng Hai* was the *"give-way vessel"* for the purposes of the Collision Regulations.

135. In para. 5.2.27 of his report, Captain Walton suggested that, if the officer of the watch on the *Hua Sheng Hai* had been correctly monitoring the *Kirrixki*, he would have quickly established after 23:44:43 that the *Kirrixki* was underway heading in a north-westerly direction and that a risk of collision situation was *"developing rapidly"*. Captain Walton drew attention to the way in which an alarm sounded and also appeared on the radar screen of the *Hua Sheng Hai* at 23:47:48. While Captain Walton expressed the view that the officer of the watch should have altered course *"long before that point"*, he should, once the alarm sounded, have taken *"a broad alteration to port"*. He

also expressed the view that the officer of the watch on the *Hua Sheng Hai* should have sounded his whistle at around 23:44:43 when the north-westerly course of the *Kirrixki* was apparent on the radar screen. Captain Walton said:-

> *"Had he been monitoring his radar … he would have seen quite clearly that all of a sudden the Kirrixki is clearly going to be going across his bow…*
>
> *Now, it doesn't take, in my opinion, a further four minutes to make … an educated decision on how to avoid this vessel. It's quite clear that suddenly this fishing vessel is back under way, based on the AIS overlay…*
>
> *He'd see that the vessel was picking up speed, and she was probably around, what time is that, 23:44, so she was probably doing around 7 and a half knots…*
>
> *So in my opinion, this was the earliest possible time he could have taken action. But he has to assimilate it, he has to understand it, but certainly I think within 30 seconds to a minute, this is part of their training, he should have taken action, blown his whistle, and also made a broad alteration of course."*

136. Captain Walton expressed the view that, when encountering a trawler, a ship should pass ahead of them and not astern of them. For that reason, the appropriate alteration of course to make was an alteration to port. He added that, normally, one would warn the fishing vessel that an alteration to port is being taken by sounding one short blast on the whistle. A further warning could be given about the closing situation by sounding five or more short blasts on the whistle at intervals of one second.

137. In para. 5.2.29 of his report, Captain Walton expressed the following view in respect of the responsibility of the *Hua Sheng Hai* for the collision:-

> *"Hua Sheng Hai radars are equipped with Automatic Radar Plotting Aids (ARPA). Had the* [officer of the watch] *been correctly monitoring by radar and visually (taking bearings of the fishing vessel), he would have established a developing close quarters situation long before 23:44:43… As the give-way vessel he could have made a broad alteration of course to port, placing the Kirrixki astern and then out running the fishing vessel or a broad alteration to starboard. Once the fishing vessel was passed and clear he could then resume the original course of 064T."*

138. That said, Captain Walton accepted that there was fault on the part of the *Kirrixki*. But he maintained, in the course of his direct examination, that the primary responsibility to avoid the collision rested with the *Hua Sheng Hai*. In response to a question from counsel for the *Kirrixki* to explain his view, he replied *"Based on the Skipper's evidence, he was actually engaged in fishing and therefore he was restricted in his ability to manoeuvre. So therefore he was the stand-on vessel. Whereas the Hua Sheng Hai was the give-way vessel."* Captain Walton added that the collision could have been avoided *"if the Hua Sheng Hai had decided to obey the Master's standing orders and adjusted his course so it would pass with a CPA of at least 2 nautical miles…"*.

139. Under cross-examination, Captain Walton confirmed that he had no issue with the accuracy or authenticity of the VDR data of the *Hua Sheng Hai* and that he had relied on it for the purposes of his report in a similar way to Captain Simpson. However, he confirmed that he had not sought to analyse the AIS data relating to the *Kirrixki* in respect of the earlier period on the day of the collision (i.e. the period from about 18:15 when the *Kirrixki* was first engaged in fishing).

140. Captain Walton accepted that a vessel of the dimensions of the *Kirrixki* on a one metre Atlantic swell would likely encounter a slight slowing down going up a wave and an increase in speed coming down a wave. He also accepted that he had no expertise in trawling or in the operation of a fishing vessel. Captain Walton agreed that the current affecting the *Kirrixki* in the minutes before the collision was a north-westerly current and that he was mistaken in suggesting in his report that there was a *"good possibility"* that the current was running in a north-easterly direction. He conceded that the current was on the beam of the *Kirrixki*.

141. Counsel for the *Hua Sheng Hai* also put the provisions of the relevant Admiralty Sailing Directions (NP 40) to Captain Walton. Counsel drew attention, in particular, to the statement made in para. 1.19 that: *"Vessels should maintain a distance of at least 1 cable for trawlers engaged in fishing."* Captain Walton had not referred to this section of NP 40 in his reports. He had, however, referred to para. 1.18 which states that: *"Fishing vessels engaged in fishing, in addition to being hampered by their gear, may make immediate unannounced manoeuvres, care should be taken to keep clear of vessels engaged in fishing."* Counsel for the *Hua Sheng Hai* suggested to Captain Walton that he had been selective in his quotation from NP 40 but Captain Walton explained that the reason he did not refer to para. 1.19 was *"because, to be quite candid with you, no Master in his right mind would want to pass at least 1 cable from a trawler engaged in fishing"*. Captain Walton maintained that 1 cable distance (which equates to 185 metres) would be far too close, especially for a vessel like the *Hua Sheng Hai*. This is consistent with the view previously expressed by Mr. Jackson (as noted in para. 126 above).

142. In the course of his cross-examination by counsel for the *Hua Sheng Hai*, Captain Walton was also pressed in relation to his evidence that it was likely that the

not under command lights on the *Kirrixki* would have been the subject of the inspection that took place following the collision. He conceded that it was merely a matter of belief on his part that those carrying out an inspection of a fishing vessel would ensure that the vessel is in compliance with SOLAS requirements. He accepted, however, that he had seen no documents or reports from the Marine Survey Office.

143. Counsel for the *Hua Sheng Hai* also asked Captain Walton to consider the table of AIS data compiled by Solis Marine Consultants at my direction (as described in para. 130 above). In particular, counsel drew his attention to the fact that, at 23:44:34 to 23:44:56, the speed over the ground of the *Kirrixki* was an average of about 3.2 knots but, from 23:44:59 to 23:45:15, the average speed was approximately 7.33 knots and that, from 23:45:19 to 23:46:19, the average speed was about 7.12 knots and then, in the period from 23:46:28 to 23:47:38, the average speed was 8.65 knots and this increased to 9.2 knots in the period from 23:47:48 to 23:48:48. It was put to him that these speeds (namely 22 seconds at an average speed of 3.2 knots, 16 seconds at an average speed of 7.3 knots, one minute at an average speed of 7.12 knots, one minute at a speed of 8.65 knots, and one minute at a speed of 9.2 knots) were not compatible with the evidence given by Captain Antelo Malabe in respect of the various activities described by him in his evidence. Captain Walton said that he could not disagree with the speeds shown on the table produced by Solis Marine Consultants.

144. Captain Walton was then asked whether, if the *Kirrixki* was not fishing, that would *"have a very serious impact"* on his analysis. I am not sure that he fully understood the significance of that question because, initially, he responded that it was still the responsibility of the *Hua Sheng Hai* to alter course to starboard and pass behind the *Kirrixki*. However, counsel for the *Hua Sheng Hai* put it to Captain Walton that it would not have been appropriate for the *Hua Sheng Hai* to alter course to starboard if

the *Kirrixki* was incorrectly showing the fishing lights (albeit not engaged in fishing). Captain Walton replied that the *Hua Sheng Hai* should, in those circumstances, have altered course to port as the *Hua Sheng Hai* would not want to go around the stern of a vessel engaged in trawling. He maintained that, under Rule 18 of the Collision Regulations, the *Hua Sheng Hai* would have to keep out of the way of the *Kirrixki*. But counsel for the *Hua Sheng Hai* put it to Captain Walton that, if the *Kirrixki* was not engaged in fishing, the *Kirrixki* would have no priority under Rule 18. Captain Walton agreed that, if the *Kirrixki* was showing lights but not fishing, that would be a contravention of Rule 18.

145. Counsel for the *Hua Sheng Hai* asked Captain Walton to consider the role of the *Kirrixki* in the collision. The following revealing and very helpful exchange took place between them in which Captain Walton, very properly, made a number of important concessions about the failure of the *Kirrixki* to keep a look-out and the dereliction of duty on its skipper's part in turning to the north-west without looking:-

> *"Q. ...As regards the cause of the accident, would you agree that the fundamental cause -- the cause without which there would have been no collision, was the Kirrixki's 157 degree manoeuvre to starboard, and that commenced at 23:43:09?*
>
> *A. I think that was causative, yes.*
>
> *Q. Fundamentally without that, there would have been no collision?*
>
> *A. Clearly, yeah.*
>
> *Q. And that was carried out without even looking round, isn't that right?...*
>
> *A. Yes, I can't disagree with that.*
>
> ...

Q. And if he hadn't turned to the northwest, there would have been no collision?

A. Correct.

Q. Is that, without putting a tooth in it, is that not one of the most fundamental breaches of a… professional mariner's duty, to do something like that?

A. It is.

Q. Close to a dereliction of duty, in fact? It's very, very serious?

A. Not keeping a lookout is very serious.

Q. And not keeping a lookout perhaps is one thing, but performing an almost U turn, and then proceeding to close to maximum speed without ever looking, must be one of the most serious forms of not keeping a lookout there could be?

A. I did not disagree with Captain Simpson on this.

Q. Would you agree with Captain Simpson when he says that keeping a lookout is the keystone of the arch of the Collision Regulations?

A. It is the most important part of being a deck officer all the way up to being a Skipper…

…

A. It is a vital part of it, that is the whole job, that is the whole reason you're there.

Q. Because the whole… purpose of the Collision Regulations is to allow vessels to know how to react with one another, isn't that right?

A. That is correct, yes.

Q. So that one side can predict how the other side is going to react. So we don't have ships turning into each other, isn't that right?

A. That is correct.

Q. But if one of the parties isn't looking where they are going at all, the Collision Regulations don't work, isn't that right?

A. Correct."

146. Captain Walton also agreed that, if the skipper of the *Kirrixki* had checked his radar or set a guard or proximity alarm on the AIS or the radar, the collision could have been avoided. He also accepted that, had the *Kirrixki* been traveling at a speed of 4 to 5 knots, there would have been no collision. On the other hand, Captain Walton continued to maintain the view that the officer of the watch on the *Hua Sheng Hai* could have taken early action with *"with a minor alteration of course"* in order to keep a CPA (in accordance with the master's standing orders) of 2 or more nautical miles. Captain Walton did not agree with the suggestion made by counsel for the *Hua Sheng Hai* that a CPA of 1 nautical mile was *"more than sufficient"*. Captain Walton expressed the view that any competent officer would realise that *"fishing vessels can do different and strange things, therefore you keep out of their way"*. He reiterated his view that a distance of 1 nautical mile was *"far too short"* and that such a distance leaves little time, especially for a vessel the size of the *Hua Sheng Hai*. Captain Walton also said that, while the turn and change in course executed by the *Kirrixki* was unusual, it would not have been an issue for the *Hua Sheng Hai* had the officer of the watch made an earlier alteration. Captain Walton acknowledged that the manoeuvre made by the *Kirrixki* was dangerous, but he maintained that the *Hua Sheng Hai* could easily have altered course within 30 seconds or even a minute after the *Kirrixki* took a north-

westerly course and he maintained that the *Hua Sheng Hai* could, in that way, have avoided a collision. His evidence was:-

> *"there is a hell of a lot of responsibility given to the officer of the watch on the Bridge, yes, and in my opinion, they should be attentive and especially in a situation like this where they do have a target coming down pretty much directly on to them, then they should be really aware that -- and he didn't try to increase the CPA, which we discussed at length here, he remained on his course so therefore, as he gets nearer, and I have to say if I was on that Bridge I'd be getting a bit twitchy about this. So I think, you know, any officer, prudent officer, prudent mariner would be watching his radar quite closely at this point as well as visually of course."*

147. Captain Walton disagreed with the view expressed by Captain Simpson about the need for the officer of the watch to have a period of evaluation in order to make an assessment as to whether the *Kirrixki* was going to maintain the north-westerly course and not going to turn again. Captain Walton said that, in his view, it did not take that long to decide to put a ship to hand steering and to alter course broadly. His view was that the *Hua Sheng Hai* would have turned *"relatively quickly"* if the officer of the watch had gone to 20° or even hard over to port. It was put to him by counsel for the *Hua Sheng Hai* that the intentions of the *Kirrixki* would not have been perceptible to the officer of the watch until long after 23:44:50. However, Captain Walton expressed the view that the movement of the *Kirrixki* towards the course of the *Hua Sheng Hai* became evident once the speed of the *Kirrixki* reached 3.1 knots. Although Captain Walton did not put a time on this, it would appear from the Solis Marine Consultant's table that this would have occurred at 23:44:37. It should be noted that, at that time, the *Kirrixki* was still in the course of turning a complete circle. Captain Walton agreed with

counsel for the *Hua Sheng Hai* that the *Kirrixki* could have slowed down quite rapidly if, for example, the skipper took full power off and went into full astern mode. Counsel for the *Hua Sheng Hai* also put to Captain Walton that, at the time the whistle of the *Hua Sheng Hai* sounded, there was a distance of approximately 0.125 nautical miles between both vessels. Captain Walton did not disagree, but he speculated that the noise made by the winches might have interfered with the sound of the whistle from the *Hua Sheng Hai*.

148. On re-examination, Captain Walton made clear that both vessels had a duty to look out. When his re-examination was completed, I asked Captain Walton to identify on the collision plot chart the last point in time when, in his view, the *Hua Sheng Hai* was capable of making a manoeuvre to avoid the collision. Captain Walton did not disagree with Captain Simpson's view that, at some point between 23:47:08 and 23:48:08, the *Hua Sheng Hai* was getting to the point where no avoiding action could have been taken. I then asked him to identify the last point the *Kirrixki* could have successfully taken avoiding action. Captain Walton replied that the collision could have been avoided by the *Kirrixki* up to approximately 23:49 to 23:50 by taking full speed off. He gave this evidence in the context that there would have been a drag on the vessel by reason of the nets. At that point, counsel for the *Hua Sheng Hai* was given liberty to ask a further question as to what the position would have been in the event that the *Kirrixki* was not engaged in fishing at that time. Counsel asked Captain Walton what the position would have been at the time the whistle of the *Hua Sheng Hai* was sounded and the *Kirrixki* was not then engaged in fishing or casting the nets and related gear. He specifically asked whether, if the *Kirrixki* did not have the trawling gear deployed, the *Kirrixki* could have avoided the collision at a distance of 0.125 nautical miles, or approximately 200 metres. Captain Walton responded to say that, given the size of the

Hua Sheng Hai, it would have been hard, at that point, for the *Kirrixki* to avoid a collision. He was then asked what was the last point at which the *Kirrixki* could have successfully taken avoiding action. Captain Walton responded to say that, if the *Kirrixki* was not involved in trawling and proceeding at a speed of 9 knots, the skipper of the *Kirrixki* would need, not only to take speed off, but he would also have to put his wheel hard over. However, he added that, even in such circumstances, he was still of the view that the vessels *"may well have made contact"*.

