



Management Review

2022

---

Brett McElligott, HSEQ Manager  
Grindrod Shipping

---

## CONTENTS

---

<b>Date of Review</b>	<b>4</b>
Review of previous Management Review (2021)	5
Review of the Action Plan for year 2022	5
<b>Vision and Mission Statement</b>	<b>6</b>
<b>Safety &amp; Environmental Protection Policy and Objectives</b>	<b>6</b>
<b>Review of Vessel Feedback to Safety Management System and updating of the SMS.</b>	<b>7</b>
Company circulars review	7
Master's system review	7
<b>Internal and External Audits / Inspections</b>	<b>8</b>
Audits Internal and External	8
Analysis of Audits	8
Periodic review of Internal Audits for compliance with the ISM Code	13
<b>Analysis of Incidents and Near misses</b>	<b>13</b>
Incidents	13
Near Miss	18
<b>Safety Performance</b>	<b>21</b>
<b>Environmental Performance</b>	<b>22</b>
Technical Measures: Energy Efficiency Existing Ship Index (EEXI)	22
Operational Measures: Carbon Intensity Indicator (CII)	24
<b>Port State Control</b>	<b>28</b>
<b>Review of International and Country Specific statutory requirements</b>	<b>32</b>
New Regulations review	32
<b>Customer Feedback / Complaints</b>	<b>32</b>

---

---

Risk Assessments	34
Critical Equipment failures	34
Management of change	34
Security	34
Company and ship resource levels review	35
Company Resourcing Levels	35
MLC / Crewing matters	36
Review of rest hours within the Fleet	36
Review of Surveys (certification, Existing COC, Major Memo, significant issues)	36
Review of dry docking	36
Review of BASSNet	37
Suitability and effectiveness of the HSEQ system	37
Review of training needs	37
Training of Company Personnel:	38
Training of Shipboard personnel	38
Drills	38
Performance Indicators	39
Action plan for continual improvement 2022	42
Appendix 1: Masters review	43
Appendix 2: SEEMP review	47

---

# Date of Review

Date: 24 March 2023

The Management Review was chaired by General Manager and attended by following members.

Quentin Foyle

Hilton Stroebe

Rajaraman Krishnamoorthy

Rajesh Sharma

Denver Mariano

Henry Dayo

Joey Baluyot

Brett McElligott

Brendon George

Mike Allen

Rennie Govender (Away IVS Gleneagles)

Warren King

---

## Review of previous Management Review (2021)

Report of previous Management Review (2021) was reviewed and found satisfactory. No outstanding issues were noted.

## Review of the Action Plan for year 2022

Refer to attached sheet for action plan

<b>S.NO</b>	<b>Item</b>	<b>PIC</b>	<b>Target date</b>	<b>Status</b>
1	Enhance safety culture on board through monthly campaigns and upload the same in SHEQ website	DPA	MONTHLY	ONGOING
2	Promote health bulletins and upload the same in SHEQ website	DPA	AS REQUIRED	ONGOING
3	Identify on the job training needs for various shipboard activities and promulgate the same to fleet.	DPA	AS REQUIRED	ONGOING
4	Addition of 2 ships in our fleet	General Manager	SEP 2022	GSM Sold – not completed
5	Review manning levels of all vessels in the fleet as required by MPA circular	FELICIA	JUNE 2022	JUNE 2022
6	Implementation of PODIUM for fuel oil consumption, charter party terms and monitoring CO2 emissions	BRETT	JAN 2022	Implemented
7	Implementation of SSAS test in Podium	DPA	JAN 2022	Implemented
8	Implementation of KARCO TRAINING SYSTEM	DPA	JAN 2022	Implemented
9	Changeover of ECDIS from FURUNO to Chartworld during dry dock	Ship Manager	AS REQUIRED	Implemented
10	Preparations for compliance with SEEMP III, CII regulations	BRETT / RENNIE	DEC 2022	Implemented
11	Upgrading BASSNET to version 2.11	SUBU	DEC 2022	To be completed 2023
12	Upgrading all office users outlook to OFFICE 365	SUBU	DEC 2022	Implemented
13	Commence food safety audit by BLU	PATRICIA	JAN 2022	Implemented

# Vision and Mission Statement

## **VISION STATEMENT**

To continue to be a significant and profitable international ship-owner and operator with a growing fleet of modern and flexible ships.

## **MISSION STATEMENT**

*To provide high quality shipping services across the sectors in which the division participates and be the carrier and partner of choice for Blue Chip customers.*

# Safety & Environmental Protection Policy and Objectives

*Grindrod Shipping PTE. Ltd is a leading global provider of shipping operations. It is recognised that our services, lead to an improved quality of life.*

*It is Grindrod Shipping's policy to:*

- *Care for its people and provide safe and healthy working conditions;*
- *Protect and conserve the environment in which we operate;*
- *Maintain the highest standard of integrity; and*
- *Provide our customers with services that most closely meet their requirements and expectations.*

---

# Review of Vessel Feedback to Safety Management System and updating of the SMS.

---

## Company circulars review

---

All Company circulars issued in 2022 were reviewed and incorporated in our SMS system if the SMS required updating. A few circulars are reissued with new 2023 circular number and uploaded in SHEQ system.

---

## Master's system review

---

All Masters system reviews received from vessels were analyzed by the Office and necessary corrective action taken as required. The HSQE manuals were amended on occasion.

Please see Appendix 1 for details of the Master's Review.

HSQE manuals were also reviewed for continual improvement depending on feedback from ships, classification society, administration, oil majors, PSC inspections, non conformities, changing regulations, best practices etc.

---

# Internal and External Audits / Inspections

## Audits Internal and External

Internal audits of ships and company were carried out at planned intervals for improvement of the HSQE system. Corrective and preventive actions were taken for all observations / NC raised.

All Non-Compliances and observations raised in external audits were reviewed and necessary Corrective and preventive actions were taken to prevent recurrence.

The following **external** audits were completed onboard the Vessels and Grindrod Ship Management Office during 2022:

External Audit Type	No. Of Audits	No. of NCR	No. Observations
ISM + ISPS	6	1	0
MLC	6	0	0
ISO9001	-	-	-
ISO14001	-	-	-
DOC (MPA+MI)	1	0	0

The following **internal** audits were completed onboard the vessels during 2022:

Internal Audit Type	No. Of Audits	No. of NCR	No. Observations
ISPS + ISM + MLC	47	143	362
Navigation	20	7	25

## Analysis of Audits

In 2022 the office began to visit some vessels as the ports started to open up again following the COVID 19 restrictions which had been in place worldwide for the previous 2 years. However some of the internal audits were still completed by the senior officers on board the vessels due to COVID restrictions in areas like China. Whilst the officers onboard genuinely tried to complete an audit that was objective, the office has far more experience in completing audits and specifically identifying issues that may be fleet-wide. There were significantly fewer non compliances and observations in 2022 compared to 2020 when the office representatives completed all the audits. It is hoped that with the relaxing of the COVID regulations allowing office representatives to travel to the fleet in 2023, most of the Audits will be done by office representatives. The following analysis of the audits was completed. Please note that for analysis purposes, the audit findings are usually entered in BASSNet.

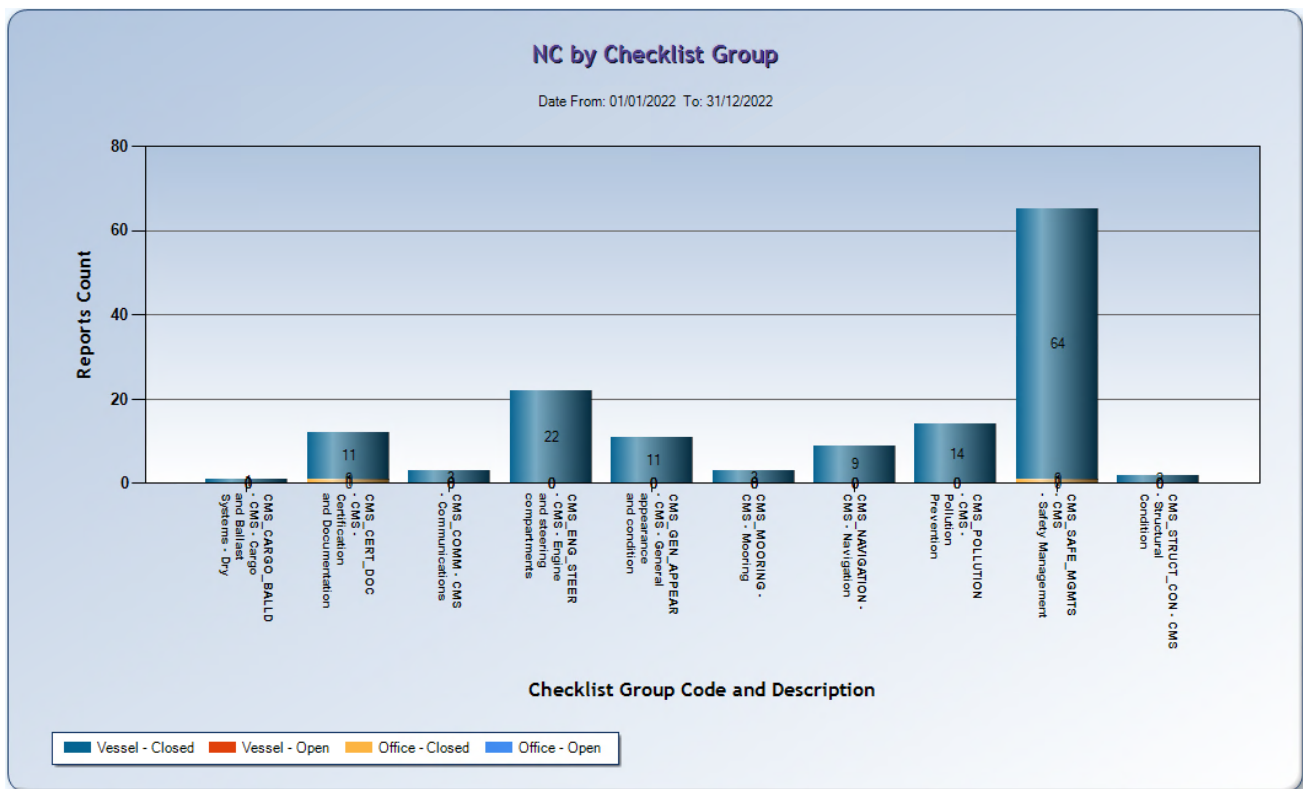


## Internal ISM Audits:

### Non-Conformities

The Masters are not as efficient as they should be with appropriate and valid closeout of observations and NCN's. On occasion the Masters do not reply to the remarks, these then become overdue. The Ship Manager/DPA is to actively ensure that the vessel closes out all NCN's and observations appropriately.

45% (35% in 2021) of all NcN's are Safety Management related. It should be noted that many of the audits were remote audits due to the complications that have occurred from the COVID 19 pandemic where the office auditors were not able to attend the vessel so these audits were completed remotely with most of the observations at non-compliances being picked up by the attending Master. These issues picked up are typically port state control issues and the master is to concentrate his efforts with the other SMT members on fire fighting and LSA port state control issues.



