

Final Report

FATALITY OF CREW AFTER FALLING OVERBOARD FROM INCE NORTHWIND AT ISTANBUL ANCHORAGE ON 3 DECEMBER 2023

TIB/MAI/CAS.154

Transport Safety Investigation Bureau
Ministry of Transport
Singapore

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The Transport Safety Investigation Bureau of Singapore

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SYNOPSIS

On 2 December 2023, the Singapore registered bulk carrier, Ince Northwind (INW) anchored at the Port of Istanbul, Türkiye, for changing of crew and taking provision supply.

On the afternoon of 3 December 2023, nine on-signers took a launch and arrived at the anchorage for joining INW. After eight of them boarded the vessel via the pilot ladder, the last on-signer, who was the Ordinary Seaman (OS) fell off from the pilot ladder when he was about 2-3m from the deck level and landed on deck of the launch. The OS suffered serious injuries and was unconscious. He was immediately brought back to shore for medical assistance but was declared dead at hospital on the next day.

The Transport Safety Investigation Bureau classified the occurrence as a very serious marine casualty.

The investigation revealed that the eight on-signers, who had boarded the vessel before the OS, did not wait for the accommodation ladder to be ready and were using only the pilot ladder even though the freeboard was more than 9m. The OS also boarded INW with only the pilot ladder, although the accommodation ladder had already been ready for use then. The OS appeared to be nervous prior to climbing the ladder and was seen tired and exhausted in the midst of climbing.

The investigation also revealed that the Company's procedures were not implemented onboard INW effectively. There was no personal floatation device (PFD) or lifejacket prepared for the on-signers and all the nine on-signers did not wear PFD or lifejacket when they were climbing the pilot ladder. The launch was secured to INW by a mooring rope and did not move away when on-signers crossed onto the pilot ladder and started climbing.

DETAILS OF VESSEL

Name	Ince Northwind
IMO number	9969118
Flag registry	Singapore
Classification society	Class NK – Nippon Kaiji Kyokai
Ship type	Bulk Carrier
Delivered	31 May 2023
Owner / ISM Manager ¹	Bright Carrier S.A. / MES Shipping Agency Pte Ltd
Gross tonnage	36140
Length overall	199.98m
Breadth moulded	32.24m
Depth moulded	19.30m
Summer draught	13.526m
Main engine(s)	Hitachi-Man B&W 6S50-C9,7-HPSCR 2 Cycle Diesel



Ince Northwind (*Source: the Company*)

¹ As per the International management code for the safe operation of ships and for pollution prevention – ISM Code. The “ISM Managers” is referred to as the Company in this investigation report.

1 FACTUAL INFORMATION

All times used in this report are Ship Mean Time (SMT) unless otherwise stated. SMT is three hours ahead of Coordinated Universal Time (UTC+3).

1.1 Sequence of events

1.1.1 On 2 December 2023, at 1150H, the Singapore registered bulk carrier, Ince Northwind (INW) anchored at Kumkapi anchorage², the Port of Istanbul, Türkiye, for changing of crew and taking provision supply.

1.1.2 On the afternoon of 3 December 2023, an Istanbul registered agency service boat, “Yildiray-I” (a launch) (see **Figure 1**), was proceeding to INW with the ship’s provision and nine joining crewmembers.



Figure 1 - The agency service boat, Yildiray-I
(Source: the Company)

1.1.3 At about 1445H, the launch arrived the ship side of INW, an Ordinary Seaman³ (MA) from the launch passed a mooring rope to the crew of INW via a messenger line to tie the bow of the launch to keep alongside to INW. After the pilot ladder was lowered⁴, INW’s crew continued preparing the accommodation ladder. At that time, the first on-signer, the new master started climbing up the pilot ladder while the accommodation ladder was still being prepared.

1.1.4 After the new master boarded the INW using only the pilot ladder, the remaining eight on-signers started climbing the pilot ladder one after another in sequence.

1.1.5 By the time of the last crew was about to climb the pilot ladder, the accommodation ladder was ready for use. The Chief Officer (CO), who was at

² At latitude 40° 57.2'N longitude 028°54.5'E.

³ Acting as a marine assistant (MA).

⁴ The pilot ladder was rigged but heaved up 1-2 meters to clear the sea water with a tripping line.