149. Captain Simpson was recalled for further cross-examination on Day 9. This arose in light of Captain Walton's evidence that a radar alarm was heard at about 23:47:48 on the *Hua Sheng Hai* in advance of the collision. While Captain Simpson conceded that it could have been an alarm on the radar, he could not say for sure that it was from the radar. He said that there are many alarms that one can hear on the bridge of a vessel and that they do not necessarily signify an emergency, *"more that they are an indicator of something going on"*. Captain Simpson reiterated his view that he regarded 23:45 as the first time that the *Kirrixki* could be seen to be settling into a north-westerly course. Captain Simpson drew attention to the collision plot chart and the way in which it showed that, at 23:45:09, the heading and the course over the ground were still about 15º apart, but, by 23:45:37, they were only 4º apart. At that point, Captain Simpson said that the *Kirrixki* had *"steadied on course"*.

150. On re-examination, Captain Simpson did not agree with Captain Walton's view that the *Hua Sheng Hai* could have made a 70º or 80º turn to port or indeed a full round turn. Captain Simpson characterised a full round turn as *"highly unusual"*. He also said that it was only with the benefit of hindsight that one could say that, if the *Hua Sheng Hai* had done a 70º alteration of course, *"things quite likely would have been different…"*. With regard to the sounding of the alarm, Captain Simpson said that the

officer of the watch must have been aware by 23:47 of the approach of the *Kirrixki* because, very shortly thereafter, he instructed the able seaman to switch to hand steering at that point and gave him the order to put the wheel to port. It should, however, be recalled in this context that a period two minutes elapsed before that order was given. The VDR records show that the first turn to port occurred at 23:49:03.

The preliminary act of the *Kirrixki*

151. There is one further aspect of the evidence which I should identify for completeness. In his closing submissions, counsel for the *Hua Sheng Hai* sought to rely on the content of the preliminary act of the *Kirrixki* to suggest that the *Hua Sheng Hai* had been seen by the *Kirrixki* five minutes before the collision. That was not something that had been put by him to Captain Antelo Malabe in the course of cross-examination but counsel submitted that he was not obliged to do so.

152. Before considering that submission, it is necessary to explain the purpose and effect of a preliminary act. Under O. 64, r.36(1), the parties to collision actions of this type are required to deliver preliminary acts within 7 days after the commencement of the action (in the case of a plaintiff) or 7 days from entry of appearance (in the case of a defendant). The preliminary acts must contain certain prescribed factual particulars relevant to the collision. These must be delivered in advance of any pleadings and are required to be sealed up and to remain so until ordered to be opened by the trial judge. The parties are accordingly required to provide details of certain key circumstances relating to the collision before they know the detail of the case made by the other shipowner.

153. In practice, the preliminary acts are kept in sealed envelopes in a locked safe in the office of the Admiralty Marshal until they are given to the trial judge. Under the Civil Procedure Rules, they are no longer required to be filed in England & Wales and,

for that reason, they are not considered in any detail in the current edition of *Marsden & Gault.* However, older editions of *Marsden* provide helpful guidance as to their function and purpose. Thus, in *Marsden on Collisions at Sea* (12th Ed, 1998, at para. 18-85), the authors explain that the answers given in the preliminary act have the status of formal admissions by the party filing the preliminary act. On that basis, counsel for the *Hua Sheng Hai* is legally correct that he was not under an obligation, as a cross-examiner, to put an admitted fact to the skipper of the *Kirrixki.* In the same paragraph, the authors suggest, citing *The Semiramis* [1952] 2 Lloyd's Rep. 86, that the court may hold a party to the admissions made. But the authors also make clear that, as was held in *The Geo. McKnight* (1947) 80 Lloyd's Rep. 419, the court is entitled to proceed on the evidence which it deems to be the most accurate and trustworthy. The court is therefore not bound by the admissions made by a party in its preliminary act.

154. In this case, counsel for the *Hua Sheng Hai* sought to rely on two paragraphs of the *Kirrixxki's* preliminary act namely paras. (g) and (j). In para. (g), the *Kirrixki* was required to state its course and speed when the *Hua Sheng Hai* was first seen. The answer given was 326° and 7/8 knots. In para. (j), the *Kirrixki* was required to state when the lights (if any) of the *Hua Sheng Hai* were first seen. In response, the following answer was given at para. (j) : *"The aft spotlights (not the navigation lights) were the first lights the Master saw* ***once passed*** *by the 'HUA SHENG HAI'"* (emphasis added). Counsel for the *Hua Sheng Hai* argued that, when these answers are read with the AIS records of the *Kirrixki's* speed over the ground, it is clear that the *Hua Sheng Hai* was seen 5 minutes before the collision (which would have been sufficient time for the *Kirrixki* to take evasive action. For this purpose, he identified that, at 23:45:09, the speed over the ground was recorded at 7.7 knots and the heading was recorded as 327° and that, between then and 23:49:08, the speed over the ground frequently varied

between 8 and 9 knots and the heading was frequently 326° or very close to it. While he could not pinpoint an exact time when the trawler's heading was precisely 326° and the speed was between 7 and 8 knots, he submitted that the coincidence of heading and speed recorded in the preliminary act was likely to have occurred at some point within that timeframe. I have to say that I am not at all sure that this follows from the material before the court. More importantly, I do not believe that the preliminary act can properly be interpreted as suggesting that the *Hua Sheng Hai* was seen during this period. In my view, the answers must be read as a whole. In the first place, para. (j) identifies that it was the aft lights of the *Hua Sheng Hai* which were first seen and then only when *"once passed by the Hua Sheng Hai".* That plainly suggests that the *Hua Sheng Hai* was not seen until after the collision. This conclusion is reinforced by the clear terms of para. (k) in answer to the requirement in O. 64, r. 36(1)(l)[9] to state whether any lights of the other vessel, other than those first seen, came into view before the collision. The answer given is that no lights of the *Hua Sheng Hai* were seen. Taking paras. (j) and (k) together, it is clear that the case made in the preliminary act is that no lights were seen until after the collision. For that reason, it seems to me that the answer at para. (g) must be read as suggesting that the speed and heading stated were those at the time of the collision. In so far as the speed of the *Kirrrixki* is concerned, that is consistent with the evidence of Captain Antelo Malabe in para. 58 above that the trawler increased speed to *"7 to 8, 6 to knots"* after the trawl doors have been lowered into the water. As noted, in para. 62 above, that is the activity which the skipper says was underway at the moment of the collision. While the AIS data shows that the speed of the trawler was higher at the time of the collision, the answer given in para. (g) of the preliminary act,

[9] There is a misalignment between the notation used in the preliminary act and that used in O. 64, r. 36(1). The letter "j" is omitted from the rule but is included in the *Kirrixki's* preliminary act such that para. (k) of the preliminary act is in response to para. (l) of the rule and para. (j) is in response to para. (k) of the rule.

when read against the other answers given, is not inconsistent with the case made at trial. Thus, although counsel for the *Hua Sheng Hai* was legally correct in his submission that he was not required to cross-examine the skipper about the admissions made in the preliminary act, I am of the view that, if he wished to rely on the *Hua Sheng Hai's* interpretation of para. (g), he should have put that interpretation to Captain Antelo Malabe so that the latter would have an opportunity to respond to the suggestion that the *Hua Sheng Hai* had been seen in the five minute period before the collision. In any event, it seems to me that the terms of the preliminary act (considered as a whole) do not support the submission made by counsel for the *Hua Sheng Hai*. However, the preliminary act may be of some relevance in assessing the credibility of Captain Antelo Malabe's evidence given that he now says that he saw the *Hua Sheng Hai* at about seven miles.

Findings of fact and fault

155. Having reviewed the evidence, it is now necessary to make findings of fact. It is also necessary to determine whether both vessels were at fault or whether the collision was attributable solely to one of the parties. For this purpose, I deal, first, with the *Kirrixki,* following which I will address the position of the *Hua Sheng Hai*. For the reasons discussed in paras. 156 to 183 below, I have come to the conclusion that there was fault on the part of the *Kirrixi.* Similarly, for the reasons discussed in paras. 209 to 214 below, I have also found that there was fault on the part of the *Hua Sheng Hai.* For that reason, it will be necessary to address the apportionment of fault and I address that question in paras. 216 to 229 below.

There was fault on the part of the *Kirrixki*

156. There can be no dispute that there was fault on the part of the *Kirrixki*. Captain Antelo Malabe has accepted that he did not keep a look-out. That is one of the most basic requirements that a mariner must fulfil. That is common sense but it is also a legal obligation. Rule 5 of the Collision Regulations makes that clear. The text of Rule 5 has already been quoted in para. 18 above. It expressly requires *"every vessel"* to keep a proper look-out not just by sight and hearing but by all available means. There is no exemption for fishing vessels. Rule 5 also expressly requires that the look-out should be maintained *"at all times".* There is no exemption for those involved in the process of casting the nets or in fishing operations. Moreover, while Captain Antelo Malabe stressed that he was fully occupied in the process of lowering the nets and related gear into the water, it must be kept in mind that, even if that could provide some excuse (which it does not), the trawler had a crew of 10 and no explanation has been given as to why at least one crewman was not keeping, at the very least, a look-out by sight.

157. Unsurprisingly, this failure on the part of the *Kirrixki* was readily acknowledged by Captain Walton. The relevant exchange between Captain Walton and counsel for the *Hua Sheng Hai* is replicated in para. 145 above. Captain Walton, very properly, accepted that the failure to keep a look out was a fundamental breach of a professional mariner's duty. He also accepted that the requirement to keep a look-out is *"the most important part of being a deck officer all the way up to being a skipper"* and that *"it is a vital part of it, that is the whole job, that is the whole reason you're there".* This evidence of an experienced and expert mariner is also relevant in the context of Rule 2(a) which provides that nothing in the Collision Regulations shall exonerate a vessel from the consequences of neglecting to take a precaution which may be required by the ordinary practice of seamen.

158. It cannot be denied that this fundamental failure to keep any look-out at all was, at minimum, a major cause of the collision. As counsel for the *Hua Sheng Hai* noted, in their closing written legal submissions, this follows from what Captain Antelo Malabe himself said in his witness statement. As noted in para. 60 above, the skipper stated: *"I was focused on the trawling operations and did not see the Chinese vessel at any point.* ***Had I seen the vessel I would have slowed down or tried to alter course****. I did not however see the vessel."*[10] As counsel observed, the skipper never saw the *Hua Sheng Hai* because he never looked. Had he looked, it is clear from appendix E to Captain Simpson's report (addressed in para. 86 above) that the green sidelight on the starboard side of the *Hua Sheng Hai* would have been visible from as early as 23:21:08 when the *Kirrixki* was still drifting. Appendix E shows that the green sidelight of the *Hua Sheng Hai* remained visible to the *Kirrixki* from then until the collision. No one has questioned the analysis contained in Appendix E. Thus, had a look-out been posted on the trawler, the presence and direction of the *Hua Sheng Hai* would have been noted by the *Kirrixki* and it could therefore have decided either to defer its north-westerly course until the *Hua Sheng Hai* had safely passed or have taken a different course entirely. There was no evidence that the *Kirrixki* needed to take a north-westerly course.

159. The failure to keep a look-out is not confined to a failure to do so by sight. It extends also to a failure to use the radar equipment on board the *Kirrixki* to monitor the presence of other vessels in the vicinity. Rule 5 provides that, in addition to hearing and sight, a vessel must also use all available means appropriate in the circumstances so as to make a full appraisal of the risk of collision. This requirement is supplemented and reinforced by Rule 7(b) which requires vessels to make proper use of radar equipment on board in order to obtain early warning of the risk of collision and in order to

[10] Emphasis added

undertake radar plotting of detected objects. The *Kirrixki* was equipped with a radar (as it was required to be). The radar and the AIS on board could also be set to alarm mode triggering the sounding of an alarm when another vessel approached. Yet, Captain Antelo Malabe did not bother to make use of the alarms or the radar itself even though he accepted that the *Hua Sheng Hai* had been picked up by the *Kirrixki's* radar at a distance of 15 miles. Instead, he was arrogantly dismissive of the utility of the radar alarm notwithstanding its ready availability on board. He laughed when counsel for the *Hua Sheng Hai* first brought up the use of the radar in cross-examination. His explanation for not setting a radar alarm was that the bridge would sound like a *"disco"*. He maintained, for example, that the weather could trigger it. That unsubstantiated suggestion was roundly rejected by Captain Simpson and I accept his expert view that a firm echo from a vessel would be required to trigger the alarm.

160. Furthermore, although Captain Antelo Malabe accepted that the alarm was normally set at 12 miles, he did not engage it on this occasion and no convincing explanation has been advanced explaining why he did not do so. For completeness, it should be noted that, in his report, Mr. Jackson (who inspected the *Kirrixki* before the fire) identified that there were two radars on board and an AIS system. The older radar could not be used for plotting but the Philips X Band radar on board enabled the user to set an alarm for the CPA of automatically acquired targets, in which case, an audible alarm would give warning of an approaching vessel. The AIS on board was a Furuno Universal AIS FA 150 which allowed the user to set an alarm for the CPA of a target vessel with a range from zero to 6 miles, in which case an audible warning would sound where another vessel enters inside the limit set by the user. One can immediately see the utility of this equipment. Not only was there a failure to utilise the alarms but there was an even more fundamental failure to check the radar before moving from a near

stationary position (as the trawler was drifting) to a north-westerly course at a significant speed. In my view, the failures of the *Kirrixki* to check the radar or to the make use of this equipment to provide a warning of an approaching vessel both constituted clear breaches of Rules 5 and 7(b) and they were, very obviously, contributing factors to the collision. This was acknowledged by Captain Walton who agreed with counsel for the *Hua Sheng Hai* that the *Kirrixki* could have avoided the collision if the skipper had checked the radar or the AIS or set a proximity alarm on either the AIS or the radar. In this context, Captain Antelo Malabe is also condemned by his own words. In response to a question about the non-use of the alarms in the course of his cross-examination on Day 4, he rather sarcastically said: *"Yes, and I could have turned on the AIS and I could have put … my crew on the bow looking at the Chinese vessel"*. While, he may have intended to be sarcastic, his words very strongly point up his failure to use all available means to determine if a risk of collision existed. Instead, he blithely ignored the risk and, in manifest breach of a mariner's duty under the Collision Rules, he left it entirely to other vessels to keep a look-out and take evasive action.