An analysis of the **Internal Non-Compliances in 2022** identified the following areas of improvement for 2022:

1. Pollution Prevention: Is garbage being collected, separated and disposed of as per the Company Garbage Management Procedure? (7 NcNs).
2. Maintenance Management: Is a planned maintenance system being followed and is it up to date?. (5 NcNs).
3. Safety Management: Are lifeboats, including their equipment and launching mechanisms, in good order? (5 NcN's).
4. Safety Management: Are lifebuoys, lights, buoyant lines, quick release mechanisms and self-activating smoke floats in good order? (5 NcN's)

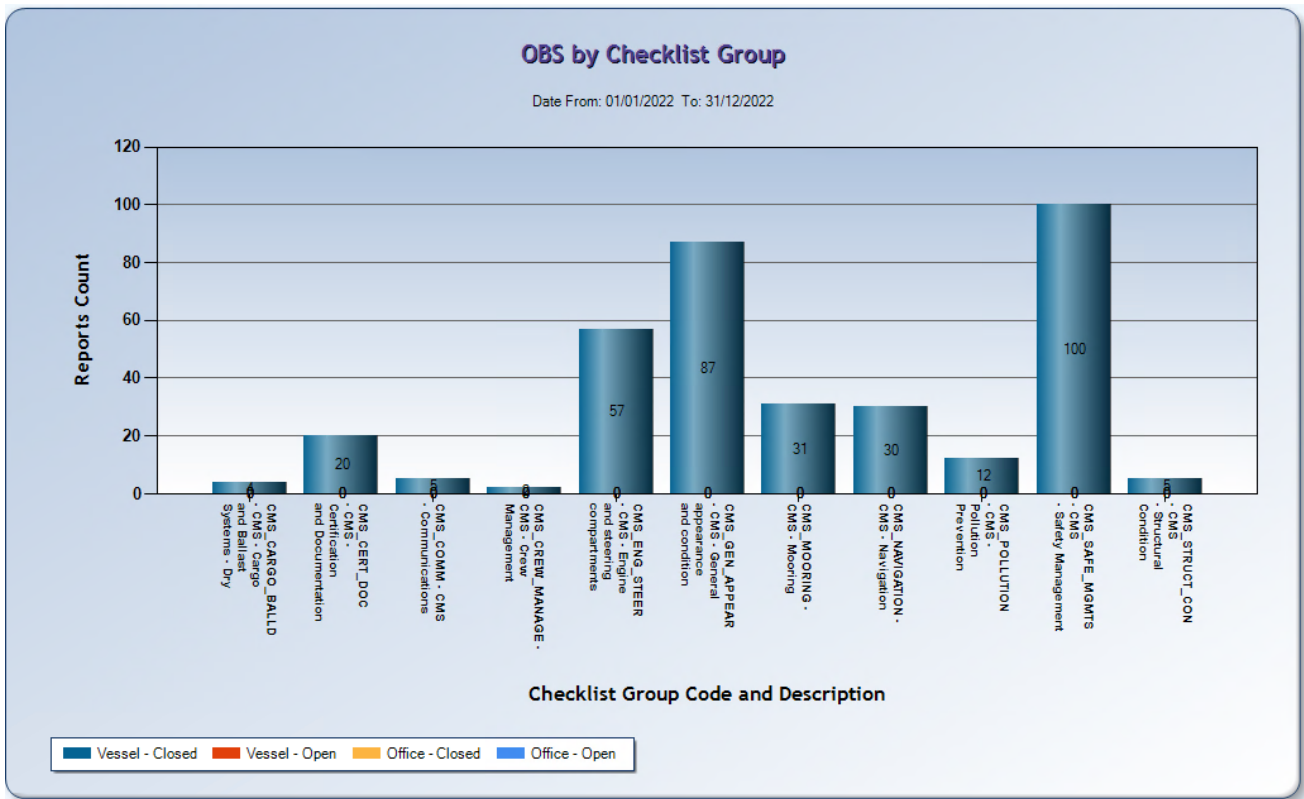
- Safety Management: Are Enclosed Space Entry and Hot work Permits procedures complied with ? (5 NcN's)

**Internal ISM Audits:**

Observations

An analysis of the **Internal Observations noted in 2022** identified the following areas of improvement for 2023:

The below observations are all new – not previously recorded multiple times in previous years. The visiting Ship Managers are to ensure The Masters and Heads of Department continue to maintain a high standard of cleanliness and record keeping associated with that Maintenance.



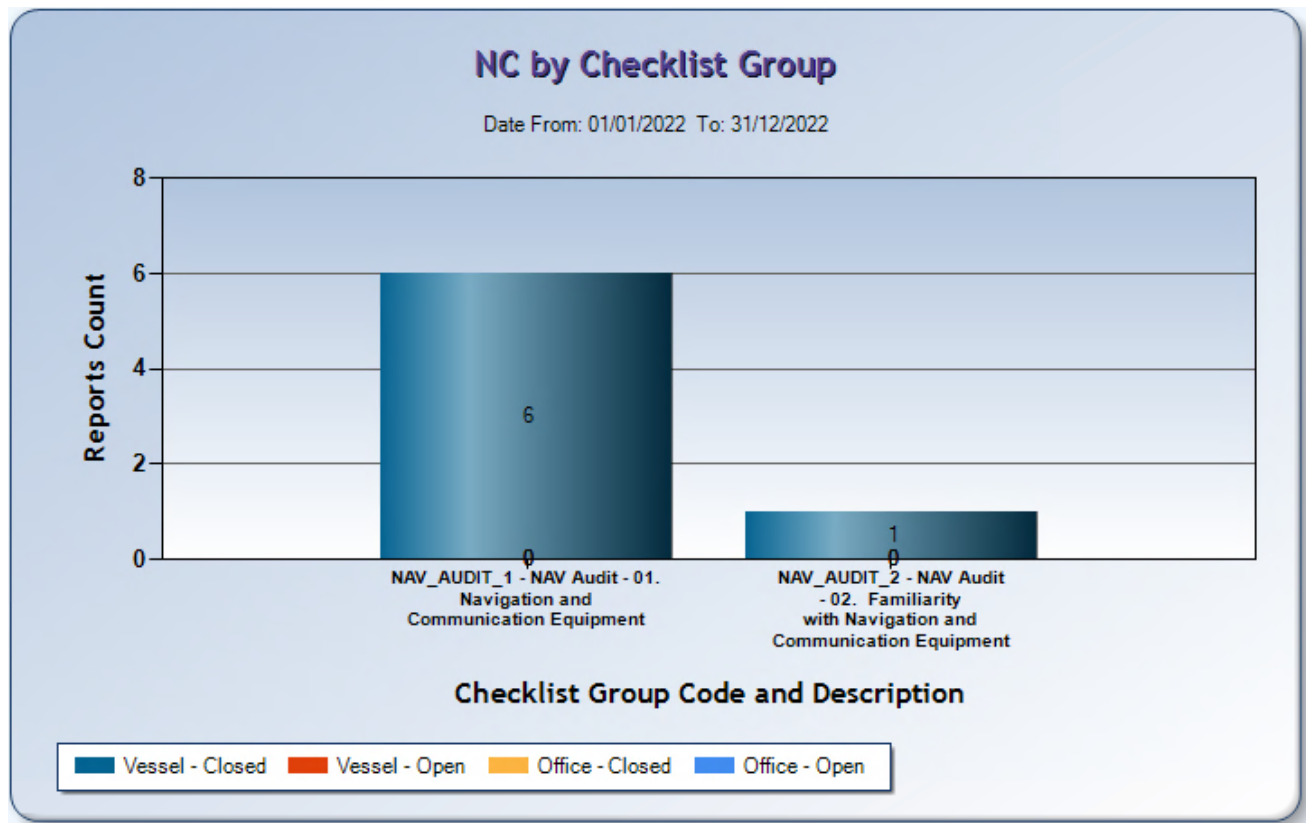
An analysis of the **Internal Observations** identified the following areas of improvement for 2022:

- General Condition: Are internal spaces and storerooms clean, free from Debris and tidy (11 obs). This was also the highest 2021
- General Condition: Are all vents and air pipes clearly marked to indicate the spaces they serve (9 obs). Third highest in 2021
- Mooring: Are pedestal fairleads, roller fairleads and other rollers well greased and free to turn and are bits and chocks free of grooving? (8 obs)
- Safety: Are fuel, ballast and other space vents and air pipes in good order and does visual evidence indicate regular maintenance? (7 obs)

**Corrective Action Plan for Internal Audits:**

The SHEQ department representatives who will contribute to additional shipboard audits and training on board during their ship visits in 2023 (if allowed by COVID 19 restrictions) to ensure that the Ship Maintenance plans are being adhered to and particularly that the FF and LSA issues have been addressed. It is generally felt that these Many of these observations are on the PSC hitlist and a detainable item.

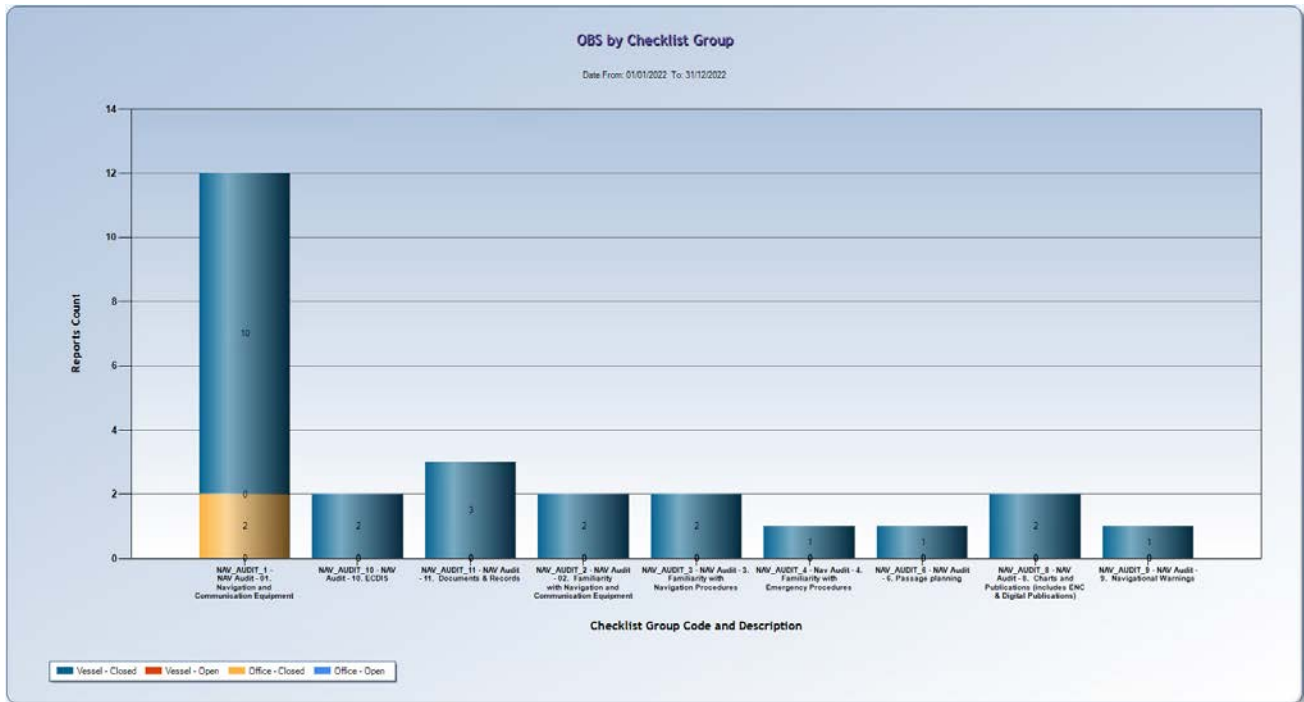
**Internal Navigation Audits:**



An analysis of the **Internal Non-Compliances** noted in 2022 identified the following areas of improvement required for 2023:

The HIGH RISK non compliances are as follows:

1. All navigation equipment related including the following: Speed log, VDR, Magnetic compass, portable radios and other non-specific Navigation equipment.