- the embarkation point on deck of INW, shouted to the launch telling the remaining crew to use the accommodation ladder. The last joining crew, an Ordinary Seaman (OS), gestured⁵ back to the CO and started climbing up the pilot ladder. The OS did not use the accommodation ladder and continued climbing the pilot ladder to board INW.
- 1.1.6 At about 2 - 3m from the deck level, the OS fell off from the pilot ladder and landed on deck of the launch. The OS suffered serious injuries⁶ and was unconscious not responding to the MA's verbal calls. The MA got back the mooring rope from INW, and the launch immediately brought the OS back to shore for medical assistance. He was declared dead at hospital the next day on 4 December 2023.
- 1.2 The ship
- 1.2.1 INW was a Supramax sized bulk carrier having five cargo holds and four sets of deck cranes installed onboard for cargo loading and discharging. At the time of occurrence, INW was in ballast condition drawing a draught of 4.7m forward and 6.9m aft, the mean draft was about 5.8m. The freeboard was about 13.5m at the time the on-signers boarding INW with the pilot ladder.
- 1.2.2 The launch was built in 1996 and operated by Yildiray Shipping Agency. It was used for carrying⁷ passenger and store supplies. The launch has its length overall 18m, breadth 5m, depth 2.01m and the freeboard (Summer) at 1.69m.
- 1.2.3 At the time of the occurrence, the launch was alongside and parallel with INW where the pilot ladder was in line with the launch cabin. The width of the walkway (see **Figure 2**) on both sides of the launch cabin was about 1m, and the height of the bulwark was about half a meter. There were rubber tyres (about 25cm width) secured around the hull of the launch as fenders. The provision store was loaded on deck at the aft part of the launch and was planned to be offloaded to INW after all on-signers boarded INW.

⁵ Indicating NO and declining to use the accommodation ladder.

⁶ According to the MA, the OS was lying on deck with face down and blood on deck, the OS vomited blood after his body was turned up by the MA.

⁷ Passenger carrying capacity at a maximum of 12 pax including launch crew.

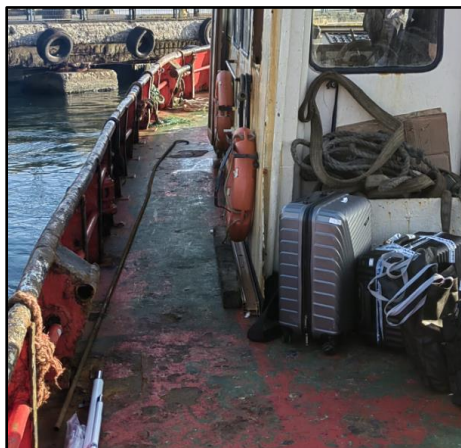


Figure 2 - View of the port side walkway of the launch
(Source: the Company)

1.3 Crew details

1.3.1 INW crew

1.3.1.1 There were 23 Turkish officers and ratings including the Master onboard INW. All crew held valid STCW⁸ competency certificates required for their respective positions onboard. At the Port of Istanbul, the Company scheduled nine officers and ratings to be signed off with replacements indicated in **table 1**.

Off-signers	On-Signers
Master	Master
Second Officer	Second Officer
Able Seafarer Deck -1	Able Seafarer Deck -1
Able Seafarer Deck -2	Able Seafarer Deck -2
Ordinary Seaman	Ordinary Seaman
Donkeyman	Donkeyman
Oiler -1	Oiler -1
Oiler -2	Oiler -2
Deck Cadet	4 th Engineer

Table 1 – list of off-signers and on-signers

⁸ The International Convention on Standards of Training, Certification and Watch keeping for Seafarers (or STCW), 1978 sets qualification standards for masters, officers and watch personnel on seagoing merchant ships.

1.3.1.2 The qualification and experience of the two Masters, Chief Officer and OS are tabulated in the table 2 below.

Designation	Age	Qualification	Duration onboard (month)	In-rank service (Year)	Service in Company (Year)
Master (off-signer)	56	COC – Master / STCW II/2, IV/2	6.6	23	1.6
Master (on-signer)	48	COC – Master / STCW II/2, IV/2	-	14	-
Chief Officer	33	COC – Chief Officer / STCW II/2, IV/2	1.5	2.5	7
OS (on-signer)	20	Deck Rating as per STCW II/4	-	0.4	0.4

Table 2

1.3.1.3 The new Master (on-signer), who was the first time with the Company, was the first person boarded INW. He did not wait for the rest of the on-signers to board INW and proceeded to meet the present Master (off-signer) for handing and taking over.