161. The fault on the part of the *Kirrixki* does not end there. In my view, the *Kirrixki* was also plainly at fault in the manner in which it suddenly, after a period of drifting and a brief period at a slow speed in a different direction, accelerated sharply and turned onto a north-westerly course in the minutes before the collision. Thus, even if the trawler was entitled to priority, this would amount to a breach of Rule 17(a) under which a vessel which has priority over another is required to keep its course and speed. In this context, the following facts emerge from the evidence: It is clear from the evidence of Captain Antelo Malabe that, in the course of the evening of 11th October 2019, a problem arose with the engine of the trawler. While work was done to the engine, the

trawler was drifting. According to Captain Antelo Malabe, he turned on the red *"Not under command"* lights for the duration on the work. This is disputed by the *Hua Sheng Hai.* It is contended on its behalf that the trawler was not equipped with such lights. However, when he inspected the *Kirrixki* soon after the collision, Mr. Jackson did not investigate whether the trawler was equipped with such lights and, for that reason, there is no direct evidence that the trawler was not equipped with such lights. Nevertheless, in light of the conclusions that I reach below in relation to the unreliability of other aspects of Captain Antelo Malabe's evidence, I cannot be satisfied, on the balance of probability, that the trawler was showing two red lights while the engine was under repair. After all, the skipper had not shown himself to be conscious of the need to apprise other vessels of the trawler's activities. He had not adjusted the AIS on board to transmit information as to the true status of the trawler. As previously noted, the wrong information was being transmitted by the AIS of the *Kirrixki,* during this period of drifting, that the trawler was underway. All of that said, it should have been observable by the *Hua Sheng Hai* that the *Kirrixki* was drifting. It is clear from the evidence of Captain Simpson that the lack of an image of any wake from the *Kirrixki* (as represented on the radar screen of the *Hua Sheng Hai*) would have alerted the officer of the watch on the *Hua Sheng Hai* (had he been paying attention) to the fact that the trawler was drifting.

162. While Captain Antelo Malabe was unable to recall for how long the trawler was drifting, the AIS data transmitted by the *Kirrixki* demonstrates that, up to at least, 23:42:37, the speed over the ground of the trawler was less than 1 knot. The experts agreed that, at that speed, the trawler was unlikely to be under power. As noted in para. 101 above, Captain Simpson expressed the view that, based on the AIS data, the *Kirrixki* had been drifting for about 40 minutes. He also took the view that by 23:43:09,

the trawler was back under power. Captain Walton considered that this occurred 10 seconds earlier at 23:42:59. The collision plot chart shows that the trawler had been drifting in an easterly direction since at least 23.21:08 but, given Captain Simpson's view that it was drifting for 40 minutes, it appears likely that it had been drifting even before that time. Within three minutes after that time, the *Kirrixki* was no more than 5.033 nautical miles from the *Hua Sheng Hai*. This is clear from a radar screen shot of the latter which is timestamped 23:24:01 and which is replicated on p. 25 of Captain Walton's report. The collision plot chart shows that the trawler continued to drift in a roughly easterly direction until about 23:41:59 when its course over the ground changed from 109.60° to 154.80° as the trawler turned to starboard in a south-easterly direction. At that point, its speed was still less than 1 knot which suggests that it was still drifting. Not long afterwards, its speed increased slightly. This is confirmed by the AIS data which records a speed of 1.6 knots at 23:42:48. This indicates that it is likely that some degree of engine power has now been engaged. Thus, while the experts put the time of restarting the engine at 10-20 seconds later, it seems to me to be likely that the trawler was under power from 23:42:48 onwards. Very soon after that, at 23:43:09, the speed had increased to 2.3 knots. Between then and 23:44:56, the trawler turned to starboard in a circular motion, the course over the ground moving from 112°.3 to 298° and the heading moving from 174° to 330° while the speed increased during the same period to 3.5 knots, demonstrating that the trawler was now underway. While the collision plot chart would suggest that the trawler did not pick up significant speed or begin its new north-westerly course until 23:45:09, the underlying AIS data confirms that this occurred a little earlier at 23:44:59. At the latter time, the speed recorded was 7.4 knots, the heading was 330° and the course over the ground was now 335.30°. Thereafter the

course over the ground remained at more than 318°[11] until the moment of the collision and the heading never dipped below 324°. While the speed was not constant during that period, for most of the time it was more than 8.7 knots.

163. In the absence of avoiding action by either or both vessels, this turn to the north-west combined with a significant acceleration in speed, after a period of drifting and a period at a slow speed, put the *Kirrixki* on an inevitable collision course with the *Hua Sheng Hai*. This was very properly acknowledged by Captain Walton. The relevant exchange between him and counsel for the *Hua Sheng Hai* is quoted in para. 145 above. He accepted that the manoeuvre to starboard by the *Kirrixki* that commenced at 23:43:09 was causative of the collision and that *"Fundamentally without that, there would have been no collision".* He also accepted that this turn to the north-west was done without even looking around and that, in the absence of that turn, there would have been no collision. To his credit, Captain Walton readily accepted the proposition put to him by counsel for the *Hua Sheng Hai* that this was *"one of the most fundamental breaches of a… professional mariner's duty."* In addition, he did not dissent from the proposition that: *"not keeping a lookout perhaps is one thing, but performing an almost U turn, and then proceeding to close to maximum speed without ever looking, must be one of the most serious forms of not keeping a lookout there could be."*

164. In my view, this evidence is particularly helpful, coming as it does from an experienced and expert mariner called as a witness by the *Kirixxki.* It is very clear evidence that the manoeuvre adopted by the skipper of the *Kirrixki* was an unacceptable breach of the requirements of good seamanship. In my view, that is so even if it be the case that the *Kirrixki* was the stand-on vessel within the meaning of the Collision Regulations to which the *Hua Sheng Hai* would ordinarily be required to give way.

[11] For most of the time, it was more than 323°.

Rule 17(a) makes this clear. It requires the vessel with priority to maintain its course and speed. Accordingly, such a vessel is not entitled to expect that, when it is within a short range from a give-way vessel, it can start from a near stationary position or take a sudden turn that puts it on a collision course with the give-way vessel. That is well illustrated by the approach taken in both the *The Tojo Maru* and *The Forest Pioneer* (which I discuss below in the context of apportioning fault). But, even in the absence of authority, I think the same conclusion would have to be reached on the basis of the complete failure of the skipper of the *Kirrixki* to take any account of the presence of the *Hua Sheng Hai* before executing this manoeuvre. That seems to me to be a very obvious example of atrociously bad seamanship which well qualifies as negligence for the purposes of the law of torts.

165. That leads in turn to the next relevant issue in the context of the findings to be made in relation to the *Kirrixki.* There is a significant dispute between the parties as to whether the *Kirrixki* is entitled to be treated as the stand-on vessel for the purposes of the Collision Regulations. In particular, the *Hua Sheng Hai* strongly contests the veracity of the evidence of Captain Antelo Malabe that, in the minutes before the collision, the *Kirrixki* was engaged in lowering of the nets and related gear into the water. On that basis, the *Hua Sheng Hai* does not accept that the *Kirrixki* was either engaged in fishing within the meaning of Rule 3(d) or restricted in its ability to manoeuvre within the meaning of Rule 3(g). The case has been made on behalf of the *Hua Sheng Hai* that the evidence of Captain Antelo Malabe cannot be reconciled with the objective evidence derived from the AIS data transmitted by the trawler. It is contended that the speeds of the *Kirrixki* in the minutes before the collision were simply too fast to allow a trawler to undertake the various phases involved in the process of deploying its nets and the other elements of its fishing gear. It is also contended that

there was insufficient time to do so in the interval between the moment the trawler struck on a steady north-westerly heading and the moment of the collision. In this context, it should be recalled that both parties agreed that one could only start that process when the trawler is capable of proceeding forward in a relatively straight course. Thus, the *Kirrixki* could not have been so engaged until it came out of the turn described above and started to pick up speed at 23:44:59. As noted in para. 62 above, Captain Antelo Malabe said that, at the moment of the collision, the trawler was in the course of letting the trawl doors and cable into the water. That is one of the later stages of the process of lowering the nets and gear into the water. That begs the question: could the *Kirrixki* have got to that stage in the process within the period between 23:44:59 and 23:51:05 when the collision occurred? Could it have done so at the speeds recorded at 41 specific points of time at roughly 10 second intervals within that period?

166. In order to assess the parties' respective positions on this issue, I believe it is useful to consider what occurred in the earlier part of the day on 11th October 2019. There is no dispute between the parties that, in the course of the earlier part of the evening of 11th October 2019, the *Kirrixki* was engaged in fishing. This was expressly accepted by Captain Antelo Malabe on Day 4. In circumstances, where there is no doubt that the trawler had undertaken the process of casting its nets and related gear at that time in order to commence fishing, the pattern of behaviour of the *Kirrixki*, during this time, provides a useful baseline against which to assess its behaviour in the period immediately prior to the collision.

167. The pattern of behaviour is apparent from the AIS data transmitted by the trawler. I have been provided with a table of the data showing the heading, the speed over the ground and the course over the ground of the trawler in respect of the period beginning at 12:03:51 on 11th October 2019 when it was docked in Dingle. While all of

this data was not put to Captain Antelo Malabe in the course of cross-examination, the data represents an objective record of these aspects of the trawler's behaviour on the day of the collision and the *Kirrixki's* expert, Captain Walton, agreed that GPS data (from which the data transmitted by the trawler's AIS is derived) is accurate 95% of the time. For that reason, I do not believe that Captain Antelo Malabe could realistically have disputed this data even if every detail of it had been put to him. Moreover, just as Captain Simpson was recalled, the owners of the *Kirrixki* could equally have applied to recall Captain Antelo Malabe. No such application was made.

168. The AIS data shows that the trawler started to move from Dingle at about 14:29:24. By 14:42:37, it had reached a speed[12] of 8.7 knots and, with one exception when the speed dropped to 7.8 knots at 17:21:10, it maintained a speed of more than 8 knots from then until 17:53:17 when the speed dropped to 7 knots and reduced further thereafter in the manner described below. It is therefore very clear that up to 17:53:17, it was neither fishing nor attempting to cast the nets. The evidence of both parties suggests that the speed would have to drop to somewhere in the region of 4 to 5 knots in order to start the process of casting the nets and related gear.

169. As recounted in paras. 119 to 121 above, a subset of this data (in respect of the period between 17:46:15 and 18:18:23) was analysed by Captain McGettigan who was the only expert witness to give evidence with the benefit of experience and expertise in trawling. As noted in para. 119, the trawler left Irish territorial waters at approximately 18:00:18. Once outside territorial waters, it was lawful for the trawler to commence fishing. Prior to that time, the trawler began to slow down from a speed that, in the period from 17:46:15 to 17:52:17, varied between 8 and 8.5 knots. Over the course of the next five minutes, the speed decreased, such that, at, 17: 53:17, the speed was 7

[12] All these speeds are speed over the ground.

knots and, at 17:57:18, the speed was recorded at 5.4 knots. That speed is consistent with what both Captain Antelo Malabe and Captain McGettigan suggested would be applied when a trawler is releasing the cod end of the net (or the *"sack"* as Captain Antelo Malabe described it) into the water. As noted in para. 57 above, Captain Antelo Malabe estimated the speed for that task as *"4 or 5 miles"*[13] while Captain McGettigan (as recorded in para. 110 above) suggested that a speed of 5 knots would be normal. Captain McGettigan also said that this first phase would take between four and five minutes. The AIS data demonstrates that, in the five-minute period between 17:57:18 and 18:02.19, the speed of the trawler was in the range 3.4 knots to 5.4 knots. Conscious of Captain Simpson's evidence that the speeds recorded on the AIS are no more than snapshots taken from the GPS at specific intervals, I believe that, in order to get a sense of the overall speed during this period, it is preferable to take an average of each of the speeds recorded (roughly at one minute intervals). By my calculation, the average over that period[14] is 4.8 knots which is reasonably consistent with the evidence of both Captain Antelo Malabe and Captain McGettigan. Both the speed and the time involved are consistent with the evidence I heard in relation to the first phase of the process of uncoiling the nets and lowering the nets and related gear into the water.

170. The AIS data then shows the speed of the trawler slowing to 4.4 knots at 18:03:19 and 2.2 knots at 18:04:20 and slowing further to 1.4 knots at 18:05:20, following which a speed of 1.3 knots was recorded at both 18:06:20 and 18:07:20. The speed of the trawler did not begin to pick up again until 18:08:20 when a speed of 4.4 knots was recorded. Taking the opening and closing speeds of 4.4 knots as the outer limits of this period, this phase lasted for something less than five minutes. Based on

[13] While the skipper spoke of *"miles",* it seems likely that he meant knots.
[14] This is based on individual readings of 5.4, 4.3, 3.4, 4.7, 5.6 and 5.4 knots at roughly one-minute intervals during this period.

the evidence which I have heard, this period should coincide with the next phases of the operation namely the hooking of the sweeps to the wings of the net and the lowering of the net into the water. These two processes coincide with phases 2 and 3 as described by Captain McGettigan in paras. 110 to 112 above. As noted in para. 112, Captain McGettigan estimated that a trawler would slow to a speed of 2 knots for this purpose. As further noted in para. 61, Captain Antelo Malabe said that a speed of 2.3 knots would be right for the purpose of hooking the sweeps. That coincides quite closely with the speed of 2.2 knots at 18:04:20 but there would also be no reason why that operation could not also be done at the slower speeds of less than 2 knots shown at three points during that period. As noted in para. 66, the skipper described the hooking operation as a very fast process. This is also consistent with the evidence of Captain McGettigan who, as stated in para. 112 above, said that this process would take about 30 seconds. Captain Antelo Malabe also said (as recorded in para. 58 above) that, when lowering the nets into the water, the trawler would proceed at a speed of *"2 - just under 3 miles"* but that, then the trawler would increase speed to *"6 miles"*. As mentioned in para. 111 above, Captain McGettigan said that a safe speed for this phase of the process would be 4 to 5 knots. However, there is nothing in Captain McGettigan's evidence to suggest that the lower speeds suggested by Captain Antelo Malabe for this part of the process are either unreliable or inappropriate. The speeds suggested by Captain Antelo Malabe are higher than the speeds shown for most of the timestamps within this 5-minute period but if one averages the speed over that period, they are not dissimilar. By my calculation, the average speed during this period is 2.5 knots.[15] The period in question is somewhat shorter than the six-to-seven-minute timespan estimated by Captain

[15] This is based on an average of each of the timestamped snapshots of speed at one minute intervals during the period of 4.4, 2.2, 1.4, 1.3, 1.3 and 4.4 knots.