An analysis of the **Internal Observations** identified the following areas of improvement required for 2023:

1. Navigation and communication equipment: GMDSS equipment (2 observations)
2. Navigation and communication equipment: Gyro Compass (2 observations)
3. Navigation and communication equipment: Weather fax- interpretation (2 observations)
4. Documents and records: Are deck log books and engine movement (bell) books correctly maintained and is an adequate record being kept of all the navigational activities, both at sea and under pilotage? (2 observations)

**Internal Office DOC ISM Audit:**

**NON CONFORMITIES:**

- Emergency Generator Lube Oil Filter ROB is zero for IVS RAFFLES

**OBSERVATIONS:**

- CLASSNK TECHNICAL circulars not published in MEMO section since June 2021.
- PMS to be updated on IVS PHOENIX
- Company organization chart still containing names who are no longer with Company ( CEO / TANG / AMILIA)
- ONE NOTE - Shore communications still containing names who are no longer with Company ( CEO / TANG / AMILIA)
- Communication chart in Emergency Contingency Plan is to be updated. (James to be shifted under Operations)
- Incorrect checklist (ISM/ISPS Audit) used for technical inspection on few vessels - IVS Merlion, IVS Wentworth, IVS Tembe, IVS Sentosa.

- IVS SUNBIRD – CW test records incomplete in ONE DRIVE

These NC/OBS were reviewed for effectiveness DURING MANAGEMENT REVIEW.

### **Corrective Action Plan for Internal Audits:**

The above are being addressed by induction of additional guidance via Circulars and training material. Marine Superintendents and the SHEQ department representatives who will contribute to additional shipboard audits and training on board during their ship visits in 2023.

### **Technical Inspections review**

Virtual Ship visits were carried out on all vessels by SHIP MANAGERS due to COVID restrictions on travel to ensure compliance and improvement of HSQE system. All observations raised during visits were closed and reports filed in company – BASSNet.

---

### **Periodic review of Internal Audits for compliance with the ISM Code**

---

Company has verified all those undertaking delegated ISM-related tasks are acting in conformance with the Company's responsibilities. Verification was done through review of internal audits, technical inspections, Navigation audits, Reviews by the Office on SharePoint/OneNote, incident and near miss analysis, deficiencies from PSC inspections, external audit non-conformance etc.

It was observed that each crew member effectively implements and acts in conformance with company's SHEQ Management System. Each individual shall ensure that they are familiar with their responsibilities, authority and interrelationships.

## **Analysis of Incidents and Near misses**

---

### **Incidents**

---

There were 142 incidents for the Grindrod Fleet in 2022 (87 in 2015; 110 in 2016; 104 in 2017, 187 in 2018, 145 in 2019; 147 in 2020; 130 in 2020), in the IVS Fleet. Lessons learned are distributed to the fleet and the analysis of the incidents is published to both the Office and the Fleet.

The following incidents below are a summary of the most severe incidents for 2022 for the IVS Fleet. As can be seen below the amount of LTI's and MTC's is certainly a cause of concern. Where trends have been identified (e.g. burns), Circulars have been published with remedial action. However as can be seen from below most of the injuries could have been avoided just by situational awareness alone!

### **Spills:**

**Nothing to Report**

### **Additional Noteworthy Event:**

---

## COVID Cases onboard

Suspected and confirmed COVID cases onboard during 2022:

**IVS Wentworth:** 2 cases

**IVS Sunbird** 2 cases

**IVS Ibis** 1 case of failed shore test

## Losses:

### IVS Merlion

#### **Vessel made minor contact with Quay side**

Ulsan South Korea: Vessel made contact with the jetty during berthing operation resulting in minor damage to hull

### IVS Okudogo

#### **Sudden death of 2EO ROSELITO B. GOMEZ**

The 2nd engineer passed away on 05<sup>th</sup> May while vessel was alongside in Baltimore USA. He was sitting on his chair in the engine control room during his break time and suddenly collapsed and lost consciousness. First aid was provided and the Master immediately requested shore assistance. The BCFD personnel arrived on board and declared him dead.

The medical examiner stated that the cause of death was due to Atherosclerotic Cardiovascular Disease.

### IVS Pinehurst

#### **Fishing vessel made minor contact when vessel was at anchor**

IVS Pinehurst was anchored at Yangjiang Anchorage awaiting berthing instructions.

A Fishing vessel was observed coming to the vessel's port quarter with the intention of crossing the vessel. When abeam the fishing vessel started to swing and hit our vessel's Port Bow Shoulder. The Duty Officer immediately alerted the Master and Informed the crew to check vessel's port shoulder for any damage. All tanks were sounded to confirm that there was no water ingress to the vessel. The vessel sustained dent on Hull Plating of the Port Shoulder near frame 168-170.

Fishing vessel sustained damaged to their bow but did not require immediate assistance. No Pollution was observed on the water surrounding the vessel and the fishing boat.

## LTI's:

### IVS Kestrel (LTI)

#### **Oiler - Pain in abdomen due to improper lifting of weights**

The Oiler reported to Master that he is suffering from an abdominal pain, specifically to his lower-right abdomen. The Oiler suspected that it was an appendicitis. The Oiler was taken to hospital. Upon his return he reported that he is fit for duty and this discomfort happened due to incorrect lifting a heavy object. Oiler had lifted heavy piece of metal without assistance and without supporting lifting equipment in the workshop.

### IVS Kestrel (LTI)

#### **Face Injury to CNO when entering booby hatch**

CNO was hit by the Booby hatch support handle while entering the Cargo hold. The Booby hatch was not safely secured by the pin after opening. As he held the cover while entering, the cover closed and struck the top of his helmet and hit his nose. He suffered a broken nose.

### IVS Sentosa (LTI)

#### **Injury of left hand index finger due to damaged grinding disc**

A Fitter reported that his left hand Index finger was injured/cut due to damaged grinding disc. The incident happened while he was fabricating a pipe in the workshop. He was grinding the welded part of the pipe and flange when the grinding disc got damaged. The damaged disc caught his finger, cutting the cotton gloves and injured his left hand index finger.

### IVS Hirono (LTI)

#### **Oiler fell off portable platform to the bottom of the crankcase**

The oiler was tightening the Main Engine piston rod bolts to the crosshead when suddenly the portable platform which he was standing on slid and he fell about 2.5m to the bottom of the crankcase. The Oiler climbed out of the crankcase while complaining of severe pain from the left collar bone area. He was taken to hospital where it was diagnosed that his shoulder bone had been broken.

### IVS Hirono (LTI)

#### **Eye injury**

The seafarer was lying on deck painting the davit underside, when a sudden gust of wind blew and scattered the dust straight into his face with dust particles penetrating his right eye. He immediately stopped what he was doing and went for medical help. Upon inspection of the eye, a suspected scratch was found. His right eye was covered with an eye pad/patch to let his eye rest.



## **IVS Sentosa (LTI)**

### **Slip by Crew member while descending over Pipe guard ladder aft of hatch no.5 stbd.**

The Crew member was accompanying the draft Surveyor during the ballast water tank inspection. They had to cross over the pipe support ladder situated on the stbd. side aft between hatch coaming no.5 and the accommodation block. When he descended the ladder, his feet slipped off the ladder and his back hit the platform. He could not stand up and had to be helped ashore where the agent took him to the hospital for X-rays and examination. The X-Rays showed that the bone structure was normal but that he sprained his back muscle.

## **IVS Knot (LTI)**

### **Back Injury**

The Oiler went to open the ballast valve. He stepped up on the upper platform to reach valve hand wheel to open the discharge valve. When he stepped back to the main flooring he accidentally slipped and his back hit the Main Engine L.O. Outlet pipe blind flange. He had to rest his back for 4 days as per doctor's advice.

## **IVS Thanda**

### **Back Injury**

The 2EO had completed repairs to the crane No. 1. On the way down the crane access ladder, 2EO Ilagan fell about 6 feet to the deck, landing on his lower back. He was conscious but couldn't stand as he complained of lower back pain. He had to rest his back for 2 days as per doctor's advice.

## **IVS Raffles**

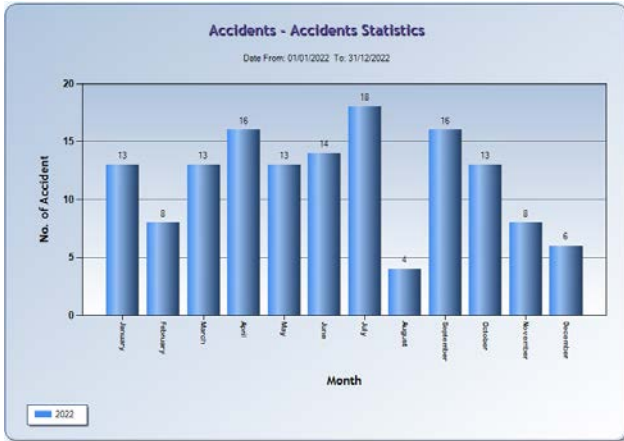
### **OS left ring finger got stuck between ladder hook and railings, severing 1cm of his left ring finger (distal phalange).**

The accident happened as they were removing the rope which was securing the aluminium portable extension ladder to the railings. The ladder slid towards the wharf and the OS's left hand ring finger was squashed by the securing hook of the ladder against the ship's railing. He was wearing his PPE (gloves) that time of the accident.

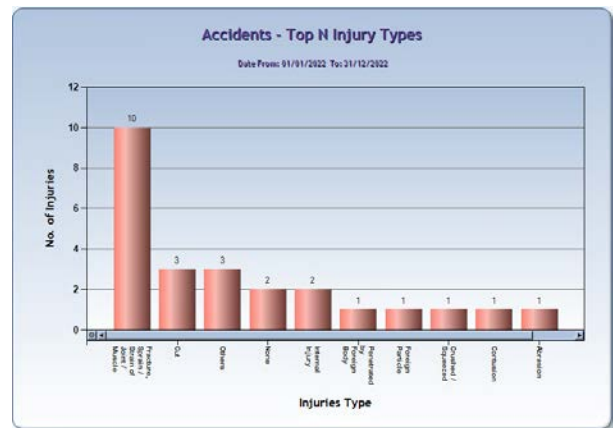
**The following Accidents occurred in the IVS Fleet during 2022:**

---

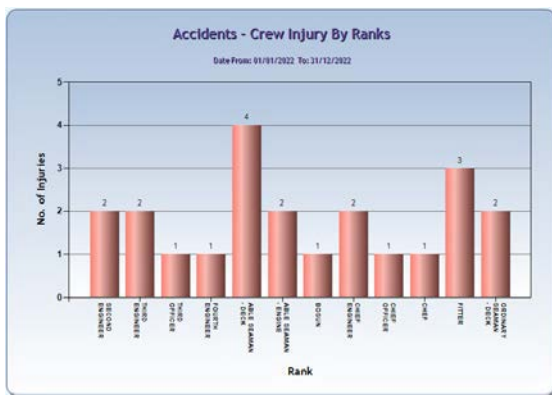




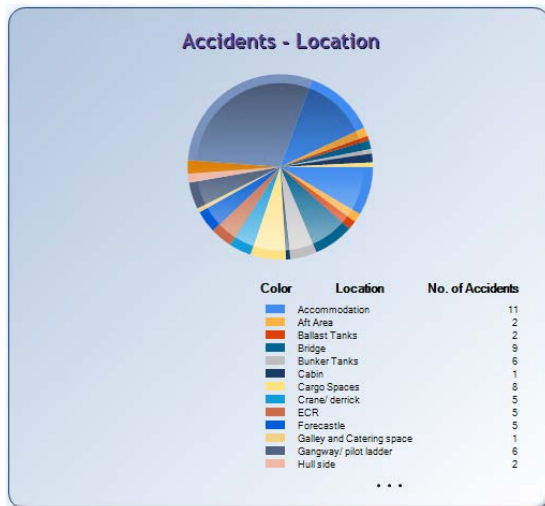
**Grindrod: Incidents by month**



**Incidents by Injury type**



**Incidents – Crew injuries by Ranks**



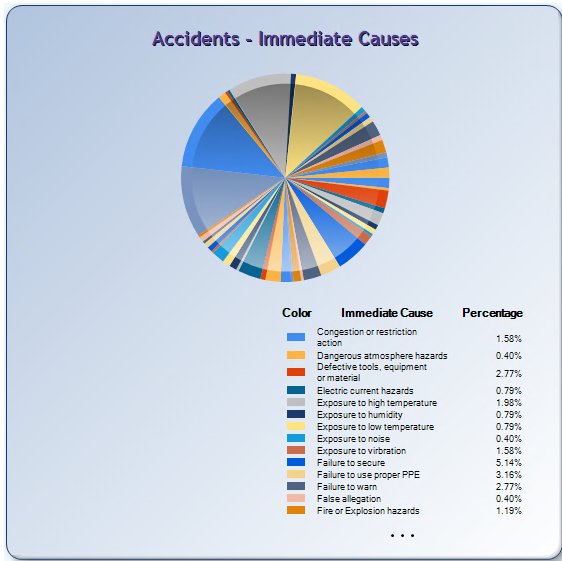
**Incidents – Location**

As can be seen in this analysis the Deck ratings were most likely to be injured. Working on the Engine Room and Main Deck were the areas where the injuries occurred. Working the holds and cleaning the holds is a team effort and all must look out for each other to ensure that bad habits do not form where due to familiarity, the individual takes a chance. In shipping this usually ends up with severe injuries.