1.3.1.4 The OS (deceased) was issued a medical certificate from the Izmit Seafarers Health Centre after completing his medical examination on 1 November 2023 with a validity of one year till 1 November 2024. The Certificate indicated that the OS was fit for sea duties with no limitations or restrictions on fitness and not suffering from any medical condition likely to be aggravated by service at sea.

1.3.1.5 The OS was reported to be 1.80m tall and weighed over 100kg, he was not seen or complained about feeling unwell to the fellow colleagues at the time of boarding INW. According to the Company, it was the OS' second time joining ship by climbing the pilot ladder at the anchorage at the Port of Istanbul. The first occasion was joining a bulk carrier of similar size as INW in April 2023 using a combination ladder⁹. He served about five months on his first ship.

1.3.2 Launch boat crew

1.3.2.1 The launch master, 41 years old, had five years' experience of operating this type of boat. He left the launch operating agency after the occurrence. The MA

⁹ Pilot ladder and accommodation ladder.

had eight months sea experience. He was inside the launch cabin with the launch master at the time of occurrence.

1.4 Transfer arrangement

1.4.1 According to the launch master, the launch approached to INW's starboard side and went alongside (see **Figure 3**) with both bows facing at the same direction. Due to the sea swell (1-1.5m), the launch started rolling moderately and drifting away from INW, the launch master throttled the engine and used helm to keep the launch staying alongside to INW while the MA secured the launch to INW with a mooring rope.

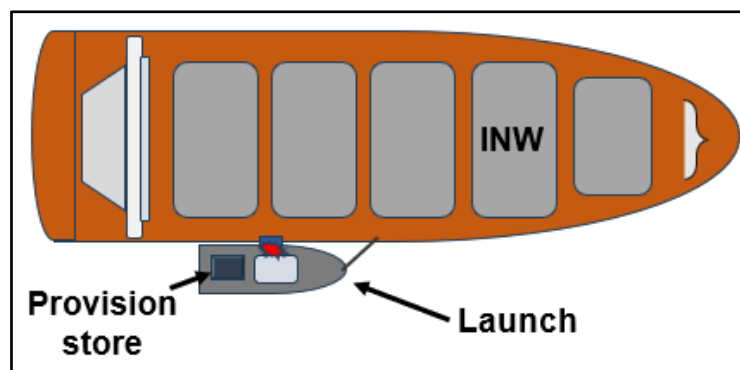


Figure 3 - The launch went alongside INW's starboard side

1.4.2 The pilot ladder had been prepared on the starboard side of INW (see **Figure 4**) when the launch arrived, the handrails at the access onboard the deck of INW were also rigged and ready for use. The height from the main deck of INW to the launch deck was about 12m. The height where the OS fell off from the pilot ladder onto the launch deck was about 9-10m. The height from lower platform of the accommodation ladder after rigged to the launch deck was about 5m.

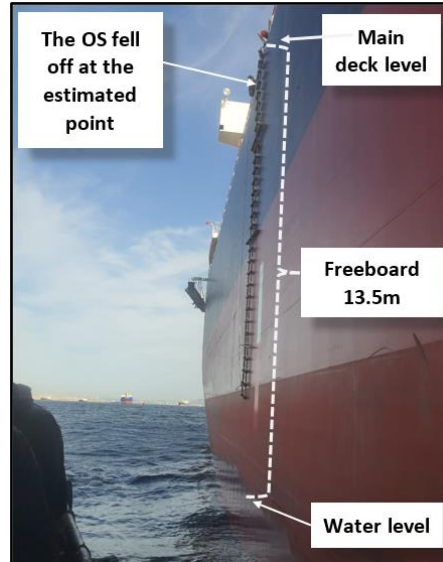


Figure 4 – Pilot ladder rigged at starboard side of INW and freeboard height
(Source: the Company)

1.5 Witnesses accounts

1.5.1 According to the launch master, he noticed that the on-signers were in desperation to board INW.

1.5.2 According to the MA, the OS was the last person to climb the pilot ladder and seen little bit nervous. He took the MA's advice to leave his backpack on the launch before proceeding to climb the pilot ladder. The backpack was to be brought up by heaving line once the OS boarded INW. While in the launch cabin, the MA heard a loud sound when the OS fell on the launch deck. The MA saw the OS lying with his face down at the walkway when he went out from launch cabin.