McGettigan but, on Day 7, he accepted that *"this was a very approximate figure".* It is, therefore, not surprising that the period shown in the table of AIS data is shorter.

171. The next phase in the process is the unwinding of the sweeps. This coincides with phase 4 of the process described by Captain McGettigan. As noted in para. 58 above, Captain Antelo Malabe suggested that, for this purpose, the trawler would proceed at a speed of between 4 and 6 *"miles"* until there is 50 metres of cable left, at which point, he would reduce speed to 3 or 4 knots. As further noted in para. 114 above, Captain McGettigan suggested that, for this phase of the process, a speed of 5 knots (approximately) would be appropriate. He also suggested that the phase could last between four and eight minutes. The speeds suggested by both witnesses are not out of kilter with the speeds shown in the table of AIS data which records a speed of 5.3 knots at 18.09:21, a speed of 5 knots one minute later and a speed of 5.1 knots at each of 18:11:21 and 18:12:21. One minute later, the speed had reduced to 4.6 knots. While the time period is shorter than that suggested by Captain McGettigan, I bear in mind that part of this phase may have begun slightly before 18:09:21 and may have continued a little beyond 18:12:21. For that reason, the time period seems to be reasonably close to the lower end of the range estimated by Captain McGettigan while the speed is broadly consistent with the estimates given by both witnesses. The way in which the speed then drops to 4.6 knots at 18:13:22, 4.5 knots at 18:14:22, 4.3 knots at 18:15:22 and 3.4 knots at 18:16:22 is also consistent with Captain Malabe's evidence that, when there is 50 metres of cable left, he would drop the speed to 3 or 4 knots.

172. Consistent with the evidence of both witnesses, the next phase of the operation consists of the manual attachment of the trawl doors to the sweeps, at one end, and to the warp wire (which keeps them attached to the trawler) at the other. Both witnesses emphasised that the process of attaching the doors to these cables or wires needs to be

done at a slow speed. Captain Antelo Malabe also suggested that, similarly, the lowering of the doors into the water also required to be done at a relatively slow speed; as noted in para. 58 above, he suggested that, otherwise, a crew member could be injured. In so far as I can see, Captain Antelo Malabe did not provide an estimate of speed for this purpose but Captain McGettigan said that 2-3 knots would be appropriate. That estimate is consistent with the speed of 3.1 knots recorded at each of 18:17:22, 18:18:23 and 18:19:23.

173. Curiously, although both witnesses emphasised that, after the doors are lowered into the water, a trawler would then pick up speed for a period, there is no evidence of that in the AIS data. Instead, the data shows that 18:21:23, the trawler settled into a relatively constant speed of 3.2 knots which is very close to the speed which both witnesses had characterised in their evidence as a normal trawling speed. Although both men said that a trawler would pick up speed at this point, there was a very significant difference between them as to the extent to which a trawler would pick up speed. Captain Antelo Malabe initially contended that, depending on the weather conditions, he would increase speed to between 6 and 8 knots. But, later, when asked what the *Kirrixki* was doing at 23:47 (when a speed of 9.4 knots was recorded), he contended that they must have been letting the doors into the water – which is also what he said was going on at the moment of the collision approximately four minutes later. This was strongly contested by Captain McGettigan who said that it would be very dangerous to proceed at that speed for that phase of the process. Captain McGettigan also estimated that after lowering the doors into the water, a trawler would increase speed to 5 knots before settling into a normal trawling speed.

174. As I have said, it is curious that the pattern of activity in the early part of the evening does not show an increase in speed before the *Kirrixki* settled into a steady

trawling speed. I am also conscious that my analysis of the speeds over the course of the time between 17:53:17 and 18:21:23 may not precisely match each of the individual phases of the process carried out by the trawler during that period. Nonetheless, there are a number of features of the data that are, in my view, highly significant. In the first place, it is clear that, until the trawler began to slow down at 17:53:17 from speeds in excess of 8 knots, the process of casting the nets and the gear could not have begun. That is clear from the evidence of both witnesses. Second, between 17:54:17 and 17:57:18, the recorded speed did not exceed 6 knots and did not fall below 5 knots. Third, between 17:58:18 and 17:59:18, the recorded speed did not exceed 4.3 knots and did not fall below 3.4 knots. Fourth, between 18:00:18 and 18:02:19, the recorded speed did not exceed 5.6 knots and did not fall below 5.4 knots. Fifth, between 18:03:19 and 18:08:20, the recorded speed did not exceed 4.4 knots and did not fall below 1.3 knots. Sixth, between 18:09:21 and 18:12:21, the speed varied slightly between 5 knots and 5.3 knots. Seventh, between 18:13:22 and 18:16:22, the speed varied slightly between 4.4 and 4.6 knots. Eighth, by 18:16:22, the speed had reduced to 3.4 knots and over the next few minutes it alternated between 3.1 and 3.3 knots before settling into a speed of 3.2 knots at 18:21:23 which, while it varied slightly from time to time thereafter, was maintained for several hours afterwards. If one discounts the period up to 17:54:17 when the trawler was slowing down, the pattern that emerges is a speed of 5 to 6 knots for a period of 3 minutes, followed by 1 minute at between 3.4 and 4.3 knots, followed by a 2 minute period at between 5.4 and 5.6 knots, followed by 5 minutes at speeds between 1.3 and 4.4 knots, followed by a 3 minute period between 5 and 5.3 knots followed, in turn, by a period of 3 minutes at speeds between 4.4 and 4.6 knots before the trawler slowed to a normal trawling speed.

175. In contrast to the pattern described above, there is nothing similar in the minutes which elapsed between the *Kirrixki* coming out of the turn, at 23:44:59, and the moment when both vessels collided at either 23:51:04 or 23:51:05 which was, at most, a 6 minute 6 second period. As previously explained, if engaged in casting its nets and related gear, the trawler would not have started the process until it came out of the turn and started on a steady north-westerly course. For that reason, I reject the suggestion made by counsel for the *Kirrixki* in their closing written submissions, that the relevant period should be taken to begin at 23:42:48 when the speed of the *Kirrixki* reached 1.6 knots. That could not be right because immediately afterwards, the trawler started to turn to starboard in the looping movement that brought it, at 23:44:59 onto the north westerly course that led to the collision. The table of AIS data prepared by Solis Marine Consultants illustrates this very well. It shows the heading of the trawler moving from 174° at 23:43:09 to 330° at 23:44:59 and the course over the ground moving in the same period from 122.3° to 335.3°. Thus, the process could not have started until the trawler came out of that fairly dramatic turn. Crucially, at no time, in the period from 23:44:59 to the collision, is there a speed of less than 5.6 knots recorded. That speed is recorded on only one occasion namely at 23:45:29. Between 23:44:59 and 23:45:15 (which is only a 16 second period), the recorded speed varies between 6.6 and 7.8 knots. Four seconds later, at 23:45:19, it had increased to 8.8 knots only to drop to 5.6 knots at 23:45:29 following which it increased over the next number of recorded speeds between 23:45:37 and 23:46:28 from 6.2 knots to 8 knots (i.e. in less than a minute). From then until the collision (which is roughly a 4 minute 36 second period), the recorded speed shown at roughly 10 second intervals never dropped below 8 knots and frequently exceeded 9 knots (which are consistent with the speeds seen in the period between 14:43:37 and 17:52:17 when the trawler was steaming towards the fishing zone). They

are completely at odds with the pattern and level of the speeds discussed in para. 174 above. The vast majority of the 6 minute 6 second period is at speeds of more than 8 knots (and often at more than 9 knots) which are not reached at any time in the 18 minute period between 17:54:17 and 18.12:21. At no time during the 6.6 minute period before the collision are speeds as low as 1.3, 3.4, 4.3, 4.4, 4.6, 5, 5.3 or 5.4 knots recorded notwithstanding that they had been recorded for most of the 18 minute period during the earlier part of the evening. These very significant differences in speed plainly cannot be attributed to the fact that some of the speeds may have been taken as the trawler rode down a wave (which might show some increase in speed) while others were taken as it sought to ride up a wave (which might show some decrease in speed). In my view, the recorded speeds in the 6 minute 6 second period before the collision are so out of kilter with the speeds recorded between 17:54:17 and 18:21:23 that they strongly suggest that the *Kirrixki* was not engaged in casting its nets and related gear into the water at the time of the collision and, accordingly, should not have been showing its green and white lights at that time. The recorded speeds are much more consistent with the trawler steaming ahead to a different part of the fishing zone to resume fishing operations.

176. This conclusion is reinforced by a consideration of one further significant point of difference between the behaviour of the *Kirrixki* in the early evening period and its subsequent behaviour in the period prior to the collision when, according to its skipper, it was on autopilot. As outlined in para. 121 above, there was very little deviation in the heading of the trawler in the minutes prior to the collision. This is consistent with the trawler being on autopilot during that time. As noted in para. 81 above, Captain Simpson went so far as to suggest that the track of the trawler from 23:46:09 onwards was *"impossibly straight"* for a vessel under manual steerage. Looking at the table of

data prepared by Solis Marine Consultants from the AIS readings transmitted by the *Kirrixki*, it can be seen that, during this period, the heading of the trawler never changed more than 2° from one point in time to the next and that, frequently, the change in heading recorded was no more than 1°. In fact, there was no change at all in the heading at some points during this period.

177. In contrast, as noted in para. 120 above, the changes in heading during the early part of the evening (when the trawler was first casting its nets) are more marked. According to Captain McGettigan, this indicates that the trawler was under manual steering at that time which he explained would be necessary to ensure that small moves could be made to port or starboard (as the case might be) in order to assist the crew in releasing jams or entanglements in the net. The relevant AIS data (which Captain McGettigan highlighted) are summarised in para. 119 above The data shows that, during the early evening period, there was a variation of 4° between 17:55:17 and 17:56:18; there was a variation of 12° between the latter time and 17:57:18: a further variation of 4° at 17:58:18 and another 4° one minute later; the heading was reduced by 4° at 18:01:19 but 3 minutes later it increased by 8°. While none of those changes in heading significantly altered the course of the trawler (the course over the ground varied from 265° to 278° during that period before settling into a fairly constant 276° or thereabouts at 18:09:21), the variations in heading are markedly different to the very slight variations shown in the 6 minute 6 second period before the collision. They are also dramatically different to the changes in heading which preceded the 6 minute 6 second period before the collision when the trawler's heading moved all the way around from 171° to 330° in the space of two minutes and its course over the ground swung from 112°.2 to 335°.3.

178. The marked differences in behaviour of the trawler, as described in paras. 176 to 177 above, add considerable weight to the conclusion that it was not engaged in the same activity in the period before the collision as it was earlier in the evening when both sides agree that it was casting its nets and associated gear into the water in order to commence fishing operations. I am further reinforced in my view by the many inconsistencies that exist in the case made by the *Kirrixki* at different stages of the chronology. Thus, as noted in para. 68 above, when Mr. Niall O'Hara inspected the trawler on behalf of its insurers, on 14th October 2019 (within 3 days of the collision), he recorded that he was told by Captain Antelo Malabe that, at the time of the collision the trawler was *"preparing to shoot nets".* A similar statement was contained in the report of Mr. Paul Rossiter (a claims investigator appointed by insurers) who inspected the vessel six days after the collision and who also spoke with the skipper. I appreciate that there may have been language difficulties and I am conscious that there was no professional interpreter present but it is still puzzling that, if it were the case that the process of shooting the nets had already commenced at the moment of the collision, two experienced professional people who spoke with the skipper on two separate occasions would both come away with the same understanding that the trawler was only preparing to shoot its nets.

179. The inconsistencies do not end there. In addition, there is the very significant inconsistency between the response to para. 5 (a) of a request for particulars served on behalf of the *Hua Sheng Hai* (where it was said that the skipper saw the ship *"a few miles ahead"*) and the witness statement of Captain Antelo Malabe (where he said in unqualified terms that he did not see the *Hua Sheng Hai* at any point) which, in turn, is inconsistent with his oral evidence (where he said that he had seen it at 7 miles and assumed that it would manoeuvre to avoid the trawler). It is also difficult to reconcile

the evidence that he had seen the *Hua Sheng Hai* with the terms of the preliminary act which, as noted in para. 154 above, suggests that the ship was not seen until after the collision.

180. There is also the very obvious inconsistency between the response given on behalf of the *Kirrixki* to para. 5(j) of the request for particulars and the evidence given by Captain Antelo Malabe in relation to the manner in which the trawler was steered in the period between 23:44 and 23:50 on the night of the collision (i.e. the period during which the skipper claims he was shooting the nets). In para. 5(j) of the request for particulars, the *Kirrixki* was specifically asked if it was steered by autopilot in that period. In contrast to the oral evidence of Captain Antelo Malabe that the trawler was on autopilot during that period, the answer given to para. 5(j) of the request for particulars was in the following terms: *"The MFV was now engaged in fishing and* ***therefore needed to be manually steered to stream the lines and net*** *and commence fishing on a set course with little deviation and reduced manoeuvrability."* (emphasis added). Not only is that answer inconsistent with the oral evidence of Captain Antelo Malabe, but it is also completely inconsistent with the notion propagated by him that the process of casting the nets and associated gear could be done on autopilot. The answer is also entirely on all fours with the evidence given by Captain McGettigan that the process of casting nets requires to be undertaken on manual steering.

181. In all of the circumstances outlined in paras. 165 to 180 above, I have come to the conclusion that the *Kirrixki* was not engaged in the process of casting its nets or related gear into the water in the period immediately leading up to the collision. On the contrary, I am satisfied, on the balance of probabilities, that the *Kirrixki* was, instead, steaming towards a different location in the fishing zone to recommence fishing operations there. In my view, the evidence to the contrary given by Captain Antelo

Malabe is inherently unreliable. There is no objective evidence available to support his version of events. Nor was any of the trawler's crew called to give evidence. While counsel for the *Kirrixki* sought to suggest that Captain McGettigan had gone so far as to agree with the skipper's evidence, I do not believe that there is any support for that contention in Captain McGettigan's evidence. It is quite clear that Captain McGettigan strongly disputed the evidence given by the skipper. In my view, counsel for the *Kirrixki* are mistaken in their reliance on a few words taken out of context where the expert said: *"I can't dispute his evidence. He gave his evidence like".* Recalling Captain McGettigan's tone and demeanour, I did not view this as an acknowledgement that he accepted the skipper's evidence as true. On the contrary, I understood Captain McGettigan to doubt the veracity of the skipper's evidence. At best from the *Kirrixki's* perspective, this is simply a statement that Captain McGettigan could not dispute that this was the evidence the skipper gave. In no sense, was it an acknowledgment that the evidence was true.