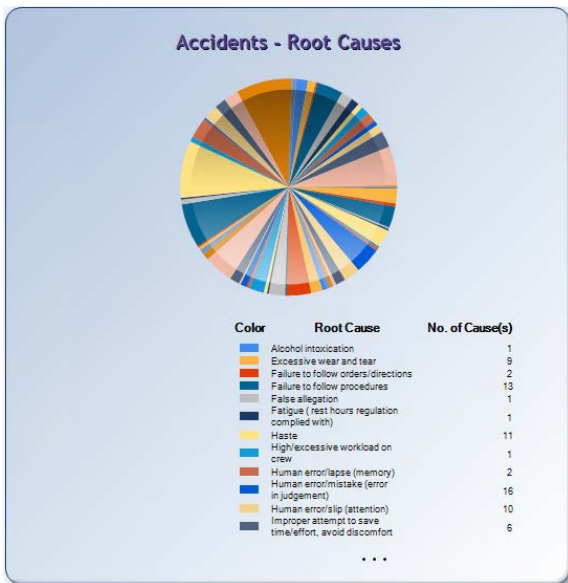
The top three **Location** of Incidents include:

- 35.4% Engine Room
- 7.8% Cargo Deck / Main Deck
- 7.8% Bridge

Whilst 35% of incidents occurred in the Engine Room spaces, the Deck and Cargo spaces had the most LTI's and the severest LTI's.



Incidents – Immediate Causes



Incidents – Root Causes

The top three **Immediate causes** of Incidents include:

- 12.3% Machinery Malfunction
- 11.5% Procedural Error
- 11.1% Machinery Breakdown
- 5.4% Failure to Secure

In summary – 26.1% Immediate causes of incidents are Tools and machinery that the crew are using. Please ensure that prior to using the equipment that the tools are in good working order and complete regular maintenance on equipment.

The top four **Root causes** of Incidents include:

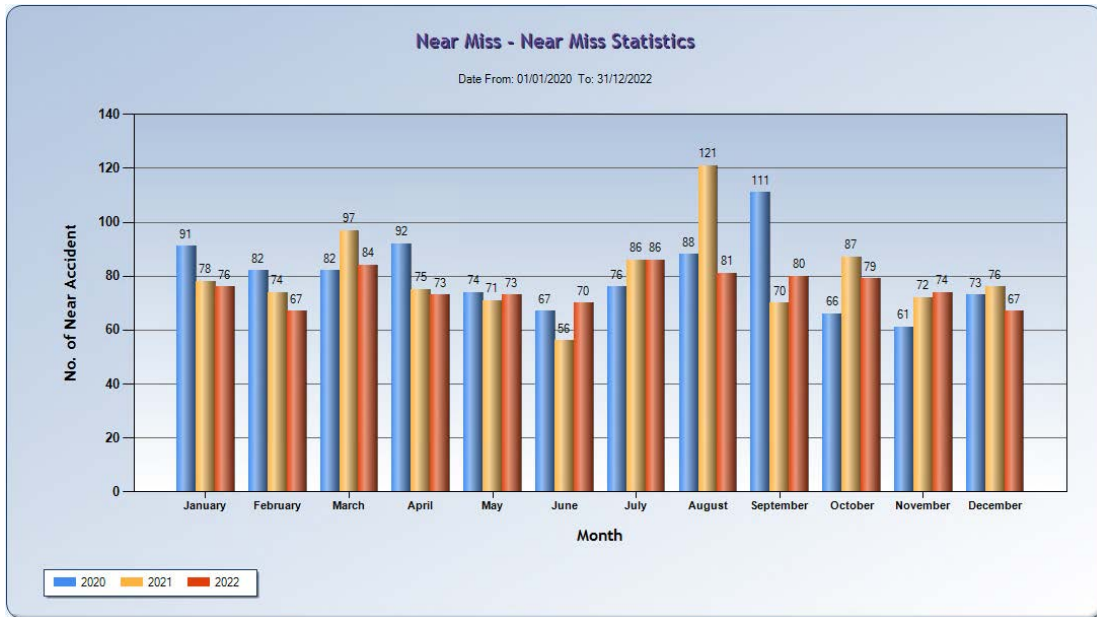
- 9% Lack of situational awareness
- 7.1% Lack of attention
- 5.2% Error in Judgement
- 6.5% Excessive wear and tear

In summary – 33.9% Root causes of incidents is directly attributable to human error which may have its origins haste and not assessing the complete picture prior to commencement of the job. Hence the need for the Senior Management team onboard to oversee the jobs being performed onboard and enforce the saying that “speed can kill”.

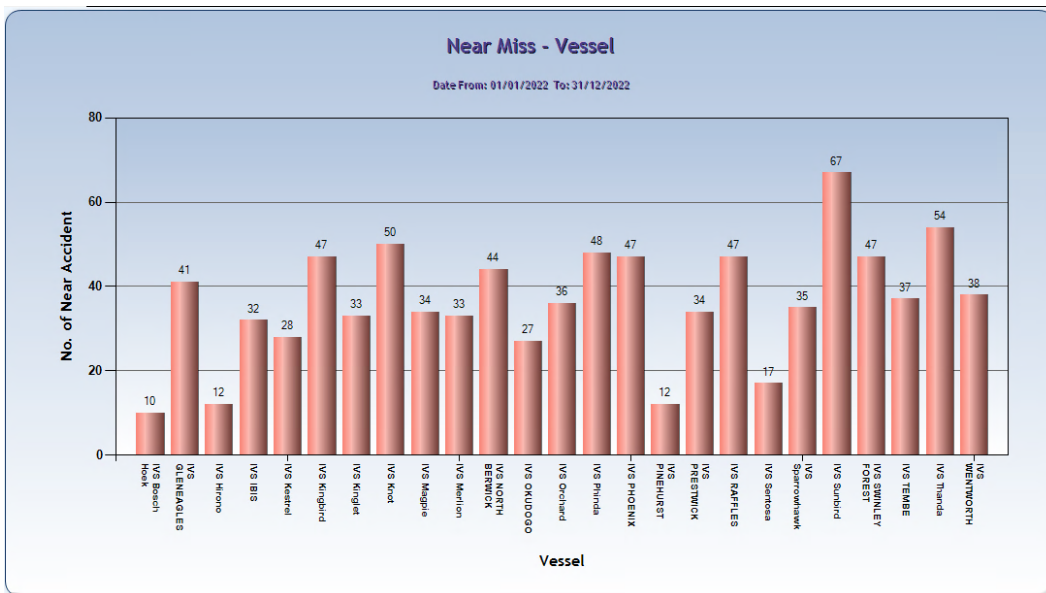
## Near Miss

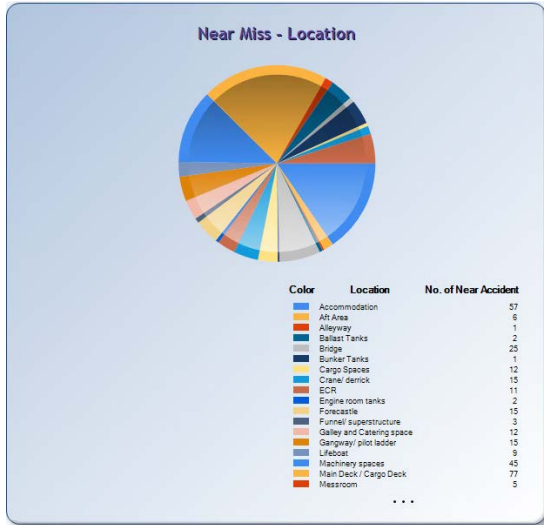
A total of 910 near misses were raised during 2022 for the IVS fleet, the last of the Product carrier was sold March 2021. Historically the Unicorn vessels have been more consistent with near miss reporting. This is a 5.5% decrease in the number of near misses raised in 2021 (963 near misses). Further education in the use of the “Fast track wizard” in BASSNet for the ease of reporting has not led to increased reporting of near misses.

Where applicable the “Lessons learned” in BASSNet are being distributed to the fleet. These are then being read out during the Safety Management Committee meetings held onboard.



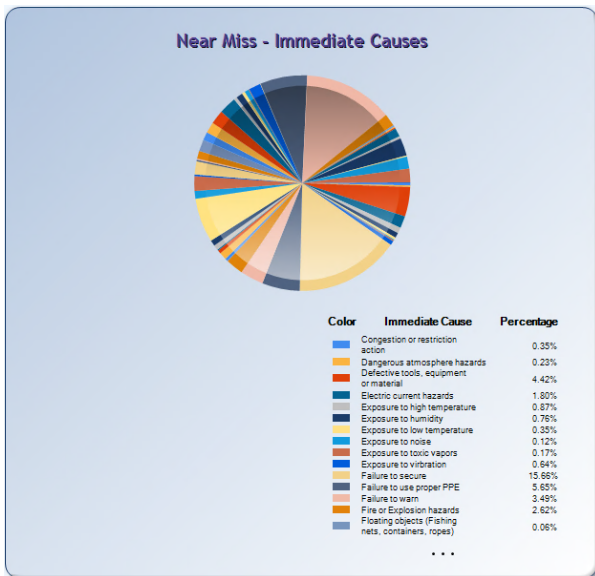
Unfortunately, not all vessels report as diligently regarding near misses. Typically, the Office expects around five near misses per month. This would make it 1440 near misses for the fleet in 2022 or 60 near misses per vessel. Some vessels are much lower than that, only 1 vessel reported in excess of 60 Near Misses in 2022. Vessel senior management is to ensure that their crew remember “Safety First” and report all near misses.