1.5.3 According to the CO of INW, the accommodation ladder was ready for use just before the OS was about to climb the pilot ladder. The OS gestured using hand signal to decline the use of accommodation ladder. The OS was seen slowing down when reaching about 4m to the deck which he had already passed the transfer point across to the accommodation ladder. The CO advised him not to rush and told him there were only few steps to reach the deck, the OS acknowledged "Okay, Brother". He then looked downwards and said, "tell the boat to move away", in about 3-4 seconds later, he fell off from the pilot ladder. The OS' waist and thigh were seen hitting the railing of the launch before

landing at the walkway area next to the cabin (see **Figure 5**). The CO recalled that the OS did not slip from the steps of the pilot ladder.



Figure 5 – Post accident enactment on how the OS landed on the launch
(Source: the UEIM¹⁰)

1.5.4 An on-signer Oiler (Oiler-1, age 23), who was queuing to climb the pilot ladder, noticed that the OS was nervous while queuing to board INW. When the Oiler-1 asked if the OS was afraid of height, the OS responded NO. On seeing the OS' worrying face, the Oiler-1 suggested the OS to board ahead of him so that the Oiler-1 could encourage him from behind. But the OS declined and preferred to be the last one. After the Oiler-1 reached on deck, he was observing the OS when he started to climb the pilot ladder. The Oiler-1 noticed that the OS' face turned pale slowly. This was also noticed by an Able Seafarer Deck (ASD) who assisted in rigging the accommodation ladder onboard INW. At that time, the Oiler-1 and others on deck of INW encouraged the OS and said to the OS: "If you climb up few more steps, we can hold you, hang on a little longer". The OS responded "Brother, tell the boat to move." The OS fell off when he looked down¹¹.

1.6 The Company's safety management procedures

On safe embarkation

¹⁰ Transport Safety Investigation Center of Türkiye participated in TSIB's investigation in accordance with the Casualty Investigation Code. The UEIM assisted in the interviewing of the relevant persons from INW and the launch.

¹¹ The OS' face expression was seen by the eyewitnesses (the CO and Oiler-1) as the OS could have passed out before his fall.

- 1.6.1 The Company's safety management procedures on embarkation required the rigging and using of combination ladder when the freeboard was more than 9m¹². A responsible deck officer must supervise the embarkation.
- 1.6.2 According to the Company, the CO, who was the responsible deck officer at the embarkation point, did not give permission to all on-signers to use the pilot ladder when the accommodation ladder was being prepared at the time. The CO had tried to stop the on-signers from climbing but to no avail. The CO did not insist further as he saw the on-signers had started climbing up the pilot ladder.
- 1.6.3 A bridge checklist on "Safe embarkation/disembarkation of crew/others" in the Company's safety management procedures required its fleet of vessels to conduct a self-check for crew transfer arrangement. The purpose of the checklist was to ensure that all its crew were ready for the operation, among others, few points relevant to this occurrence were extracted as follow:
- Has the crew changeover plan been prepared carefully with the company and agent?
 - Is the following equipment ready for use – Personal Floatation Device (PFD) / safety harness donned with lifeline, Personal Protective Equipment (PPE) (lifejacket, gloves, etc.)?
 - Are the embarkation/disembarkation arrangements as per international regulations?
 - Is the gangway/combination ladder properly rigged?
 - Has the agency boat (launch) been informed to be clear of the ship during the crew transfer?
- 1.6.4 The investigation team gathered that the bridge checklist onboard INW was not used at the time of occurrence. There was also no PFD or lifejackets prepared for the on-signers to use. None of the on-signers was donning PFD or lifejackets when climbing the pilot ladder.

Stop work authority

- 1.6.5 The Company incorporated "Stop Work Authority" (SWA) in its safety

¹² As required by SOLAS Convention, Chapter V, Regulation 23. The combination ladder arrangement consists of a pilot ladder and an accommodation ladder at the same time. The pilot ladder should be rigged immediately adjacent to the lower platform of the accommodation ladder and the upper end should extend at least 2m above the lower platform.

management procedures which empowered ship's crew members to stop a task or an operation, if in the individual crew member's opinion that, an unsafe act, unsafe behaviour and/or unrecognised situation was developing in performing the task or operation, a person was in threat or danger, or could be injured. The individual crew member then was to report the unsafe act, unsafe behaviour and/or unrecognised situation to the Master onboard. No retribution would follow a stop work action initiated in good faith by the crew member. The CO attempted to stop all on-signers from climbing the pilot ladder verbally while the accommodation ladder was in the process of preparation, but to no avail and the current Master onboard was not informed.