182. For completeness, I should address the argument made in the closing submissions of counsel for the *Kirrixki* that it is implausible that the trawler was speeding toward another fishing ground. First, they argued that he was already in a fishing ground. Next, they argued that, against the backdrop of Mr. Jackson's evidence that he had been told that the skipper was facing the stern at the time of the collision, such a move would be a *"kamikaze type of action for the skipper to propel forward straight into the HSH if he was facing the bow."* I do not believe that the first of those contentions carries any weight. Any consideration of fishing zone 7.j.2 shows that it covers a very large area of the sea. Within it, there may well be pockets that are, for one reason or another, considered to be more favourable than others. Having already fished

at one point in the fishing zone, it would not be surprising if a skipper of a trawler decided to put some distance between that location and the next.

183. In light of the evidence that the trawler was on autopilot at the time of the collision and the casual manner in which the skipper treated the obligation to keep a look-out, I do not believe that there is any substance in the second suggestion made by counsel for the *Kirrixki*. Regrettably, the skipper appears to have regarded it as everyone else's responsibility to keep a look-out and that he was not obliged to do so. As I have found, he was plainly prepared to proceed ahead at almost full speed without keeping a look-out. Counsel are right to characterise this as kamikaze action but this was, by the skipper's own admission, precisely what happened on the night of 11th October 2019.

184. There are a number of other allegations made on behalf of the *Hua Sheng Hai* against the *Kirrixki* (including a contention that there was a failure to update the information transmitted by the trawler's AIS) but I do not believe that it is necessary to spend time on them. In my view, they were not significant contributing factors to the cause of the collision. For example, there is no evidence that the officer of the watch on the *Hua Sheng Hai* was misled by the information transmitted by the AIS. As noted previously, Mr. Zhang did not give evidence and I therefore cannot find that any of his actions (or inaction) were prompted by inaccurate information transmitted by the trawler's AIS.

There was also fault on the part of the *Hua Sheng Hai*

185. The *Kirrixki* advanced a number of reasons as to why it contends that the *Hua Sheng Hai* is responsible for the collision. In the first place, it was argued that the *Hua Sheng Hai* caused the collision by ignoring the fact that it was in a fishing zone where it is alleged that trawlers are vulnerable. Counsel for the *Kirrixki* argued by reference

to the decisions in *The Tweesdale* and *The Grovehurst* (discussed below), that a trawler is not obliged to get out of the way of other vessels. It was also submitted that, if the ship had complied with its Master's orders, it would have maintained a distance of two nautical miles rather than one. Had it done so, it was contended that the collision would not have occurred. By resolutely sticking to its course without adjustment for the presence of the *Kirrixki,* it was argued that the ship created a close quarters situation. The case was also made that the crew of the ship failed to keep a consistent and regular look-out. In that context, counsel for the *Kirrixki* highlighted that, although the ship was fitted with sophisticated navigational aids, there is no evidence as to the regularity with which the officer of the watch consulted the radar or used binoculars to assess the risk of collision. Had the crew kept a proper look-out, it was suggested that the crew would, first of all, have seen that the trawler was initially displaying the red not-under-command lights and, later, that it was displaying the green and white fishing lights such as to make the ship the give-way vessel for the purposes of the Collision Regulations. It was also submitted that, if a proper look-out had been maintained, the ship would have taken avoiding action at a much earlier time than the moment when the ship belatedly changed to hand steering and turned 10 degrees to port at 23:49:03 and turned further to port at 23:50:54. It was submitted that, under the Master's orders, the ship should have changed to hand steering when the CPA was predicted to be less than 2 miles.

186. In order to assess the case made by the *Kirrixki,* it is necessary to make some findings of fact in relation to the conduct of the *Hua Sheng Hai* and those on board who were on the watch in the period before the collision. The court does not have the benefit of the evidence of Mr. Zhang, the officer of the watch on the night of 11th October 2019 but both Mr. Xu, the able seaman on duty with him, and Mr. Wang (who was on the

watch before him) both gave evidence. Mr. Wang was on the watch from 20:00 to 24:00 (ship's time) which should equate to 19:00 to 23:00 UTC. As noted in para. 49 above, Mr. Wang said that he saw the *Kirrixki* in the course of the takeover by Mr. Zhang at 22:45. He said that he had seen it both on the radar and with the aid of binoculars and that it appeared to him to be stationary at that time. He also said that he did not know it was a fishing boat. He estimated that the *Kirrixki* was more than 10 nautical miles away and that the CPA was between 3.4 and 4 nautical miles. As noted in para. 49 above, that estimate of CPA appears to be wrong and to be a significant overestimate. The radar screenshots discussed below confirm this.

187. It also appears from the radar screenshot[16] taken from the records of the *Hua Sheng Hai* (which is addressed in paras. 76 and 132 above), that, in fact, the *Kirrixki* had already been acquired as a target by the *Hua Sheng Hai* before the handover of the watch from Mr. Wang to Mr. Zhang. As previously explained in para. 76, acquiring another vessel as a target in this way involves manual intervention by the officer of the watch. Notably, the date and time on the screenshot is *"OCT/11/19 23:23 LOCAL"*. Given that Irish Summer Time continued until the last weekend in October, that local time equates to 22:23 UTC. Both Captain Walton and Captain Simpson were agreed that the precise time at which the screenshot was taken was 22:23:15. That screenshot also demonstrates that the AIS of the *Kirrixki* had informed the *Hua Sheng Hai* that it was a fishing vessel under way and using the engine albeit that the representation of the *Kirrixki* as target *"A"* suggests that, at that point, the *Kirrixki* was already drifting or stationary. As Captain Simpson observed[17], the screenshot does not show the characteristic wake (shown for other vessels displayed on the screen) that signifies a

[16] The screenshot is replicated in Figure 7 on p. 15 of Captain Simpson's first report. It also appears as Figure 11 in Captain Walton's first report.
[17] See para. 101 above.

vessel underway and he acknowledged that this would be observable by the officer of the watch. The screenshot also shows that the radar of the *Hua Sheng Hai* had calculated the distance between both vessels at 15.1 nautical miles. It also predicted a CPA of 0.873 nautical miles and a TCPA of 86 minutes 30 seconds which would equate to 23:49:45. The screenshot shows that, if the *Hua Sheng Hai* continued on its existing course, it would pass the *Kirrixki* at a distance of less than 1 nautical mile. That CPA is less than either that recommended in the master's standing orders described in para. 44 above or in the COSCO Ship Management System described in para. 47 above. However, it is clear from the expert evidence on both sides that, at a range of 15.1 nautical miles, there was no reason, at that point, to consider altering course.

188. It is also clear that, as outlined in para. 76 above, the *Kirrixki* was still being treated as a target at 23:07. A radar screenshot at that time confirms this. That screenshot also shows that, by that time, a second target had been acquired namely a fishing vessel called the *Nuevo Confurco.* In contrast to the AIS information transmitted by the *Kirrixki,* the AIS of the additional target was transmitting information that it was engaged in fishing. The screenshot displays a wake behind the new target but shows none behind the *Kirixki.* At that point, as the screenshot shows, the distance between the *Hua Sheng Hai* and the *Kirrixki* had reduced to 7.78 nautical miles, the CPA was now 1.053 nautical miles and the TCPA was 46 minutes 29 seconds.

189. By 23:24:01, the distance between the *Hua Sheng Hai* and the *Kirrixki* had reduced to 5.033 nautical miles, the CPA was now 1.078 nautical miles and the TCPA was now predicted to be 29 minutes 26 seconds away. Again, this is clear from a radar screenshot which is reproduced as Figure 12 in Captain Walton's first report. At that point, the *Kirrixki* was still not displaying a wake. The experts are agreed that, by this time, the *Kirrixki* was visible without binoculars to the *Hua Sheng Hai* albeit that, as

noted in para. 102 above, Captain Simpson said that binoculars would have given greater definition. The fact that the vessels were now in sight of each other means that the application of the rules in s. II of Part B of the Collision Regulations (discussed in paras. 24 to 30 above) was now triggered. According to Captain Walton,[18] now that the vessels were in sight of one another, the officer of the watch on the *Hua Sheng Hai* should have attempted to ascertain the status of the *Kirrixki.* He also said that the officer should, in accordance with standing orders, have called the master. While Captain Simpson acknowledged that he should have called the master, he highlighted that the *Kirrixki* was drifting and that the CPA was increasing. He also expressed the view that no risk of collision was developing at that time unless the trawler picked up speed and changed course.

190. In circumstances where Mr. Zhang did not give evidence, I do not know what assessment he may have made (if any) at the time the vessels came within sight of each other. I have the evidence of Mr. Xu but he was not qualified to make the kind of assessments that fall to be made by an officer of the watch. That said, his evidence is sufficient to allow some factual findings to be made. It is clear from his evidence on Day 2 that, although he is not qualified to monitor the radar, he nonetheless observed the *Kirrixki* on the radar screen when it was about 10 miles away when he said that it was stationary. Notwithstanding his lack of qualifications, his evidence to that effect is unsurprising. The screenshots taken from the radar screen of the *Hua Sheng Hai* are very clear and any reasonably observant lay person would be able to recognise the track of the *Hua Sheng Hai* and the relative position of any other vessels shown on the screen from time to time. Given the way in which the screen represents the wake of moving vessels, it is also reasonable to conclude that such a person would also be able to tell

[18] See para. 5.2.13 of his first report.

whether or not any of the vessels shown on screen were stationary. Moreover, the movement of vessels shown on screen would itself be observable over time. In light of the screenshots discussed in paras. 187 and 188 above (which were taken at either side of 10 nautical miles), we know that the *Kirrixi* was still drifting at a distance of 10 nautical miles. Thus, I have no difficulty in accepting Mr. Xu's evidence that the *Kirrixki* was seen by him on the radar screen at a distance of 10 nautical miles. That would have occurred at some point between 22.23 (when the first of those screenshots was taken) and 23:07 (when the second was taken). That timeframe can be further narrowed to sometime between 22.45 (when the handover of the watch took place) and 23:07 (when the second screenshot was taken).

191. Mr. Xu also confirmed that Mr. Zhang was monitoring the radar himself but, as counsel for the *Kirrixki* have stressed, there is no evidence of the extent to which – or the regularity with which – he did so. Mr. Xu also said that Mr. Zhang used the binoculars to look at the *Kirrixki* but, again, there is no evidence of the extent to which or the regularity with which this was done. Nor is there any evidence of when the binoculars were first used by him. Mr. Xu said that he also used the binoculars himself but he could not recall when that first occurred. Although he said that he had been asked by Mr. Zhang to keep looking at the trawler after it was captured on the radar, it appears to be clear that it was not visible at the 10 mile mark. When asked whether he recalled seeing it with the binoculars, his response was that: *"I couldn't see that it's so dark."* Thus, it appears to be probable that he could not have kept a physical look-out for the *Kirrixki* until later. For the reasons discussed in paras. 192 and 193 below, it appears probable that this did not occur until the *Kirrixki* was emerging from the looping turn described earlier.

192. Mr. Xu said that he first saw the *Kirrixki* with his own eyes at a distance of about 5 miles. That is consistent with the view expressed by Captain Simpson (as noted in para. 102 above) as to when a crewman on one vessel could first see the other vessel with his own eyes. However, I am concerned that Mr. Xu is not the best judge of distance. As noted in para. 39 above, Mr. Xu is plainly incorrect in his suggestion that the vessels were as much as half a mile away when the *Hua Sheng Hai* sounded the whistle. As outlined in para. 147 above, Captain Walton agreed with the proposition put to him by counsel for the *Hua Sheng Hai* that the vessels were only 0.125 miles apart at that time. For that reason, I have a concern that Mr. Xu may have overestimated the distance when he said that the vessels were 5 miles apart when he first saw the *Kirrixki.* Moreover, as explained in para. 193 below, Mr. Xu could not recall seeing any green light on the trawler. Had he been looking at the trawler at a distance of 5 miles, he should have seen the green light on its starboard side[19].

193. Mr. Xu was asked by counsel for the *Hua Sheng Hai* to describe the lights on the *Kirrixki* that he observed when he first saw the trawler. In response, he said that there were *"two lights, the navigational lights and the deck lights".* When he was probed further by counsel for the *Hua Sheng Hai,* he said that he saw grey and red navigational lights and white deck lights. He did not say that he saw double red lights[20] and, later under cross-examination, he could not recall seeing green and white fishing lights.[21] Mr. Xu's reference to red navigational lights is significant as is the fact that he could not recall seeing green lights. It is clear from appendix E to Captain Simpson's

[19] As explained in para. 194 below, there were a number of points when the green light would not have been visible but Appendix E to Captain Simpson's report makes clear that it would have been visible from 5.48 miles to 5.07 miles and again from 4.58 miles to 2.88 miles. As I understand it, there were two very brief periods when it would not have been visible because of the orientation of the trawler as it went through the looping turn that brought it onto the north-westerly course.

[20] i.e. the not-under-command lights

[21] Which Captain Antelo Malabe contended had been lit once the repairs to the engine had been completed.

report that the red navigational light (which the Collision Regulations require to be displayed on the port side of a vessel) would not have been observable from the *Hua Sheng Hai* until 23:44:38 when the vessels were only 1.64 nautical miles apart. That was very close to the time the *Kirrixki* completed the looping turn described previously. This is, in turn, consistent with para. 13 of Mr. Xu's witness statement where he said that he recalled seeing the *"fishing vessel was turning but still moving slowly".* The AIS data transmitted from the *Kirrixki* shows that, at 23:44:37, the trawler was still turning to the starboard and proceeding at a relatively slow speed of 3.1 knots and it continued to turn to the starboard from then until 23:44:56 at much the same speed. I therefore think that it is probable that Mr. Xu first physically observed the *Kirrixki* at some point between 23:44:37 and 23:44:56

194. Appendix E also demonstrates that, in the preceding period between 23:21:08 (when the vessels were 5.48 nautical miles apart) and 23:44:08 (when they were 1.75 miles apart), the only navigational light of the *Kirrixi* visible from the *Hua Sheng Hai* was the green starboard light (although that would not have been visible at all for two minutes between 23:24:08 and 23:26:08 or for one and a half minutes between 23:37:38 and 25:39:08). It seems to me to follow, as a matter of probability, that Mr. Xu was not physically watching the *Kirrixki* in the period between 23:21:08 when, according to Appendix E, the green light of the *Kirrixki* would have been visible from the *Hua Sheng Hai* until at least 23:44:08 when the red portside light first became visible. He may, however, have been observing it on the radar. There is evidence that he and Mr. Zhang took turns to monitor the radar but how often that occurred is unclear. In so far as Mr. Zhang is concerned, I have no evidence that he was physically watching the *Kirrixki* during that period or that he was constantly monitoring the trawler on the radar.