The top four **locations** of Near Misses include:

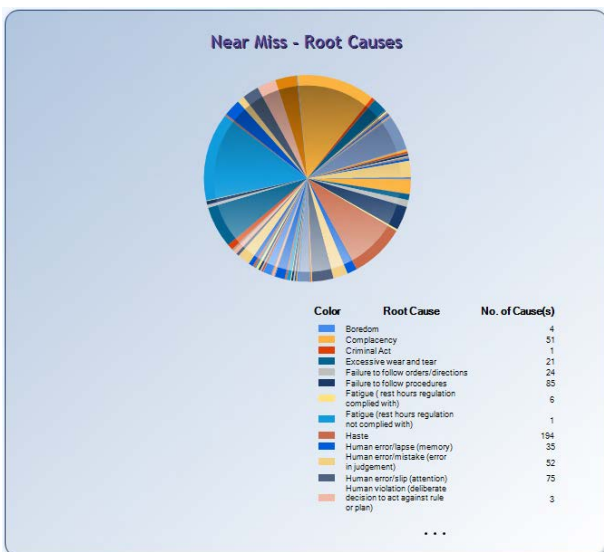
- 20.8% Main Deck
- 15.4% Accommodation
- 12.2% Machinery spaces
- 6.7% Bridge



The top four **Immediate causes** of Near Misses include:

- 15.7% Failure to secure
- 13.4% Procedure Error
- 7.04% Poor housekeeping, disorder

In summary – 48.6% or the top 6 Intermediate causes of incidents are directly attributable to human error which may have its origins in lack of thorough and proper training. This is the same as the previous 3 years



The top six **Root causes** of Near Misses include:

- 13.8% Lack attention
- 12.2% Lack of situational awareness
- 8.5% Haste
- 6.5% Incorrect judgment
- 5.4% Over confidence

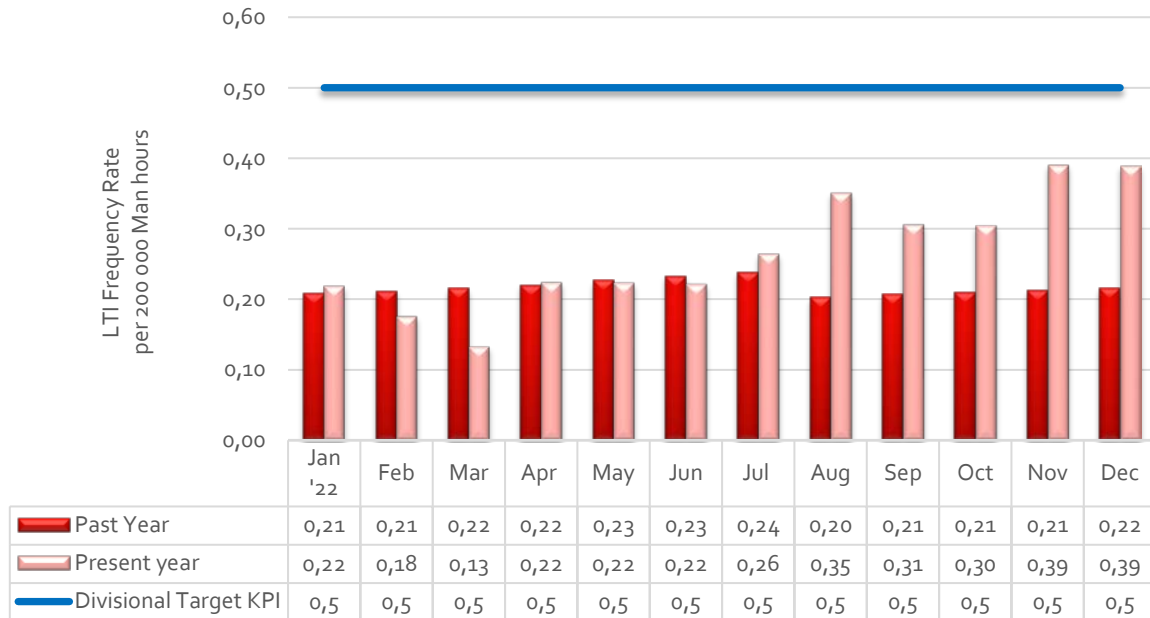
These are all put down to human error. Reinforcement and Monitoring of procedures by the SMT onboard is essential for the reduction in human error through proper policing and education of the crew onboard.

Near Miss – Root Causes

# Safety Performance

## LTIFR

### IVS Shipping



KPI	Comment by exception
<b>Fatality</b>	-
<b>LTIFR</b>	The Division has a LTIFR target rate of 0.50 per 200 000 man-hours (rolling average) Remains below target and under control. Education measures regarding working with mechanical tools being completed onboard.

Safety incidents and injuries have been reported by e-mail to the Ship manager and crewing department. However, on occasion the same has not been reported into BASSNet. The Ship Managers are to ensure that all incidents and near misses which are reported in e-mails, Safety Committee minutes or other reports are also reported in BASSNet.

The IVS Fleet are now recording incidents and injuries far more accurately over 2022. This has been backed up by the Office reviewing the Medical reports of crew received for payment by the Office. The IVS Fleet have made good strides with regard to the reporting of injuries during work. The Masters are encouraged to keep on the good work and not only to have a safe vessel but when injuries occur, to report them so that the rest of the fleet can learn from these injuries.

As seen above, the LTI's have remained constant throughout 2022. (Please see Incident Section within this report pg.14). Many of the LTI's were falls from less than 1.5m. This caused considerable discomfort to the individual.

## Environmental Performance

The maritime industry can have significant environmental impacts, including GHG emissions, air pollution, water pollution, and other ecological impacts. Grindrod Shipping is committed to reducing its environmental footprint. The International Maritime Organization's has a GHG strategy, which envisages a reduction in carbon intensity of international shipping by reducing CO2 emissions per transport work, as an average across international shipping, by at least 40% by 2030 compared to 2008, and the total annual GHG emissions from international shipping by at least 50% by 2050 compared to 2008.

Achieving IMO's GHG reduction targets will require a number of strategies, including **fleet modernization, vessel performance optimization, and proactive management of fuel efficiency, as well as monitoring and reporting of GHG emissions and fuel consumption**. With effect from the 1<sup>st</sup> January 2023, IMO legislation implementing the Energy Efficiency Design Index for existing ships ("EEXI") and Carbon Intensity Indicator ("CII") will apply to our fleet.

---

### Technical Measures: Energy Efficiency Existing Ship Index (EEXI)

---

There are two requirements for this legislation, the first is to review a vessel's design using the EEXI formula. The vessel's greenhouse gas emissions are measured in relation to the efficiency of the design of the vessel.

If a vessel is compliant, no alterations are required. If a vessel is not compliant, remedial action is required to ensure compliance with the EEXI requirements. Typically, the main engine power output will be restricted. This reduction in power will be required in order to comply with the reduction in emissions.

The EEXI approval by the Classification Society is only issued once in the lifetime of a vessel. We have employed consultants who have reviewed the designs of our fleet and have forwarded the EEXI calculations to the fleets' Classification Society for approval.

The table below are the EEXI calculations completed by appointed consultants. These calculations have been verified and approved by Class NK and may be subject to amendment. Engine Power Limiters may be required to be installed onboard certain of the older vessels whose initial design and hull shape are not efficient.

#### Change of Ship Type from "Bulk" to "General Cargo" ship type.

Approval from the Singapore and Marshall Islands Flag was obtained for Class NK to change the ship type of 8 handysize vessels from "Bulk" to "General Cargo". Class NK has re-issued the vessel statutory certificates to reflect the change in ship type. As "General cargo" ship type there is no requirement to install an EPL and the CII calculation is less onerous.

The table below describes the preliminary speed and Main Engine fuel consumptions based on the applicable EEXI calculations which have been approved by the Classification Society. Please note that these speed/consumptions are theoretical calculations and will be required to

---



be verified by means of sea-trials. The Charter Party “Vessel description” will be required to be amended following the installation of the Engine Power Limiter (EPL).

The Engine Power Limiter required for the vessels in the table below assume that most vessels are designated as “Bulk” vessels. Those vessels in Bold Italics have been reclassified as “General Cargo” vessels.

#### Outfitting of Engine Power Limiters

EPL’s are presently on order with the Engine Manufacturers. We have scheduled that all EPL’s will be placed onboard by the end of Q1 2023 and installed as soon as practicable thereafter, but no later than the vessel annual surveys in 2023.

EPL Requirement	Ship Names	Date of Delivery	Effect of EPL on Vessel	
			Maximum Theoretical Speed (knots)  LADEN	Fuel consumption (MT/day) of ME+2 MT (for DG) at Maximum speed LADEN
NONE	IVS PRESTWICK IVS OKUDOGO IVS PHOENIX IVS NORTH BERWICK IVS SWINLEY FOREST <b>IVS SUNBIRD</b> <b>IVS SPARROWHAWK</b> <b>IVS THANDA</b> <b>IVS PHINDA</b> <b>IVS TEMBE</b> <b>IVS KESTREL</b> <b>IVS KINGLET</b> <b>IVS KNOT</b>	2019/09/16 2019/08/08 2019/06/03 2016/03/21 2017/01/10 2015/09/15 2014/12/03 2015/01/12 2014/08/27 2016/01/28 2014/05/26 2011/08/09 2010/08/30	No EPL Fitted, the Main Engine Power remains the same. Therefore, no effect on Current Charter Party speed/consumptions.	
10-20%	IVS GLENEAGLES IVS WENTWORTH IVS PINEHURST	2016/03/14 2015/11/26 2015/07/17	13.84 13.84 14.00	27.8 26.2 30.0
20-30%	IVS BOSCH HOEK IVS HIRONO IVS IBIS IVS MAGPIE	2015/10/27 2015/08/26 2012/03/01 2011/08/09	13.83 13.79 13.06 13.08	25.4 27.0 18.1 16.8
30-40%	IVS RAFFLES IVS MERLION IVS SENTOSA IVS ORCHARD IVS KINGBIRD	2013/07/14 2013/04/11 2010/06/21 2011/03/02 2007/06/28	13.46 13.08 13.09 13.03 13.17	21.9 19.2 22.6 22.9 20.1

## Operational Measures: Carbon Intensity Indicator (CII)

The second legislative requirement is to calculate the CII. This formula reviews the operational business conducted by the vessel on an annual basis. The best results will be seen by vessels that travel long distances and consume lower fuel quantities by sailing at an economical speed. The vessel's performance will be reviewed and approved annually by the Classification Society.

The calculation for this indicator includes fuel quantity consumed divided by miles sailed. If a vessel has a long sea passage and sails at economical speed, a better result will be achieved. If a vessel has long stays, (example at anchorage or in port), this will negatively affect the CII calculation.

The regulations/objectives for CII are:

- The Statutory required CII will decrease by 2% per annum between 2023 and 2027.
- The IVS Fleet should strive to maintain a minimum of “C” rating or better.
- Should a vessel score “D” for 3 years dating from the 2023 audit year the vessel will be subject to punitive sanction by the Classification Society which may include the withdrawal of the vessel's trading certificates.
- Should a vessel score “E” for two consecutive years from the 2023 audit year it will be subject to punitive sanction by the Classification Society including the withdrawal the Classification certification, thereby not allowing the vessel to trade any further. The same penalty applies to both “Bulkier” or “General Cargo” vessels who obtain an “E” rating for two consecutive years.

Additional consideration needs to be given to the possibility of commercial penalties being levied by charterers against ships with low ratings. Examples of this might include entities refusing to charter in ships for 2024/2025 with a rating lower than a C to adhere to their own internal ESG targets. There might therefore be a scenario where owners are suffering negative commercial ramifications in the market due to their rating before facing similar fines/penalties from international/local bodies. This underlines the importance of maintaining the entire fleet at a C rating or better by the end of the first collection period.

	CII YR 2022	CII YR 2021
IVS Bosch Hoek	C	B
IVS North Berwick	B	C
IVS Gleneagles	C	C
IVS Hirono	C	C
IVS Okudogo	B	C
IVS Phoenix	D	C
IVS Prestwick	B	E



IVS Swinley Forest	<b>C</b>	<b>E</b>
IVS Wentworth	<b>C</b>	<b>C</b>
IVS Pinehurst	<b>D</b>	
IVS Ibis	<b>C</b>	<b>C</b>
<b>IVS Kestrel</b>	<b>B</b>	<b>A</b>
IVS Kingbird	<b>C</b>	<b>D</b>
<b>IVS Kinglet</b>	<b>B</b>	<b>C</b>
<b>IVS Knot</b>	<b>B</b>	<b>B</b>
IVS Magpie	<b>C</b>	<b>C</b>
IVS Merlion	<b>D</b>	<b>C</b>
IVS Orchard	<b>D</b>	<b>C</b>
<b>IVS Phinda</b>	<b>A</b>	<b>B</b>
IVS Raffles	<b>D</b>	<b>C</b>
IVS Sentosa	<b>D</b>	<b>E</b>
<b>IVS Sparrowhawk</b>	<b>B</b>	<b>A</b>
<b>IVS Sunbird</b>	<b>B</b>	<b>A</b>
<b>IVS Tembe</b>	<b>A</b>	<b>B</b>
<b>IVS Thanda</b>	<b>A</b>	<b>A</b>

CII comes into force 1 January 2023. For Q1 2023 Report the above table will be expanded to include the vessel CII “year to date” to reflect the vessel’s CII performance during 2023.