- 1.6.6 Prior to joining a ship, the Company also required four senior officers¹³ to attend a familiarisation training and briefing conducted by the Company. The training and briefing topics, among others, included the Company's safety management system and policies, regulatory requirements for certification and survey of the vessel and voyage information about the vessel, etc. The records provided to the investigation team for the new Master's familiarisation training and briefing was documented on 1 December 2023 prior to joining INW. The safety briefing for the other officers and ratings would be carried out within 24 hours by the Master or other senior officers onboard after joined the vessel.

1.7 Environmental information

- 1.7.1 At the time of the occurrence, INW was at anchor. There was south-westerly fresh to strong breeze of about 17-27 knots (Beaufort wind force 5-6), the sea condition was slight to moderate at about 1-1.5m. The sky was cloudy but with good visibility more than 6nm.

¹³ The Master, Chief Engineer, Chief Officer and Second Engineer.

2 ANALYSIS

2.1 The occurrence

2.1.1 The OS fell off from the pilot ladder, hit the railing and landed on deck of the launch with his face down. He suffered serious injuries and became unconscious. He was declared dead at hospital the next day after the occurrence.

2.1.2 The freeboard of INW was about 13.5m due to its light condition, a combination ladder was required for embarkation at this height. Although the OS mentioned that he was not afraid of height when queried by the Oiler-1, the MA noticed that the OS looked worried and nervous while waiting to climb the pilot ladder.

2.1.3 Despite being informed by the CO that the accommodation ladder was ready for use, the OS declined using the accommodation ladder and opted to use only the pilot ladder. This behaviour was likely driven by his sense of self-esteem after seeing all other on-signers ahead of him had climbed the pilot ladder without any issues.

2.1.4 As the OS was climbing up the pilot ladder higher, he was seen slowing down by the CO, and his face turned pale slowly which was noticed by the Oiler-1 and an ASD. He was likely getting tired and exhausted. The CO and other on-signers on deck of INW attempted to encourage the OS continuing to climb up the pilot ladder as it was about 2 -3m before reaching the deck level. However, he seemed to know that he might not be able to make it to the deck level and had asked the launch to move away from ship side. The OS could have either fainted or become weak when he looked down and fell off from the pilot ladder before the launch could move away from ship side.

2.1.5 The accommodation ladder was rigged with its lower platform at about 5m above the launch deck. The OS bypassed the accommodation ladder and reached a position where he fell off about 4-5m above the lower platform. If the OS had used the accommodation ladder, which was rigged beside the pilot ladder, it would be less strenuous for the OS to board the ship and the occurrence could have been avoided.

2.1.6 This occurrence highlights the importance of following established procedures in using the combination ladder when the height of vessel's freeboard is more than 9m. The ship's crew should have enforced the use of combination ladder

for the on-signers. As for individual, it should not be shy to use the combination ladder, more so if it is physically challenging to the individual.

2.2 Position of launch during transfer

2.2.1 At the time of occurrence, the launch master was operating the launch engine and helm to keep the launch resting firmly alongside INW. In addition, the launch was also secured to INW by a mooring rope. The investigation team noted that the intention of the launch master was to prevent the launch being pushed away by sea swell and created a gap between the launch and ship side of INW, which may cause the person crossing over to miss the pilot ladder and fall into water.

2.2.2 However, once the person had stepped onto the pilot ladder and started climbing, the launch should move away and stay in the close vicinity till the person has reached onto the deck of the vessel. This common practice is to prevent landing and hitting onto the launch in case the person falls off from the pilot ladder. Instead, the person would fall into the water and with a lifejacket (a requirement when boarding vessel via pilot ladder), he would be able to stay afloat in the water.

2.2.3 As evident in this occurrence, the launch was keeping alongside the ship side of INW with a mooring rope till the last on-signer tragically fell on deck. The mooring rope had delayed the moving away of the launch when asked by the OS before he fell from the pilot ladder. The investigation team opined that, if by operating the launch engine and helm could not keep the launch resting firmly alongside INW to facilitate boarding, the boarding should be aborted till the sea condition had improved.

2.3 Implementation of the Company's procedures

2.3.1 The bridge checklist in the Company's safety management procedures was to ensure safe embarkation and disembarkation of personnel by requiring the ship crew to ensure that the relevant items were ready, and the condition was safe. However, the INW crew did not make use of the checklist to perform the checks prior to the boarding of the on-signers. There was no PFD or lifejacket prepared for the on-signers and none of the on-signer worn PFD or lifejacket when climbing the pilot ladder.