195. In making the findings outlined in paras. 193 and 194 above, I have not lost sight of what Mr. Xu said in para. 13 of his witness statement (quoted in para. 39 above) that he was, at all times standing by the wheel under the direction of Mr. Zhang. Nor have I overlooked his evidence that he was instructed to keep looking at the *Kirrixki*. However, given that the ship was on autopilot until about 23:49, it appears to be inherently unlikely that Mr. Xu was standing by the wheel for the entire period of duty. It also seems to me to be clear that, when paras. 13 to 17 of his witness are read together (and in conjunction with his oral testimony), his evidence that he was, *"at all times"*, standing by the wheel, must be read as relating to the period when the *Kirrixki* was emerging from the turn and was physically seen by him either at 23:44:38 (when the red port light of the trawler was first capable of being seen) or possibly a little later. Taking the tenor of his evidence as a whole, I do not believe that there is any sufficient basis to conclude that, on the balance of probability, he was standing by the wheel and keeping a constant look-out for the *Kirrixki* from the moment he first saw it on the radar at a distance of 10 nautical miles.

196. Another relevant aspect of Mr. Xu's evidence is that, in answer to a question from counsel for the *Hua Sheng Hai* as to what he understood by the deck lights being turned on, he said that: *"they may be trawling or working".* Thus, I must proceed on the basis that those on duty on the *Hua Sheng Hai* at the time of the collision must have understood that there was, at the very least, a possibility that the *Kirrixki* had its trawl net in the water. In turn, they must have understood (however erroneously) that there was a possibility that the *Kirrixki* may have priority under the Collision Regulations either as a vessel engaged in fishing or as a vessel with limited manoeuvrability. At that time, they had no information that could have allowed then to discount that possibility. It must also be kept mind that, as noted previously, they had very clear information on

their radar screen that the *Kirrixki* was a fishing vessel such that the officer of the watch should have been alive to the possibility that it could be engaged in fishing. For that reason, it does not seem to me to be material that Mr. Xu could not recall seeing the green and white lights that the Collision Regulations prescribed for trawlers engaged in fishing operations.

197. I do not believe that there are any other findings that fall to be made on foot of the limited evidence given by Mr. Xu. The balance of the relevant factual evidence available in relation to the actions or inaction of the *Hua Sheng Hai* is derived from the objective material extracted by the experts from the VDR records of the ship and the record of the AIS data transmitted by the trawler. That evidence establishes the following: As Captain Simpson acknowledged in para. 3.14.9 of his second report, the *Kirrixki* began to steady onto a north-westerly course from 23:44:09. The trawler came fully out of the looping circle turn at 23:44:59 at a speed of 7.4 knots. From then until the collision, the trawler maintained a reasonably steady north-westerly heading that varied between 330° and 325° and a fairly steady course over the ground that varied between 335° and 315° (but for most of the time was close to 325°)[22]. The trawler was advancing fast. The extract from the collision plot chart contained in para. 61 above graphically illustrates the remarkably straight north-westerly course of the trawler and its inevitable intersection with the course of the *Hua Sheng Hai*. There can be no question that this must have been visible to the officer of the watch on the *Hua Sheng Hai*. By 23:46:28, the trawler's speed had increased to 8 knots and it continued to accelerate after that. The distance between both vessels was also rapidly reducing. According to Appendix E to Captain Simpson's report, the vessels were 1.52 nautical miles apart at 23:45:09 but, one minute later, that distance had reduced to 1.28 nautical

[22] There was one reading of 341.6° at 23:45:09 but that is very much an outlier.

miles and 28 seconds after that, this had reduced further to 1.16 nautical miles. That rapid reduction in distance must have been very apparent to anyone monitoring the trawler from the bridge of the *Hua Sheng Hai.* It is therefore unsurprising that, as noted in para. 42 above, Mr. Xu described the trawler as accelerating towards the *Hua Sheng Hai.*

198. Based on the evidence of Captain Simpson (and Captain Walton did not disagree), it is probable that, at some point between 23:47:08 and 23:48:08, time ran out for the *Hua Sheng Hai* to take any action to avoid a collision with the trawler racing towards it. From the moment the trawler's speed increased to 7.4 knots at 23:44:59, that gave the officer of the watch a period of between two and three minutes (approximately) to take action. No action was taken by the *Hua Sheng Hai* with a view to avoiding a collision until 23:49:03 when the AIS and VDR data of the ship shows that it turned 10° to port. That was just over 4 minutes since the trawler came out of the turn and more than 2 minutes after the trawler's speed had increased to 8 knots. On the basis of the expert evidence that turn was too late to avoid the collision. As Captain Simpson said in his report, the distance between both vessels was then down to less than 0.8 nautical miles, only six ship lengths of the *Hua Sheng Hai.* The next turn to port, at 23:50:54, was also too late to avoid damage. It happened only 11 seconds before the collision when the vessels were only 0.083 nautical miles apart.

199. There was some disagreement between the experts as to whether the alarm that one can hear sounded at 23:47:48 on the *Hua Sheng Hai* was the radar alarm warning of the approach of the *Kirrixki*. Captain Walton was of the view that it was the radar alarm but, as noted in para. 149 above, Captain Simpson suggested that there are many alarms that can typically be heard on the bridge of a ship from time to time and they do not always signify an emergency. However, I am of the view that it is probable that it

was the radar alarm. In reaching that view, I bear in mind that the trawler had previously been acquired as a target and I also bear in mind the very obvious coincidence in time between the sounding of the alarm and the imminent collision of both vessels. It is clear from Appendix E to Captain Simpson's first report that, at the time the alarm sounded, the vessels were only one nautical mile apart and the CPA was predicted to be 0.02 nautical miles within less than 4 minutes. It is noteworthy that the first attempt by the *Hua Sheng Hai* to avoid the collision did not take place until after the alarm sounded. While Captain Simpson suggested that the officer of the watch must have been aware of the trawler's approach prior to that time, almost two minutes passed before the first turn to port occurred.

200. The records show that the whistle of the *Hua Sheng Hai* was sounded between 23:50:31 (just over half a minute before the collision) and 23:50:58 (which was, at most 7 seconds before the collision). In para. 147, I have already drawn attention, in this context, to the fact that Captain Walton agreed that, at the point the whistle was first sounded, the vessels were no more than 0.125 nautical miles apart. As Captain Walton observed in his first report, there were 4 short blasts follow by a number of longer blasts over a period of 27 seconds. They did not correspond with those prescribed by Rule 34(d)[23] of the Collision Regulations which envisages that, when vessels in sight of one another are approaching, a series of 5 short and rapid blasts should be sounded immediately if either vessel does not understand the other's intentions or is in doubt whether the other is taking any action to avoid the collision. When the whistle was belatedly sounded on the *Hua Sheng Hai,* I believe that it is likely that the officer of the watch was simply trying, as a last ditch and somewhat desperate measure, to alert the trawler to the imminent danger of collision. While Captain Antelo Malabe said that he

[23] The rule is quoted in para. 36 above.

did not hear the whistle, there is no doubt that the whistle was sounded. But the fact remains that it was sounded at a late stage when it seems unlikely that any action could have been taken by the *Kirrixki* to avoid the collision. As outlined in para. 148 above, while there was a possibility that the trawler might have been able to avoid the collision at that time if its nets were in the water, Captain Walton agreed that this would not have been likely if the trawler was unencumbered by its nets (as I have now found). In such circumstances, it would have been more difficult to slow down sufficiently to avoid the collision.

201. Having found the facts as outlined above, I now turn to the case made against the *Hua Sheng Hai* by counsel for the *Kirrixki* in their closing submissions. As noted earlier, it is first argued that the collision was caused by the *Hua Sheng Hai* by ignoring the fact that it was in a fishing zone. I am not convinced that the fact that the collision occurred in a fishing zone is of any real significance. Virtually the entire sea around Ireland is comprised of such fishing zones. Zone 7j2 represents a significant chunk of the Celtic Sea and some of it is specifically designated for hake fishing. The fact that such a large area of sea has been designated as a fishing zone does not mean that it is teeming with fishing boats. For that reason, a ship passing through a fishing zone may not necessarily encounter fishing boats. During the evening of 11th October 2019, it appears that only two fishing boats were in the vicinity of the *Hua Sheng Hai* namely the *Kirrixki* and the *Nuevo Confurco.*

202. It is true, however, that the law has, for a long time, recognised that other sea traffic should take care around fishing boats engaged in fishing. This is reflected in the current edition of *Marsden & Gault* at para. 7-352 where the authors say – citing a number of old authorities and largely repeating what was contained in earlier editions – that fishing vessels have *"freedom to fish on the high seas, and to be fast to their nets*

… whether their fishing ground is in the track of ships or not. It is the duty of other ships as a matter of seamanship to take greater precautions when passing over fishing grounds, so as to keep clear of fishing vessels and not make them cast off from their nets … this rule gives a vessel engaged in fishing precedence over most other vessels. The vessel engaged in fishing is thus under a duty to keep her course and speed in accordance with r.17(a), subject to the qualifications to that rule." There are two features of that principle that are particularly relevant here. First, the precedence accorded to a trawler arises where it is engaged in fishing. Second, even when the trawler is entitled to precedence, it is not free to move in whatever way it wishes. As Rule 17(a) makes clear, it must maintain its course and speed.

203. Among the authorities cited by *Marsden & Gault* in support of the proposition stated in para. 7-352 are *The Tweesdale* (1889) 14 P.D. 164 and *The Grovehurst* [1910] P. 316. These are also the cases on which counsel for the *Kirrixki* seek to rely as authority for their submission that a trawler is not obliged to get out of the way of other vessels.[24] However, I do not believe that these authorities can be relied upon to suggest that a trawler does not need to keep a look-out or to suggest that, in some way, trawlers have more extensive priority over other sea-traffic than that afforded to them under the current Collision Regulations. In the first place, the trawlers in both of those cases kept a look-out. In both cases, the crew of the trawlers, in marked contrast to the crew of the *Kirrixki,* had kept a look-out and had done their best to warn the approaching vessels of their presence. In *The Tweesdale,* the crew even sent up flares to warn off the sailing vessel which later collided with the trawler. Similarly, in *The Grovehurst,* the crew

[24] They also rely on the observations of Pigot C.B. in the Irish case of *Murphy v. Palgrave* (1870) 21 L.T. 209 but the report of the case is very short and the principles are not addressed in any detail. For that reason, I do not believe that it adds anything for present purposes. Moreover, notwithstanding the observations of the Chief Baron as to the right of the plaintiffs to fish near the Poolbeg Lighthouse, the jury ultimately held for the defendants whose steam tug had caused the fishing boat to be swamped.

sounded the whistle to try to alert the approaching steamer of the danger of collision. Second, in both of those cases, the trawlers had their nets in the water at the time of the collision. That is quite different to the present case. The judgments of Butt J. in *The Tweesdale* and the Court of Appeal in *The Grovehurst* show that the courts in both cases were concerned about the restricted manoeuvrability of a trawler with its nets down. In neither case is there any suggestion that a trawler should have priority in other circumstances. Third, it seems to me that these decisions have now been overtaken by the provisions of the current Collision Regulations which expressly give priority to trawlers with their nets in the water and to other vessels with restricted manoeuvrability. There was no similar provision in either the 1884 Regulations considered in *The Tweesdale* or the 1897 Regulations considered in *The Grovehurst.* In both cases, the court effectively carved out an exception to the then existing rules in order to take account of the practical difficulty facing a trawler in trying to take action to avoid a collision after it had cast its net into the sea. As Vaughan Williams L.J. observed in *"The Grovehurst",* at p. 329: *"I can see no reason for the rule that trawlers should carry the triplex light, when the trawl is down, but to shew vessels approaching that trawlers with their trawls down, must be treated as incapable of obeying the ordinary sea rules, and that therefore other vessels approaching must get out of the trawler's way."*[25] At the time both cases were decided, there was no express provision in the applicable Regulations similar to Rule 18(a) which required other vessels to keep out of the way of a vessel engaged in fishing or otherwise restricted in the ability to manoeuvre. Now that such an express provision exists, it seems to me to follow that the decisions in *The Tweesdale* and *The Grovehurst* have been overtaken by the current

[25] The triplex light mentioned by Vaughan Williams L.J. was a red green and white light which trawlers were bound under the 1897 Regulations to display if engaged in fishing.

Collision Regulations. Furthermore, as the extract from *Marsden & Gault* makes clear, trawlers do not have an untrammelled right to do as they please even when they have their nets in the water. They are required to keep to their course and speed. That is obviously to ensure that vessels which are required to keep clear of them can take educated decisions as to how to avoid them without fear that the trawlers will not suddenly change course or change their speed.

204. For all of these reasons, I reject the argument advanced on behalf of the *Kirrixki* that the *Hua Sheng Hai* should be found responsible on the ground that it ignored the fact that it was traversing a fishing zone. I also reject the argument that the *Kirrixki's* status as a trawler meant that it had no obligation to other vessels or that it was always for other vessels to get out of its way. Such an argument is not open in circumstances in light of my finding that, at the time of the collision, it was not fishing or engaged in casting its nets or related gear. Even if it had been so engaged, it would, by reason of the sharp change in course taken by it, be in breach of Rule 17(a). As the extract from *Marsden & Gault* illustrates, even a trawler with its nets in the water is not entitled to undertake such a manoeuvre. That said, the fact that the crew of the *Hua Sheng Hai* knew that the *Kirrixki* was a fishing boat is a relevant circumstance in assessing whether there was fault on the part of the *Hua Sheng Hai*. That is an issue to which I return below.

205. The next argument advanced on behalf of the *Kirrixki* is that the collision would never have occurred if the crew of the *Hua Sheng Hai* had complied with its Master's orders and maintained a CPA of more than 2 nautical miles. As outlined previously, there is a difference between the CPA recommended in the master's orders and the one nautical mile requirement identified in the COSCO ship management system. Taking

the former from the English language version[26] contained in Appendix F to Captain Walton's first report, the requirement is to *"keep sharp look-out all times keep clear of any other objects including … fishing boats …Any action taken to avoid collision should keep CPA more than 2nm in calm sea … If the CPA is less than above mentioned … you must change to hand steering till clear each other".* The requirement in the COSCO document is replicated in para. 47 above, so it is unnecessary to replicate it here. As the experts acknowledged, the master's orders take precedence over the latter and it is clear that they were not honoured in two respects. First, the CPA was never more than 2 nautical miles. Second, notwithstanding that fact, hand steering was not utilised until about 23:49 when the vessels were approximately half a nautical mile apart and the CPA was down to 0.01 nautical miles[27]. But, it is important to keep in mind that a breach of master's orders is not necessarily a negligent act. While it may be a basis to take disciplinary action against an offending member of a ship's crew, it is not *per se* actionable by a third party. The obligation under the Collision regulations is to keep out of the way but the Regulations do not go so far as to prescribe what that requires. While Rule 18(a) requires a power driven vessel to keep out of the way of a vessel not under command, a vessel engaged in fishing and a vessel restricted in its ability to manoeuvre, the rule does not offer any guidance as to what a safe distance might be. That is left to the application of prudent seamanship by those in control of vessels in the particular circumstances of an individual case. Similarly, while Rule 16 requires *"early and substantial action to keep well clear"* from a vessel which is directed by the Regulations to keep out of the way of another vessel, the rule offers no guidance as to what that entails.