## **SOLUTIONS TO IMPROVE EFFICIENCY**

### Operational:

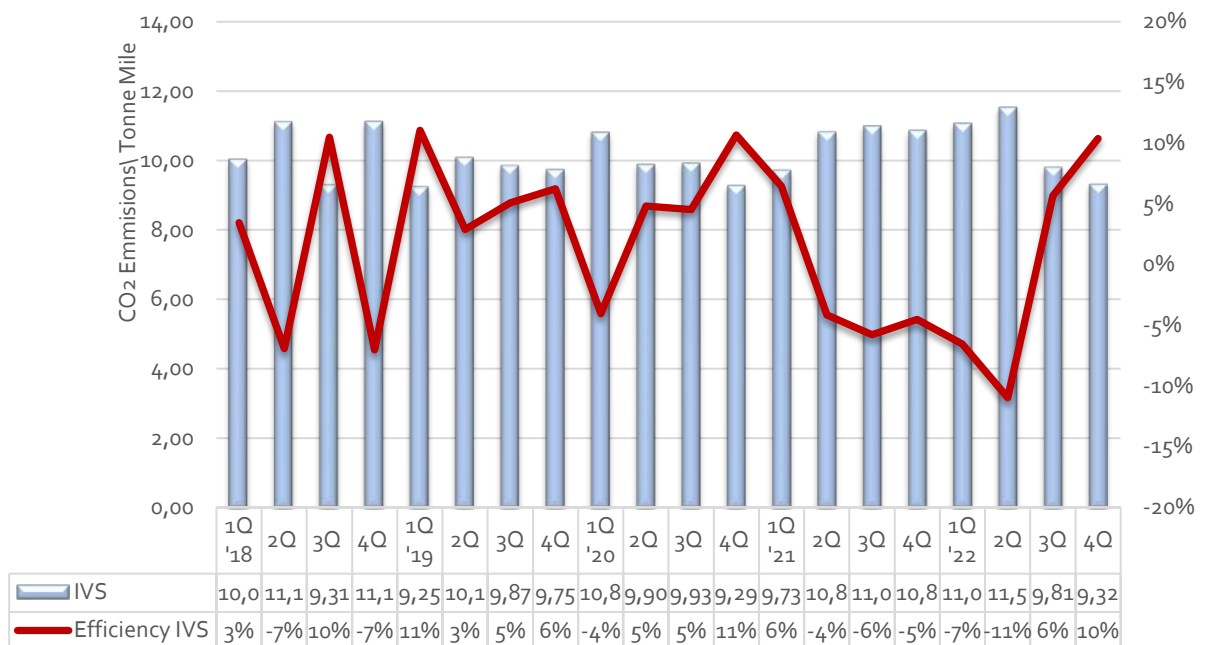
- Voyage optimisation through weather routing and voyage analysis. The IVS Fleet uses Podium for this purpose.
- Propulsion efficiency devices – the majority of the fleet are being outfitted with these devices. Please see table below detailing Propulsion Efficiency Devices presently installed.
- Efficient lighting system onboard the vessels. This is completed during the vessel Dry Docking.
- Hull coating being maintained (this applied every 2.5 years)
- Hulls are cleaned when fouled (for example after long anchorage stays e.g. 20-25 days)
- Variable frequency drives. Nine IVS Vessels have VFD’s installed, the rest of the fleet will be outfitted in due course.
- Bunker management: the supply of marginal or waxy bunkers leads to waxing of the bunkers within the storage tanks, especially in colder climates. The boiler may need to be used to supply steam to the tank heating coils continuously to liquidise the fuel oil. The continual use of the boiler for heating purposes can use around 1-2 tonnes per day which will impact the CII rating of the vessel.

Technical:

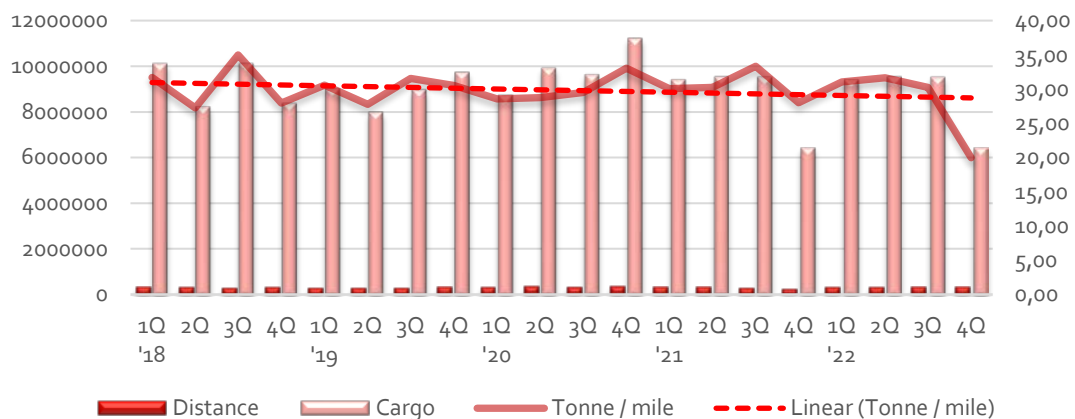
- Main Engine Performance optimisation through the review of the engine performance results by the engine manufacturer.
- Engine de-rating should this be a statutory requirement following the EEXI calculation approval.
- Improved Auxiliary engine load through the efficient use of energy consumers onboard and the education of the crew onboard regarding practical energy saving strategies onboard.

Grindrod Shipping showed an improvement in EEOI efficiency of 10% for 2022 based on the 2018 EEOI results. This is due to the sale of the Unicorn Fleet and some of the older IVS vessels, the efficiencies have been made in the Grindrod Shipping Fleet.

**Quarterly EEOI of the Grindrod Shipping Fleet**



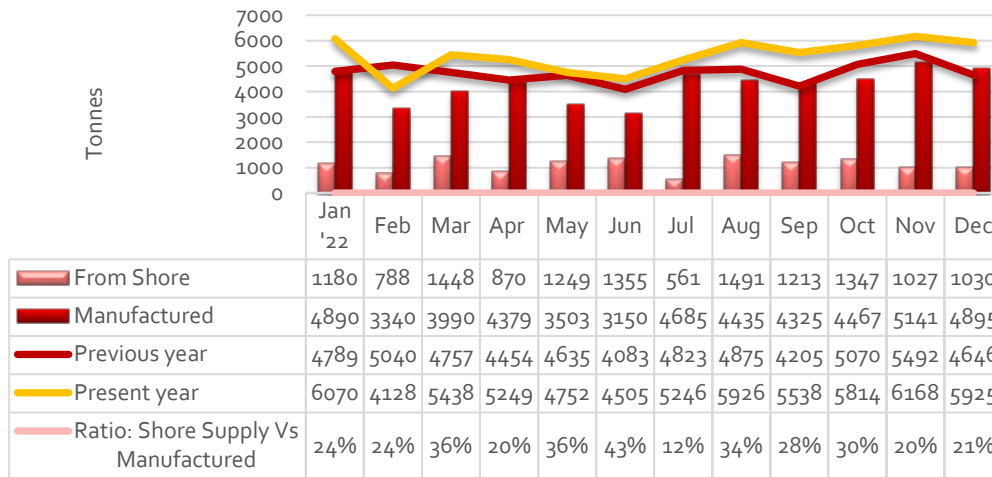
**IVS Shipping Cargo vs Distance Travelled**



Over the last two years there have been significant challenges in the Marine engine industry. In March 2020 the COVID 19 pandemic struck the world. This had a significant effect in the Marine industry and supply chain Logistics. Countries, cities, and ports were shut to outside business. This had a devastating effect on the supply chain. Typically, many of our vessels were not able to enter ports due to the ports being closed during 2020/1 or due to the industrial mines not been able to produce cargo, hence there were significant delays to cargo available in the port for transport. This meant that there were also long delays at anchorage while the vessel cargo was being assembled in the port.

In 2021 the rates rose significantly due to the lack of commodities being in certain countries which had now relax some of the COVID-19 regulations and were allowing the ports to be opened for Commerce. With the rush to get cargo into ports and the higher charter rates, the vessels were required to sail at full speed. This meant that again the vessels used significant amount of fuel. When they arrived at the port of discharge there were usually significant delays within the port due to COVID 19 related issues and the inability to discharge at rates that were normal prior to October 19 pandemic. As the world started to normalise in 2022 and the ports start to open up for business, the supply chain logistics started to get back to the pre pandemic level however the unnecessary Anchorage periods and other delays continued to persist as the primary industries commenced reemployment and tried to get their efficiencies back to normal pre COVID levels.

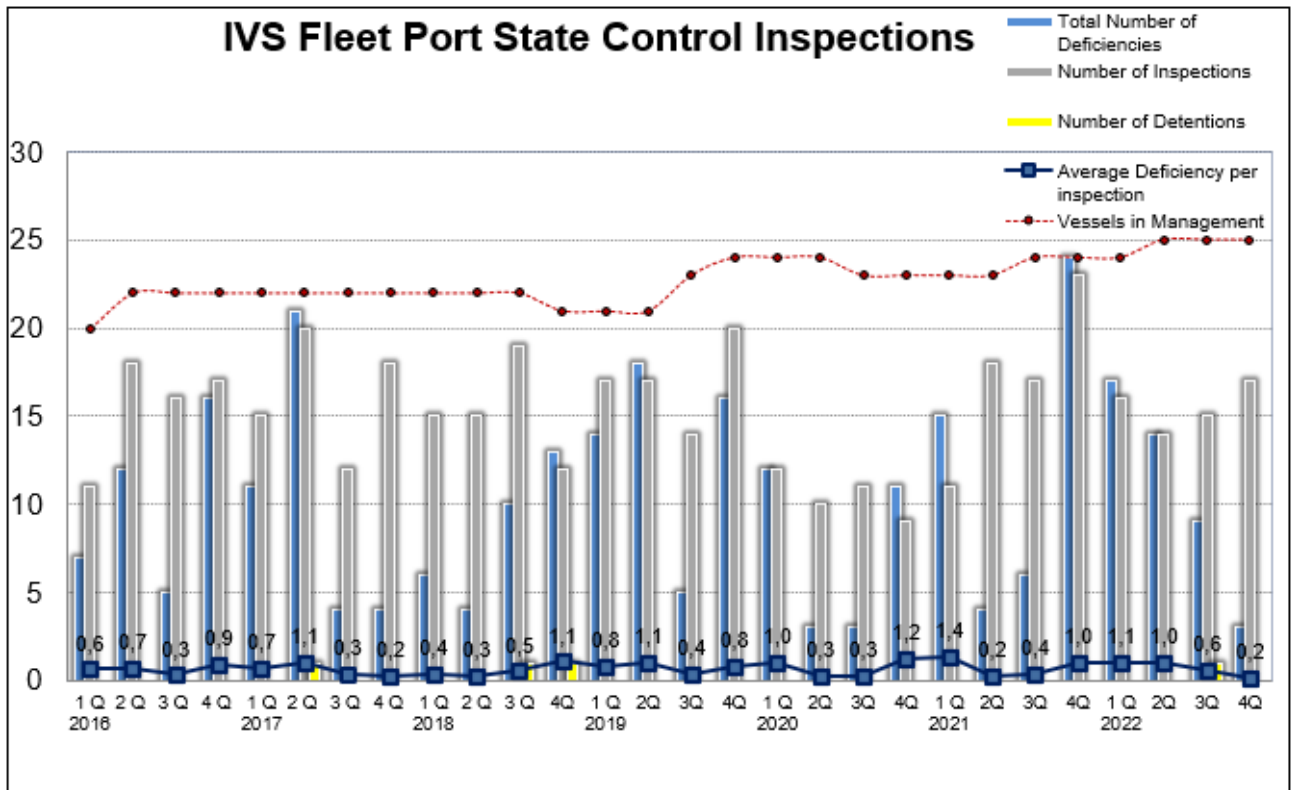
### Grindrod Shipping Water Usage



Water consumption is more compared previous years. It should be noted however this is very dependent on cargoes carried and how much tank washing is required for consecutive dissimilar cargoes. Active measures and education are in force for the domestic consumption of water. An additional reason is the sale of most of Unicorn vessels which have always been amongst the largest users of water for tank cleaning.