- 2.3.2 The CO, who was the responsible deck officer at the embarkation point, attempted exercising the SWA to stop the on-signers from boarding INW when the accommodation ladder was still in preparation, but to no avail and did not inform the current Master of INW. The CO also did not inform the launch to be clear of the ship side during the crew transfer.
- 2.3.3 Similarly, all the nine on-signers, including the new Master, were in desperation to board INW as seen by the launch Master. The new Master, who was signing on his first ship with the Company, climbed pilot ladder in a hurry to meet the current Master (off-signer) for handing and taking over without waiting for the accommodation ladder to be rigged. The remaining eight crew replicated the same unsafe behaviours as displayed by the new Master.
- 2.3.4 The unsafe behaviours of all the on-signers suggested that the Company's procedures relating to safe embarkation at anchorage and SWA were not implemented effectively.
- 2.3.5 The Company's safety management procedures on embarkation required the rigging and using of combination ladder when the freeboard was more than 9m. However, the sequence in rigging the combination ladder provided an opportunity for the on-signing crew members to use only the pilot ladder. This is because the pilot ladder was rigged from the deck of INW to the water level (see footnote no.4). When the launch came alongside INW, this setting facilitated the on-signers to climb the pilot ladder all the way to the deck level, without having to wait for the accommodation ladder to be ready.
- 2.3.6 The investigation team opined that, apart from educating the crew embarking vessel at anchorage to use appropriate transfer arrangement, the Company should review the process of rigging the combination ladder to prevent the crew from using only the pilot ladder. For instance, to lower the pilot ladder to the water level only when the accommodation ladder is rigged.

3 CONCLUSIONS

From the information gathered, the following findings are made. These findings should not be read as apportioning blame or liability to any particular organisation or individual.

- 3.1 The OS suffered serious injuries and became unconscious after falling from the pilot ladder and landed on deck of the launch and was declared dead at hospital the next day.
- 3.2 The OS did not use the accommodation ladder even though it was ready and only used the pilot ladder for boarding despite the CO's advice. This behaviour was likely driven by his sense of self-esteem as the other eight on-signers had boarded INW using only the pilot ladder. The OS appeared to be nervous prior to climbing the pilot ladder and was seen tired and exhausted during climbing due to his body weight.
- 3.3 The launch was secured to INW by a mooring rope and did not move away from ship side of INW after each on-signer crossed over to the pilot ladder and started climbing.
- 3.4 The Company's procedures for ensuring safe embarkation and disembarkation of crew were not performed prior to the boarding of the on-signers. There was no PFD or lifejacket prepared for the on-signers and all the on-signers were not wearing PFD or lifejacket when boarding INW using the pilot ladder. The CO attempted exercising the SWA to stop the on-signers from boarding but to no avail and did not inform the current Master.
- 3.5 All nine on-signers were in hurry to board INW without waiting for the accommodation ladder to be rigged. The unsafe behaviours of all on-signers suggested that the Company's procedures relating to safe embarkation at anchorage and the SWA were not implemented effectively.
- 3.6 The Company's safety management procedures required the rigging and using of combination ladder when the freeboard was more than 9m, but the pilot ladder was rigged from the deck of INW to the water level at the time of occurrence which provided an opportunity for the on-signing crew to use only the pilot ladder, without having to wait for the accommodation ladder to be ready.

4 SAFETY ACTIONS

During the course of the investigation and through discussions with the investigation team, the following safety actions were initiated by the relevant stakeholders.

4.1 By the Company

- 4.1.1 After the occurrence, the Company revised its procedures on crew joining ship, which require the Company's crewing department to provide advance information about the on-signers and off-signers to the master of vessel and the local agent for their awareness and preparation. The master and local agent can feedback to the crewing department if they have any concerns to the crew change plan. Once accepted by the master and local agent, the crewing department is to monitor the sign on and sign off operation. If there are potential issues such as health, physical ability to climb pilot ladder at anchorage, to cancel the crew change if necessary and re-arrange accordingly.

5 SAFETY RECOMMENDATIONS

A safety recommendation is for the purpose of preventive action and shall in no case create a presumption of blame or liability.

5.1 For MES Shipping Agency Pte Ltd (the ISM Manager of Ince Northwind):

5.1.1 To ensure the Company's safety management procedures are implemented onboard its fleet of vessels effectively such as using the bridge checklist for "safe embarkation/disembarkation of crew/others". [**TSIB Recommendation RM-2024-018**]

5.1.2 To review the process of rigging the combination ladder, when the freeboard is more than 9m, to ensure safe embarkation of crew members. [**TSIB Recommendation RM-2024-019**]