[26] The English language version is in fairly rudimentary English.
[27] This is the CPA shown in Appendix E to Captain Simpson's report at 23:49:08.

206. The evidence before the court suggests that there is a wide range of views as to what a safe passing distance might be. Captain Walton was of the view that, at an appropriate point, the *Hua Sheng Hai* should have adjusted its course to maintain a CPA of more than 2 nautical miles. On the other hand, Captain Simpson was of the view that one nautical mile was a safe passing distance. His view was shared by Mr. Jackson. The one point on which all the experts agreed was that one cable (i.e. 185 metres) would be far too close notwithstanding that this is the minimum passing distance recommended by para. 1.11 of the relevant Admiralty Sailing Directions.[28] Even Captain Walton did not suggest that the *Hua Sheng Hai* should have altered course when the CPA shown for the *Kirrixki* (at the time when it was acquired as a target) was significantly less than 2 nautical miles[29]. As outlined in para. 133 above, his evidence was that the need to alter course only *"clicked in"* when the vessels were in sight of each other at about a distance of 5 nautical miles. At that point, he said that it would be prudent to consider opening the CPA to a distance of 2 miles. As noted in para. 102 above, the *Kirrixki* would have been visible to the *Hua Sheng Hai* since about 23:21:08 when the trawler was still drifting eastward while the engine was under repair. At that point, Rule 18(a) required the *Hua Sheng Hai* to keep out of the way of the drifting trawler. As outlined earlier, the fact that the trawler was drifting should have been apparent to the officer of the watch on the *Hua Sheng Hai* from the radar screen even though the trawler was transmitting incorrect AIS information about its status and even if the two red not-under-command lights were unlit or absent.

207. Captain Simpson did not agree that the *Hua Sheng Hai* was required to maintain such a large CPA. As noted in para. 87 above, his view was that, up to the time the

[28] See para. 126 above for the text of the relevant extract from the Sailing Directions.
[29] As noted in para. 187 above, the predicted CPA was 0.873 nautical miles at the time the trawler was acquired as a target.

trawler restarted its engine, the vessels were diverging and the CPA was increasing. As further noted in para. 103, Captain Simpson resolutely maintained this view under cross-examination. He insisted that there was no need for the *Hua Sheng Hai* to alter course while the trawler was drifting. The predicted CPA was more than one nautical mile and was widening. He accepted that the increase in CPA was no more than about 0.2 nautical miles but he held to his view that a CPA of one nautical mile or slightly more was reasonable particularly in circumstances where the trawler was not drifting towards the *Hua Sheng Hai*. He also stressed that a drifting vessel has no propulsion.

208. I found the evidence of Captain Simpson on this issue to be persuasive. In circumstances where the trawler was drifting and the CPA was predicted to be slightly more than one nautical mile, I agree with Captain Simpson's view that there was no requirement in such circumstances for the *Hua Sheng Hai* to change course. I bear in mind that the burden lies on the *Kirrixki* to establish why that CPA was not sufficient in order to comply with the obligation on the *Hua Sheng Hai* under Rule 18(a) to keep out of the trawler's way. No sufficient basis has been established to persuade me that the Rule required that a CPA of 2 nautical miles should have been maintained. For the time the trawler was drifting, there was nothing to indicate that the ship could not pass it safely at a distance of one nautical mile. Furthermore, the P & I Club material annexed to Captain Walton's last report does not support his view that a CPA of 2 nautical miles was required. The report in question is a joint publication by the UK P & I Club and Homarus Limited (which provides consulting services in relation to the fishing industry). The report is entitled: *"Risk Focus: Reducing the risk of collisions with fishing vessels – a guide for Masters and their bridge teams."* The report addresses different a number of scenarios that may arise in relation to a wide variety of fishing activities. There is an individual section dealing with trawling and, on p. 7, the report

makes a specific recommendation that merchant vessels should *"either pass ahead of a trawler, given sufficient room, or well astern (<500m) if possible."* That CPA is significantly less than the nautical mile recommended by Captain Simpson. A nautical mile equates to 1,852 metres. In all of these circumstances, I have not been persuaded by the owners of the *Kirrixki* that the *Hua Sheng Hai* was at fault in not changing course while the trawler was drifting. They have failed to establish on the balance of probability that a CPA of more than one nautical mile was required.

209. The next part of the case made by the *Kirrixki* is that the *Hua Sheng Hai* should have taken avoiding action after the trawler regained power and started to propel forward. I reject that case in so far as it was advanced on the ground that the ship was required to give way to the trawler on the basis that the latter had priority under Rule 18(a). For the reasons previously outlined, I am of the view that, at that time, the trawler was neither engaged in fishing nor otherwise restricted in its manoeuvrability. However, that does not dispose of the entire case against the *Hua Sheng Hai.* The vessels were within sight of each other after the *Kirrixki* restarted the engine, made a full turn and began to accelerate towards the path of the *Hua Sheng Hai.* Yet, the officer of the watch did not take any action to avoid the collision until after the alarm sounded on the ship's radar at 23:47:48. By the time Mr. Xu was directed to take the wheel and the ship turned 10° to port at 23:49:03, the experts are agreed that it was already too late to successfully take action to avoid the collision. As noted in para. 198 above, time ran out to take any action such action at some point between 23:47:08 and 23:48:08. That left a reasonably short interval for the officer of the watch to assess the situation and decide what action to take. Captain Simpson expressed the view that, while he would like to think that he would have turned earlier, the officer of the watch would need some time to evaluate the situation after the trawler came out of the turn and

steadied on a north-westerly course. He said that the officer would need time to convince himself that the trawler was actually going to maintain the north-westerly course or whether it was going to turn again. In his oral testimony, he went so far as to put a time on when a decision should have been made: *"So, after 23;47 if you were on your toes and you were the best and all the rest of it, that would be about the earliest… without the benefit of hindsight."* This is slightly earlier than the time suggested in para. 3.14.7 of his report where he had estimated that 23:48 was the time for action by the officer of the watch, after evaluating the situation.[30]

210. Under cross-examination, Captain Simpson accepted that the officer of the watch could have ordered a larger angle of rudder to be used and that the whistle could have been sounded earlier. He said that the whistle should have been sounded at 23:47 although he accepted that the whistle would have been audible to the *Kirrixki* from the moment the trawler completed the turn described earlier. In light of Captain Simpson's evidence that the officer of the watch needed time to evaluate the intentions of the *Kirrixki*, I find it very puzzling that Captain Simpson would suggest that the whistle should first have been sounded as late as 23:47. It is clear from Rule 34(d) of the Collision Regulations (quoted in para. 36 above) that, where one vessel can see the approach of another but is in doubt as to its intentions, the appropriate course to take is to immediately give 5 short and rapid blasts on the whistle which can be supplemented by a light signal of at least 5 short and rapid flashes. This was never done by the *Hua Sheng Hai*. Even when the whistle was eventually sounded at 23:50:31 (just seconds before the collision), it did not follow that pattern.

211. Captain Walton took a different view of the actions of the officer of the watch. As noted in paras. 146 to 147 above, his view was that it does not take long to realise

[30] See para. 94 above where the relevant passage from his report is quoted.

that it is necessary to take action when one is faced with a *"target coming down pretty much directly on to them".* He also took the view that this should have been apparent to the *Hua Sheng Hai* once the trawler's speed increased to 3.1 knots. The AIS data shows that this occurred at 23:44:37 when the trawler was still turning to starboard. I am not convinced that it is probable that the crew of the *Hua Sheng Hai* should have formed the view quite so early that the trawler was going to pursue a course that would take it on a collision course with their ship.

212. However, I agree with Captain Walton that the crew should have been very attentive to the movement of the trawler at this point. At that point, the distance between the two vessels had narrowed to 1.64 nautical miles and the CPA was down to 0.77 nautical miles (which was less than the recommended CPA in the COSCO ship management system). As previously observed, they knew that the *Kirrixki* was a fishing vessel. They also must have known that it was now under power. They should also have been conscious that fishing vessels sometimes make sudden unannounced movements. This is reflected, for example, in para. 1.19 of the Admiralty Sailing Directions (NP 40) that fishing vessels engaged in fishing may make immediate unannounced manoeuvres.[31] That is not, in any sense, to excuse the actions of the skipper of the *Kirrixki.* It is simply another factor that should, in my view, have made the crew of the *Hua Sheng Hai* more attentive to the actions of the trawler. As previously noted, Mr. Xu had understood that the *Kirrixki* was engaged in trawling.[32] That should have made them think (however erroneously) that the trawler was the stand-on vessel to which they would have to give way. In addition, now that the trawler was to the starboard side of their bow, it was, at least, a possibility that this also made it the stand-on vessel. In turn,

[31] See para. 141 above for the full terms of this paragraph.
[32] See para. 196 above.

these factors should have made then all the more attentive to its movements. Thus, while the collision course undertaken by the *Kirrixki* may not have been apparent to the *Hua Sheng Hai* as early as 23:44:37, the crew should, in my view, have been on alert at that time such that, when the steady north-westerly course of the trawler became evident, the officer of the watch should have been capable of evaluating the situation with appropriate speed.

213. There is no evidence available as to what kind of assessment (if any) was carried out by the officer of the watch. That is a major gap in the evidence before the Court. I therefore have no explanation as to why he did not sound the whistle until 23:50:31. As noted above, if he was in a state of doubt about the trawler's intentions, he should, in accordance with Rule 34(d) have immediately sounded the sequence of 5 short and rapid blasts mentioned above. He could also have supplemented this with lighting signals. Of course, the lighting signals may not have been seen by a trawler that was not keeping a look-out but the giving of the signals would, at least, demonstrate that the *Hua Sheng Hai* was aware of the impending danger and was taking appropriate action, as best it could, to avoid a collision.

214. As noted in para. 197 above, the *Kirrixki* came fully out of the turn and onto a steady north-westerly setting at 23:44:59. The collision plot chart demonstrates the very definite path of the trawler. The recorded speeds of the trawler also show that it was accelerating at this time. That path was one that would inevitably lead to a collision if neither vessel took action. Mr. Xu quite rightly described the trawler as accelerating towards the ship in a way that he had never previously witnessed. In my view, that acceleration and the course of travel of the trawler must have been apparent to anyone paying due attention on the *Hua Sheng Hai* by 23:46:08 at the very latest. By that time, the distance had reduced to 1.28 nautical miles from 1.52 nautical miles just one minute

before. That represents a reduction in distance of almost 0.5 kilometres in one minute. I do not agree with Captain Simpson that the officer of the watch needed more time to assess the situation. While Captain Simpson suggested that some scope should be given to the officer of the watch in *"the agony of the moment",* the fact is that we have not heard from the officer in question. He did not attend the hearing to explain why he did not act until it was too late to avoid the collision. Given all of the considerations outlined in para. 212 above, I am of the view that the officer of the watch should have taken early action. While the window to take such action was brief, there was, nonetheless, time to do so. As any experienced motorist will confirm, there are many decisions to avoid damage or injury that have to be taken in seconds. If the officer of the watch had been paying attention, he should, in my view, have been prepared to take immediate action by 23:46:08. Importantly, there was no impediment to the port side of the *Hua Sheng Hai*. There was wide open sea on the port side. There were no other vessels in the immediate vicinity that in any way restricted action being taken. There was no suggestion that an appropriate turn to port could not have been undertaken. In light of the views of the experts, an appropriate turn to port very shortly after 23:46:08 would have allowed the *Hua Sheng Hai* to have avoided the collision. In these circumstances, I have come to the conclusion that, even though it did not create the danger, there was, nonetheless, fault on the part of the *Hua Sheng Hai* in not taking action to avert the collision before time ran out for doing so.

215. In reaching the view set out in para. 214 above, I have proceeded on the basis that, notwithstanding that the *Kirrixi* was then to the starboard of the *Hua Sheng Hai*, the latter should not be treated as the give-way vessel. For the reasons more fully

discussed below[33], I am of the opinion that the *Kirrixki* was not entitled to create a situation which put the *Hua Sheng Hai* in that position.

The apportionment of fault

216. In circumstances where there was fault on the part of both vessels, s. 46 of the Civil Liability Act 1961 (*"the 1961 Act"*) applies. Section 46 re-enacts (with certain amendments) s. 1 of the Maritime Conventions Act 1911 (*"the 1911 Act"*). Section 46 of the 1961 Act deals with a number of matters. For present purposes, s. 46(1) is relevant. It deals with collisions between two or more vessels in the following terms:-

> *"46.—(1) (a) Where, by the fault of two or more vessels, damage is caused to one or more of those vessels or to another vessel or to the cargo of any of those vessels or any property on board, and an action is brought for such damage, the liability of each vessel in respect of such damage shall be in proportion to the degree in which such vessel was in fault and accordingly there shall be no right of contribution in respect of such apportioned liability: provided that—*
>
> *(i) if, having regard to all the circumstances of the case, it is not possible to establish different degrees of fault, the liability shall be apportioned equally among the vessels in fault;*
>
> *(ii) nothing in this subsection shall affect the liability of any person under a contract of carriage or any contract, or*

[33] Among the matters discussed below is the decision of Steel J. in *The Forest Pioneer* which highlights that even a stand-on vessel cannot put itself deliberately on a collision course with an approaching give-way vessel. It seems to me that there is a clear parallel here where the *Kirrixki* took a sudden turn at speed into the path of the *Hua Sheng Hai* without even the most cursory look to check that it was safe to do so.

shall be construed as imposing any liability upon any person from which he is exempted by any contract or by any provision of law, or as affecting the right of any person to limit his liability in the manner provided by law.