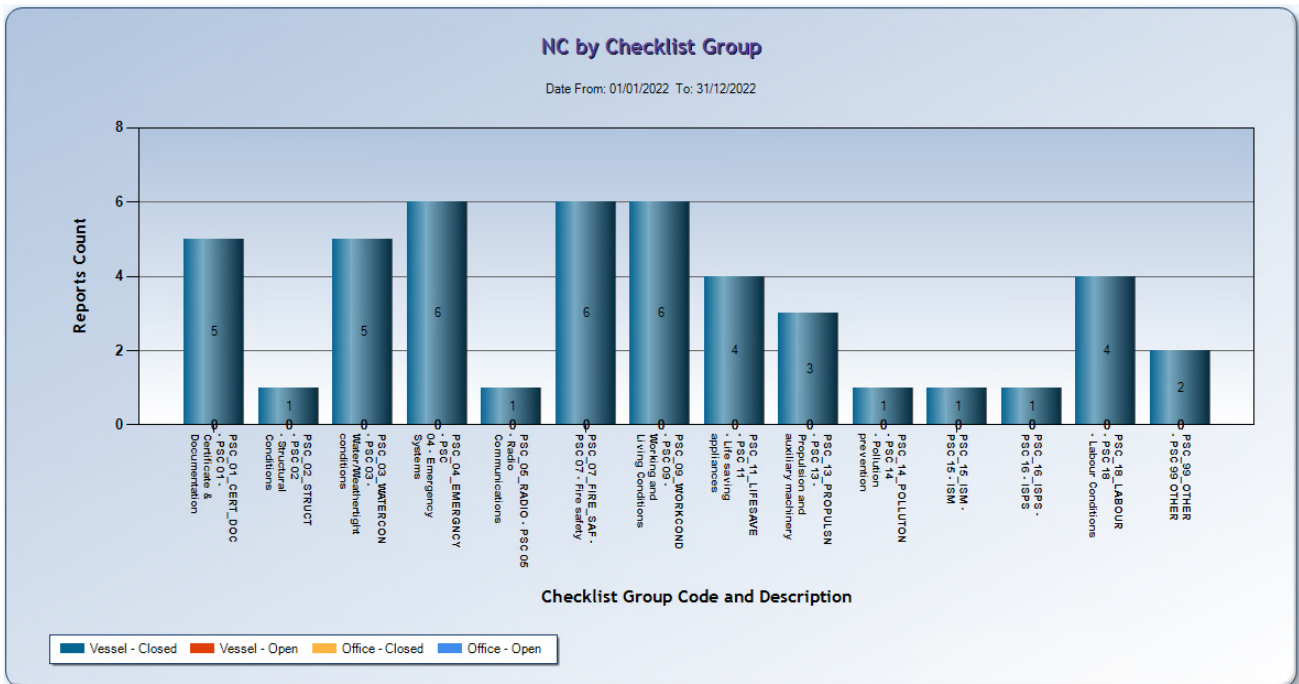
# Port State Control

Below is a graph of the defects found by PSC inspectors onboard the IVS vessels. LSA; Pollution and Propulsion systems received the most remarks. These are all high risk and have led to detentions within the fleet in previous years.



Year:	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Average no observations per inspection</b>	1.5	0.9	0.7	0.65	0.60	0.51	0.81	0.69	0.71	0.66
<b>Detentions</b>	Nil	Nil	Nil	Nil	1	2	Nil	Nil	Nil	1

IVS vessels continue to be the subject Port state control inspections. In 2022 there were 65 (69 in 2021) inspections with 33 (49 in 2021) deficiencies and **1 detention (2 in 2018)**. Overall, the deficiencies as shown in the graph below shows that Life Saving appliances (3 defects for lifeboats) continue to be the bigger issue. This was also clearly identified in the analysis of the internal audits.



Checklist Group	Checklist Item Description	Total defects
Emergency Systems	Emergency, lighting, batteries and switches	4
Fire safety	Fire detection system	3
Certification & Documentation	Others	2
Load Line	Ventilators, air pipes	2
Propulsion	Auxiliary Engines	2

IVS SENTOSA AMSA Inspection at NEWCASTLE, Australia - 07 July 2022: 7 PSC Deficiencies – Detention.

1. *Emergency Systems - During the load testing of the emergency generator, it was noted that there is a 220V low insulation in the lighting circuit. Recent heavy flooding rain when the vessel was alongside in port resulted in moisture drawn into the light fitting via seals due to light vacuum when light is cooling.*

Managers comments:

Inadequate planning / preparation - The ship staff noticed the 220V low insulation and identified the cause, and intended to fix the problem after cargo operations were completed. Inadequate maintenance – Improper sealing of electrical gland connection on emergency light on deck.

2. *Fire safety - Heat insulation defective at auxiliary engine No. 3 exhaust turbo charger manifold. During the inspection of the generator engines, the inspector climbed up onto the bedplate to get a better view of the exhaust manifold, he found lagging material to be insufficient.*

Managers comments:

Deficiency: Lack of attention – Condition of lagging not checked paying attention in detail by the officers while doing watch keeping rounds. Lack of situational awareness that exposed hot surfaces are potential ignition sources and that they shall always be properly covered with lagging material.

3. **DETENTION:** *Fire safety– Port side engine room ventilation fan fire damper defective.*

*Inspector requested to have the grids beneath the cowling removed. The pneumatic actuator was then used to close the damper. The inspector went inside the vent between the base and the mushroom and observed that flaps were not closed. The linkage affixed to one of the fins by welding, had given way which made that fin inoperable.*

Managers comments:

Lack of situational awareness: The dampers are function tested monthly. The position of the damper cannot be observed from outside as there was no inspection cover. While testing, the damper was thought to be closed when it wasn't. The fact that the damper was not fully closed was only noticed by removing the protective grating and climbing inside.

- 4. Water/Weathertight Float defective at double bottom tank No.2 (Port) Aft air vent. Ten air vent heads were opened for inspection as required by AMSA inspector. Nine vents were found in good order. The float of No 2 port air vent was found defective. On No 2 port vent , the stub guide piece welded on the floating disk was found broken off. The welding repair was carried out for joining the stub guide piece with the float disk during the last overhauling of the air vent.*

Managers comments:

Inadequate supervision by senior engineer while the welding was carried out.

Inadequate repair - Despite the fact that all ventilators were overhauled, the lack of quality of workmanship resulted in the failure of the ballast vent float.

- 5. Fire safety Fire detection and alarm system. Smoke detector defective at forward hydraulic room. All the detectors were operational on board and there was no alarm. While the AMSA inspector was conducting the bridge inspection, the fault alarm sounded alerting the inspector who enquired about the source of the fault. Upon investigation it was found that the recently replaced Smoke detector was defective in forward hydraulic room.*

Managers comments:

Electronic component failure (The fire alarm system was clear of alarms and tests were up to date however the failure occurred during the time of inspection).

- 6. Radio Communications - INMARSAT-C not set up to receive AUSCOAST warnings for current sea area. During the inspection the AMSA inspector wanted to see what regions were selected on the INMARSAT-C for the AUSCOAST Maritime Safety Information. The Australian coast is divided into 8 coastal regions from A-H and the area as per vessels position was region "C". The INMARSAT -C was only set to receive Maritime Safety Information for areas A and B.*

Managers comments:

Lack of attention – The Second officer was aware of the requirement to select the correct areas but he lacked attention and missed to select the region C.

- 7. Emergency Systems - Tachometer defective at emergency generator control panel. During the testing of the emergency generator, the AMSA inspector observed that tachometer on the generator board was faulty. Deficiency: Tachometer defective at emergency generator control panel. The vessel already had a spare tachometer on board but could not renew the same as it was of wrong specification.*

Managers comments:

Lack of attention – The spare tachometer supplied on board was of wrong specification.

Inadequate communication - The ship staff did not inform the company that the spare tachometer received onboard was of wrong specification and did not return it back to

the supplier. Also requisition was not made in a timely manner for the tachometer with correct specification

#### IVS RAFFLES PSC inspection Khalifa 20 April 2022: 7 PSC Deficiencies

1. *Ship Certificates P&I Cover for MLC insurance Reg 2.5 / 4.2 found invalid.*  
Comments:  
The Company had sent the renewed certificate to the ship by email on 16 Feb 2022. The Master had saved the renewed certificate on the Masters computer but did not print and file it in the certificate folder immediately upon receipt of the certificate. During the inspection, the Master presented the certificate folder with the expired certificate to the PSC inspector which resulted in this deficiency.
2. *Certificate of insurance in respect of liability for the removal of the wrecks found invalid.*  
Comments:  
The Company had sent the renewed certificate to the ship by email on 16 Feb 2022. The Master had saved the renewed certificate on the Masters computer but did not print and file it in the certificate folder immediately upon receipt of the certificate. During the inspection, the Master presented the certificate folder with the expired certificate to the PSC inspector which resulted in this deficiency.
3. *Documents The MSDS at paint store were not covering all paint types.*  
Comments:  
Vessel had a MSDS folder for paints in the paint room. However the MSDS for 2 items ( Hempel Hempadur Mastic 45889 Base and Hempel's Curing Agent 95880) were not filed in the folder resulting in this deficiency.
4. *Living Conditions Dead insects was noted inside lights cover.*  
These lights within the accommodation were not air/weather tight and insects entered into these covers.
5. *Working Conditions - Earth fault insulation was noted in AC220V feeder panel.*  
Comments:  
During the PSC inspection, the insulation was indicating 2 Mohm. The earth fault was found to be coming from a defective extension lead provided to the stevedores for using saws to cut shoring material for the cargo.
6. *Other - Oil accumulation was noted on hatch cover pumps drip trays.*  
comments:  
There was a minor oil leak from the sight glass plug resulting in accumulation of oil in drip trays.
7. *Other Oil accumulation was noted on Hydraulic oil tank for hatch cover drip trays & the valve wheel found loose.*  
Comments:  
The oil accumulation was due to the leak from a defective gland packing.

All the above Port State Control observations do indicate the inconsistencies between different Countries. However, it should also be noted that these defects are generally routed in lack of paying attention by those onboard. These are weak observations which could have been avoided by those onboard.



## Review of International and Country Specific statutory requirements

Both International Legal and local requirements like EU directives / CARB / ECA /VGP-NPDES, Restrictions on vessels in US & Canada with AGM, US biofouling management plan, prohibition of asbestos containing materials were complied with.

Masters are requested to obtain local requirement for each port well in advance. They are also reminded that in the SMS Memos section there is a description of the ports if previously visited by an IVS Ship visit.

All statutory requirements as per class / flag / IMO complied with.