(b) For the purposes of paragraph (a) of this subsection the liability of a vessel for damage shall mean the liability of those responsible for the proper navigation and management of the vessel…"

217. The English decisions on s. 1 of the 1911 Act are helpful in understanding the principles of apportionment under s. 46. Prior to the enactment of s. 46, it was well settled that the only faults to be taken into account in apportioning liability under the 1911 Act were faults that contributed to the damage or loss concerned. It is also important to bear in mind, in considering the respective fault on the part of both vessels, that s. 80 of the 1961 Act has abolished the *"last opportunity rule"*. Thus, it is necessary (as Brandon J[34]. observed in his article *"Apportionment of Liability in British Courts under the Maritime Conventions Act 1911"* (1977) 51 Tulane Law Review 1025 at p. 1031) to ask and answer two questions:-

(a) What faults were committed by the ships concerned?

(b) Which of those faults contributed to the loss or damage in issue?

218. In the same article, Brandon J., at pp. 1031-1032, made clear that, in considering the *"fault"* of the vessels, the court takes into account not only faults which had a causative potency, but also faults in the nature of culpability or blameworthiness (irrespective of the extent to which those faults contributed to the damage concerned).

[34] As he then was.

That seems to me to be consistent with the express language of s. 46(1)(a) of the 1961 Act. At p. 1037, Brandon J. stressed that each case must depend on its own particular circumstances. Nonetheless, he identified a number of broad lines of approach that he suggested will be generally useful *"on the basis of practical experience of apportionment in numerous cases over many years"*. These principles have subsequently been usefully summarised by Teare J. in *The Nordlake and The Seaeagle* [2016] 1 Lloyd's Rep 656 at p. 675 as follows:-

> *"(i) The number of faults on one side or the other is not decisive. It is the nature and quality of a ship's faults, rather than their number, that matter.*
>
> *(ii) Breaches of the obligations imposed on ships in certain defined situations by the Collision Regulations will usually be regarded as seriously culpable. One such rule is the narrow channel rule.*
>
> *(iii) Causative potency has two aspects. The first is the extent to which the fault contributed to the fact that the collision occurred. The second is the extent to which the fault contributed to the damage resulting from the casualty.*
>
> *(iv) In most cases though not all it will be right to treat the fault of a ship that creates a situation of difficulty or danger as greater than that of the ship that fails to react properly to such situation after it has been created.*
>
> *(v) The fact that a fault consists of a deliberate act or omission may in certain circumstances justify the court in treating it as more culpable than a fault which consists of omission only."*

219. In support of the approach summarised in para. (iv) in the above extract, Brandon J., in his article at p. 1039 referred to the guidance given by Lord Pearce in the House of Lords in *The Miraflores* [1967] 1 A.C. 826 at pp. 847-48, where he said:-

> *"It is axiomatic that a person who embarks on a deliberate act of negligence should, in general, bear a greater degree of fault than one who fails to cope adequately with the resulting crisis which is thus thrust upon him. This generality is subject, of course, to the particular facts. And it may be that the initial act was so slight or easily avoidable and the subsequent failure to take avoiding action so gross that the blame for the accident falls more largely or even (if the interval and opportunity for avoidance are sufficiently great) wholly upon the person who failed to avoid the consequences of another's negligence. Between the extremes in which a man is either wholly excused for a foolish act done in the agony of the moment as the result of another's negligence or is wholly to blame because he had plenty of opportunity to avoid it, lies a wide area where his proportion of fault in failing to react properly to a crisis thrust upon him by another must be assessed as a question of degree."*

220. Brandon J. provided some further guidance in relation to how a court might apportion fault in cases where a *"clear preponderance of fault has been established"*. He suggested at p. 1041:-

> *"it may be found helpful to consider whether the degree of fault of the ship more to blame is one and a half times as great, twice as great, or three, four, five, or even more times as great, as the degree of fault of the ship less to blame. There is, however, no single correct approach to the problem, and different judges will necessarily carry out their task in different ways."*

221. Although the approach suggested by Brandon J. is very helpful, it is nonetheless necessary to take an overall view of the conduct of both vessels. This was made clear by Willmer L.J. (sitting as a High Court judge) in *The Tojo Maru* [1968] 1 Lloyd's LR at p. 378 where he said:-

> *"The apportionment of blame under the Maritime Conventions Act, 1911, is not a matter of merely counting up the individual faults committed by one ship or the other. It is only possible to arrive at a just result by taking an over-all view of the conduct of both vessels."*

222. In the same case, Willmer L.J. addressed circumstances where a crossing situation is created by what would otherwise be the *"stand-on"* vessel for the purposes of the Collision Regulations (i.e. ordinarily requiring the other vessel to give way). At p. 377, he said:-

> *"I come next to consider the consequences of my finding with regard to the courses steered by the two vessels. My finding involves that, for an appreciable length of time, although not for seven minutes, the Fina Italia was approaching the Tojo Maru with the Tojo Maru's red light on her starboard bow. That put her under a duty to obey the crossing rules, which she failed to do. But I do not think that that is the beginning and end of the matter, for I think it is necessary to look also at the conduct of the Tojo Maru and consider whether she was justified as a matter of seamanship in setting the course which she did. It seems to me that no vessel is entitled, in face of another vessel seen to be approaching, to put herself deliberately on a crossing course in the position of a stand-on vessel, so as to force that other vessel to keep out of her way. I should certainly regard it as wrong to adopt any such manoeuvre at a late moment when the vessels are within a short range of each other."*

223. In circumstances where Willmer L.J. was of the view that this question was mainly one of seamanship, he sought advice from two experienced nautical assessors who sat with him and they advised that it was an act of bad seamanship on the part of the *Tojo Maru* to set a course of 170º at a time when the vessels were about a mile apart. However, he held that that did not absolve the *Fina Italia* from fault because that vessel went on *"sticking to her course"* even though the *Tojo Maru* was on its the starboard bow. There was also a failure on the part of both vessels to keep a proper look-out. In circumstances where it was not possible to establish different degrees of fault, Willmer L.J. apportioned liability equally between them.

224. The decision of Willmer L.J. was subsequently followed by Steel J. in *The Forest Pioneer* [2007] EWHC 84 (Comm). In that case, the *Forest Pioneer*, although a stand-on vessel, was held to be 85% liable for a collision in circumstances where the vessel took a very sudden change in course which led to the collision with the give-way vessel, the *Bulk Atalanta*. Steel J. explained his reasoning as follows[35]:-

"[38] The first thing that might be said, is that even if this was a situation to which the crossing rules were applicable, it is manifest that FP failed to maintain her course and speed. In particular, in the period from C-14 to C-5, she increased speed progressively from near stationary to eight knots.

[39] That said, I am quite unable to accept that the situation attracted the application of rr 15, 16 and 17:

a) The alteration to 210° was made without any heed to (or even awareness of) BA. The consequence was to place the vessels on collision courses. Yet,

[35] It should be noted that the letters *"FP"* and *BA"* in this extract refer to the *Forest Pioneer* and the *Bulk Atalanta* respectively.

if FP had been aware of the presence of BA, she was not hindered from adopting a safe course to the south or a south westerly course at slow speed.

b) *This state of affairs finds something of a parallel with the Tojo Maru [1968] 1 Lloyd's Rep 365. On the facts of that case, there had been an appreciable period during which the Fina Italia had been approaching Tojo Maru with Tojo Maru's red light on her starboard bow:*

> *'...I think it is necessary to look also at the conduct of the Tojo Maru and consider whether she was justified as a matter of seamanship in setting the course which she did. It seems to me that no vessel is entitled, in the face of another vessel seen to be approaching, to put herself deliberately on a crossing course in the position of a stand-on vessel so as to force the other vessel to keep out of the way': Per Willmer LJ at p 377*

c) *Of course, FP had not seen BA. But she cannot, in my judgment, pray her poor look-out in aid in circumstances where the effect of her alteration was to create a risk of collision which did not exist before but nonetheless claim the status of the stand-on vessel. I also recognise that the manoeuvre was not deliberate in the sense of being performed for the very purpose of establishing a crossing situation. But it was deliberate in the sense of not being necessitated by external circumstances (eg the proximity of shallows). It was, in short, an intentional adjustment of course and speed.*

d) As already observed, it was or should have been apparent to FP that BA was shaping to pick up a pilot. BA was accordingly constrained both in terms of course and speed.

e) As regards BA's speed it is obvious that she would be reducing speed so as to allow a pilot boat to come along side. This would, in due course, severely limit her steerage way.

f) Furthermore, given the prevailing weather conditions, BA needed to afford a lee to the pilot board. This in turn required maintenance of a course of about 320. This was something which the master of the FP was fully aware of since on his arrival the previous day, his pilot had requested that very heading for shelter purposes, something which the master recollected when he gave his statement three weeks later.

g) In this connection, the Claimants prayed in aid The Sestriere [1976] 1 Lloyd's Rep 125 as support for the proposition that as a matter of good seamanship, a vessel should take timely action to keep clear of another which was performing the operation of dropping her pilot."

225. In my view, there is a clear parallel between the facts of the present case and the facts in *The Forest Pioneer* such that, even if the *Kirrixki* was otherwise entitled to be considered the stand-on vessel, it was plainly not entitled to take a sudden turn into the path of the approaching *Hua Sheng Hai* without even considering whether it was safe to do so and without keeping any look-out (either physically or on the radar). Like the action taken by the *Forest Pioneer*, that action of the trawler did not simply create a

crossing situation; it set the trawler on a collision course with the *Hua Sheng Hai*. Such an action is entirely inconsistent with the rationale underlying Rule 17(a)(i) which requires the stand-on vessel to maintain its course and speed[36]. Thus, even if I am wrong in finding that the *Kirrixki* was not engaged in lowering its nets and gear into the water, I do not believe that this would alter the outcome of these proceedings. Even as a stand-on vessel, it would not have been entitled to behave in the way that it did.

226. Similar to the alteration to 210° in *The Forest Pioneer*, the trawler here made a turn that took it from a heading of 172° to 330° and took it from a course over the ground of 112°.2[37] to 335.°3.[38] Just like the *Forest Pioneer*, the trawler here took that turn without any heed or even awareness of the approach of the *Hua Sheng Hai*. The observation of Steel J. that the *Forest Pioneer* could not pray in aid its own failure to keep a proper look-out also resonates here. It is clear from the evidence of Captain Antelo Malabe quoted in para. 158 above that the *Kirrixki* would have taken a different course had he seen the *Hua Sheng Hai*. Likewise, the trawler cannot claim the status of stand-on vessel in circumstances where it created a situation of danger where none existed before then. Absent this manoeuvre by the *Kirrixki*, there would have been no risk of collision. Like the *Forest Pioneer*, the manoeuvre was not deliberate in the sense of being performed for the purpose of colliding with the *Hua Sheng Hai* but it was deliberate in the sense in which it involved an intentional adjustment of course and speed without looking to see if that manoeuvre would take it into the path of another vessel. It was plainly wrong for the *Kirrixki* to adopt such a manoeuvre when both vessels were within such a short range of each other. It is inconceivable that the

[36] Unless, as Rule 17(a)(ii) envisages, it is necessary to change course in the event that the give-way vessel fails to take action itself to avoid the collision.
[37] At 23:42:59
[38] At 23:44:59

manoeuvre would have been made had the trawler kept a look-out either by sight or by radar.

227. In my view, the failures on the part of the *Kirrixki* were many times more significant than the failure of the *Hua Sheng Hai* to take timely action to avoid an unexpected and sudden danger created by the trawler. Notwithstanding the finding of fault I have made against it, the *Hua Sheng Hai* is in a much less blameworthy position. Up to the point that the trawler made its foolhardy turn to the north-west without looking, the *Hua Sheng Hai* was not obliged to second-guess what the previously drifting trawler might do. In particular, it could not have predicted that the trawler would suddenly pick up speed and cross the ship's path with no thought for any approaching traffic.

228. In this context, I am not persuaded that the decision of Teare J. in *The FMG Sydney and the Apollo* [2023] EWHC 328 (Admlty) is of any assistance to the *Kirrixki.* The collision in that case arose in quite different circumstances. In that case, there was both a give-way vessel (the *Apollo)* and a stand-on vessel (the *Sydney*) within the meaning of the Collision Regulations. They were in a crossing situation. Notwithstanding the obligation on the *Apollo,* as the give-way vessel, to take early and substantial action to keep well clear of the stand-on vessel and to avoid crossing ahead of it, the master of the *Apollo* made three turns to port with the intention of crossing ahead of the *Sydney.* Those turns and some other manoeuvres put the *Apollo* on a collision course with the *Sydney* and it is therefore no surprise that Teare J. held that the *Apollo* had failed to take early and substantial action to keep well clear of the *Sydney.* He also found, on the facts, that its actions were so confusing to the master of the *Sydney* that the latter could not be treated as bearing any fault in the circumstances. If any parallel exists with that case, it is between the wrong-headed action taken by the

master of the *Apollo* and the atrociously bad seamanship on the part of the skipper of the *Kirrixki*.

229. I therefore remain of the view that the *Forest Pioneer* is a much more appropriate comparator for present purposes. Like the present case, Steel J., in that case, held that there was some fault on the part of the *Bulk Atalanta*. He held that there was a failure to explain why the *Bulk Atalanta* did not identify the approach of the *Forest Pioneer* until 8 minutes before the collision and that it ought to have taken avoiding action 5 minutes before the collision. Had it done so, the collision would likely have been avoided. Thus, although the *Bulk Atalanta* had not created the danger, its subsequent failure to take action to avoid the collision substantially caused by the *Forest Pioneer* meant that, similar to the position of the *Hua Sheng Hai*, it had to shoulder some of the blame for the collision. However, in circumstances where the *Forest Pioneer* bore very substantially greater blame for the collision, he apportioned liability as to 85% to the *Forest Pioneer* and 15% to the *Bulk Atalanta.* That approach seems to me to be entirely consistent with Brandon J.'s principles (iv) and (v) quoted in para. 218 above.

230. Taking an overall view of the facts and circumstances leading to the collision between the *Kirrixki* and the *Hua Sheng Hai,* I am of the view that a similar apportionment is appropriate here. The *Kirrixki,* as the creator of the danger, must bear the lion's share of responsibility for the collision. In contrast, the *Hua Sheng Hai* was left in a position where it had to react with speed to the sudden danger created by the trawler. While I have found fault on its part, that fault is significantly less blameworthy than the actions of the *Kirrixki* in taking a blind turn across the path of the *Hua Sheng Hai*. In my view, an apportionment of liability as to 85% to the *Kirrixki* and 15% to the

Hua Sheng Hai represents a fair reflection of their respective degrees of fault for the collision.

Next steps

231. I will list both cases before me at 10.30 a.m. on Thursday 18th April 2024 for the purposes of discussing next steps with counsel for the parties. It will be necessary to deal with the costs of the proceedings to date and to give directions as to the hearing of the assessment of damage suffered by the vessels. Between now and 18th April, counsel for the parties should therefore discuss these issues with a view to agreeing how they can best be addressed. If agreement cannot be reached on these issues, I will give further directions to the parties on 18th April.