---

### New Regulations review

---

Company has taken initiative to keep track of the New Regulations coming into force and have taken sufficient measures for implementation of these regulations. New regulations were reviewed and incorporated in company SMS where required. Company has provided REG4SHIPS where all IMO publications and flag state circulars as per new regulations are automatically updated.

The following New regulations were promulgated to fleet and complied with:

- EEXI and CII compliance and associated environmental regulation,
- Installation of ballast water treatment system which is mandatory as of June 2017- Vessels to comply at Vessel renewal Dry Dock.
- Annual Reporting of VGP to EPA,
- Compliance with IMO Data collection system for fuel oil consumption of ships and obtain STATEMENT OF COMPLIANCE.
- Prepare Ship execution plan to comply with Indian and Kuwait regulations on single use plastics.
- SECA in south Korean ports,
- Cyber security regulations

All new regulations were reviewed and will be effectively implemented.

## Customer Feedback / Complaints

Grindrod Shipping has filed a few complaints against vendors for poor performance. Subsequent meetings and communications between Grindrod and the vendor have led to a satisfactory resolution and improvement of their performance. The vendor is as follows:

- Non-Conformance: BASSNet: *Crew certificates module is not working as required. Following issues are being faced:*
    1. *Certificates data of the personnel who signed off long time back appears when searched.*
    2. *Ranking of the certificates*
-



*The issues faced are being reported but there is no improvement being carried out.*

Corrective Action:

Discussed further with BASS on the setup of the Certificates compliance checking and how it needed to be set up to ensure that it works as required. Discussed further with Crewing department on this to get more details of our Certificate requirements. The Manning requirements module was then setup for the ships based on our Certification requirements for each Rank giving numbers for each based on which certificates override others. This was then put on one ship to verify and then copied to other ships.

For the Crew appearing on the alerts it was due to them being still active on the system.

They are moved to Inactive pool so they don't appear there anymore. The Alerts showing there are two alerts one which show alerts for all Active crew even when they are not assigned to any ship and another showing those currently onboard.

Two Complaints against Grindrod Shipping was received in 2022.

Issue: Failure/corruption of the SMS Source document transition into the OneDrive.

During the process of upgrading the Source Documents from the old work environment into OneDrive the contents of the source documents reverted to a previous version dated 2017. All subsequent revisions were deleted.

Corrective action:

- IT were able to reactivate a backup of the SMS source documents. Kerry has access to the Source Documents on her OneDrive pending the resolution of the issue.

Preventative Action:

1. For future to avoid such cases, IT dept to push relevant departments who are owner of documents to cross check that all documents have been migrated as required.

Issue: Failure/corruption of the SMS Source document transition into the OneDrive.

During the process of upgrading the Source Documents from the old work environment into OneDrive the contents of the source documents reverted to a previous version dated 2017. All subsequent revisions were deleted.

Corrective action:

- IT were able to reactivate a backup of the SMS source documents. Kerry has access to the Source Documents on her OneDrive pending the resolution of the issue.

Preventative Action:

2. For future to avoid such cases, IT dept to push relevant departments who are owner of documents to cross check that all documents have been migrated as required.

## Risk Assessments

The Risk Assessments continue within BASSNet. The quality of risk assessments received from the Fleet remain are starting to improve following Office staff providing guidance whilst sailing on the vessel. The Office representatives are reminded to continue to complete the training of the crew whilst completing their inspections. The Office will continue to prepare Master templates of Risk Assessments for the fleet to use as the basis for their Review of the job description.

## Critical Equipment failures

The statutory requirement to reduce the sulphur content of fuel oil down to 0.5% has led to significant issues in the main engine during 2020. These issues have the origins in some instances due to additional chemicals being placed within the fuel which is not compatible with the main engine but generally it was the amount and type of oil used in the cylinder lubrication which led to excessive cylinder liner wear on the Main Engine. This issue persisted for the first half of 2021. As a preventative measure, following discussions with both consultants as well as main engine manufacturers, the type of Cylinder lubeoil as well as the rate of flow of the cylinder lubeoil has been modified as per the directive of the engine manufacturer. Generally this has had the effect of reducing the rate of wear on the main engines. This is being monitored continually through 2022 and main engine cylinder wear down rates measured and forwarded to the ship manager for his review and approval. It is envisaged however that main engine cylinders will typically wear at a faster rate than compared to previous years. Ship managers are reminded to keep a keen eye on this issue. The Ship Manager is to ensure there are enough spares of cylinder liners and other components with a long lead time for replacement.

## Management of change

Management of change was initiated for several operations during this period for both fleets.

However, in 2018 the Management of Change requirement was removed from the IVS SMS. The MOC requirement is not applicable for the dry fleet. In the future with Dry BMS and Rightships requirements, the management of change may become relevant again.

## Security

All Grindrod vessels comply with International Ship and Port Security ("ISPS") Code. Furthermore, when transiting in a high-risk area, anti-piracy measures as described in the Best Management Practices 5 booklet remain in force. This is a requirement of the vessel's insurance provider. IVS Vessels regularly enter into High Risk Areas (HRA) and are employing additional security protection to enhance security on board. When entering the HRA, Singapore Flag is notified and approves the use of security personnel on board.

COVID 19 Pandemic required that the Fleet increase their security awareness onboard in order that the crew did not come into contact with the Stevedores or any other persons who may transmit the virus from the shore side to the vessel. This was largely successful with very few cases of COVID 19 being reported onboard the vessels of the fleet during the pandemic.

Malaria remains an issue with vessels travelling to West Africa. A risk assessment has been completed and additional countermeasures put in place.

Stowaways: P&I have informed the Office that the incidents of stowaways in the Southern African ports are on the increase and the cost of repatriation now according to the South African Government falls on the Ship Owner. The fleet are reminded that they are to remain vigilant and take additional precautions such as shore-based security when visiting South Africa. The requirements of the Ship Security Plan are to be followed to the letter, with no exceptions to the review of stevedore ID's etc.

## Security:

**There were no security incidents reported to the Office from the vessels in 2022.**

# Company and ship resource levels review

## Company Resourcing Levels

To stay competitive in today's marketplace, it has been company's senior management commitment to develop Human Capital and provide adequate Human Resource whether it is at sea or ashore from its inception.

With company's long-term goal in mind, the company has developed world class infrastructure and work place conducive to develop talent which can support the business and deliver performance and expectations of our clients.

In our effort to continually improve quality of ship's staff as well as shore staff, we have well adapted systems for training and a strategy to monitor and retain the manpower across the organization by means of the Induction program and the KARCO training systems.

Company's fleet growth is monitored monthly so that all resources (manpower, equipment, space, etc) are adequate for current fleet and for the intended expansion.

Adequate shore-based support is provided to enable the designated person to carry out his functions.

Ship resources are well above the IMO minimum safe manning requirement. However, in 2021 the Management reviewed the minimum resourcing levels and has amended the Safe Manning Certificate (reduction of one Engineer Watch keeper and one other deck rating/personnel) in order that the Company does not have to approach the MPA should the current manning levels be below the original Safe Manning Certificate.

Company continues recruiting and training cadets on board vessels.

Ship and shore-based resources were reviewed and found adequate for safe operations.

---

## MLC / Crewing matters

---

Crewing matters were found satisfactory.

Health and hygiene bulletins were regularly promulgated to ship staff.

MLC effectively implemented on all vessels

## Review of rest hours within the Fleet

The work and rest hours regulations are becoming more and more strict and the inspectors /auditors are scrutinizing work & rest hour and non- compliance records more and more closely and in depth. Guidance from office was provided to avoid non-compliance onboard. Accordingly, ISF Watchkeeper software was provided on board for implementing rest hours in 2017. The Masters are required on a weekly basis to examine any transgressions and provide an explanation to the DPA regarding transgressions.

Rest hours noncompliance / violations are being reported by Master to company and monitored. The Master is to ensure that both he and the crew member is to sign the monthly work/rest hours of the crew member. This signed copy should be made available to the crew member should he want a copy.

Extra manning also being provided on board (case by case basis).

## Review of Surveys (certification, Existing COC, Major Memo, significant issues)

All the vessels have been adhering to Class requirements and survey schedules during the year.

Condition of class / memo monitored by ship managers and tracked to completion.

## Review of dry docking

Dry-docking of vessels carried out in consultation with the Owner.

Stern tube seals and oil is in the process of being changed to new Biodegradable type to comply with new US VGP regulations.

COC for vessels to be closed as applicable during dry-dock.

A new reporting method has been introduced which makes full use of SharePoint in the technical section.

---

## Review of BASSNet

Company staff continued to motivate the personnel on-board to continue using BASSNet.

June 2019 saw the role-out of BASSNet 2.10. The appearance of 2.10 appears to be the same as 2.9 however there are numerous ‘behind the scenes’ improvements in reporting and monitoring of the functionality of BASSNet. Company staff should continue to motivate the personnel on-board to continue using BASSNet.

Project Team comprising of IT and BASSNet Support working to ensure proper implementation / follow up of the BASSNet 2.10 system. It is envisaged that 2.11 will be rolled out in 2023.

Technical inspections and Audit reports are uploaded in BASSNet. With the continued reliance on BASSNet, Modules such as Drills and Port Operations and HR Manager will see BASSNet being more central to the operation of the Fleet.

## Suitability and effectiveness of the HSEQ system

The second half of 2014 has culminated with a re-write of the Safety Management System which was published to the vessels during August 2014. There were significant upgrades completed to all Manuals within the system.

Due to Cyber Security related issues, the Internal/External SMS has been upgraded and modernised. All can now access the SMS via iPad's etc when at home and not onboard the vessel.

## Review of training needs

Training is required on the Risk Management Module for the office staff and sea staff. This has been developed and training been conducted during the ship visits done by shore staff. The BASSNet program has also developed an Interactive training program which has been deployed to the vessels for their review.

A new on signers Induction Program was rolled out during the last quarter 2014. The Induction program caters for all new AND existing crew – from the SMT to the ratings. It is an Introduction to Grindrod and the SMS. All Crew will be obliged to complete this course prior to acceptance into Grindrod onboard the vessels. The average duration of the course is around 5 hours. However due to the changes that have been completed within the Grindrod Structure, there is now a requirement to upgrade the introduction module of the Induction Program.

SEAGULL has been replaced with KARKO which is seen to be a more relevant and up to date training software package. It is important that the Office monitors the progress of the fleet to ensure that the crew takes advantage of this resource.

In 2019 and 2020 the Office concentrated a little more on “soft skills” and encouraged a Mentorship program so that the SMT can empower the junior officers to become a more skilled and complete officer. It is hoped in 2023 the SMT onboard the vessels would take practical steps and actively encourage mentoring of the junior officers and cadets onboard as we increase our cadet intake.

---

### Training of Company Personnel:

---

Company staff have attended shore-based training conducted by authorized training institutes to continually improve skills required for ship management.

---

### Training of Shipboard personnel

---

Basis various recent changes in the industry, feedback received from vessels and vessel inspection findings, incident reports; the Office identified the gap between existing training and the requirements on board. Training resources are identified considering the increase in demand for ship staff expected in near future.

To address this gap in training and better preparation the Office is customizing new courses and updating, revising and upgrading the existing courses accordingly. There is continuous flow of information from the Ship to the Management office and to the training centres.

- All joining crew were trained for company’s HSQE management system by each manning company.
- Pre-joining briefing was carried for senior personnel in company prior joining a vessel.
- Company has provided KARKO CBT and training plan to all vessels.
- Sea staff seminars resumed in 2022.
- OJT were carried out for ship staff on navigation and HSQE matters.
- Regular HSQE campaigns were promulgated to ship staff.

---

### Drills

---

Ship/shore SAFETY AND SECURITY drills were conducted regularly and found satisfactory.

Report of ship/shore drill shared with fleet.

---

# Performance Indicators

## SAFETY, HEALTH, ENVIRONMENT AND QUALITY (SHEQ)

<b>2022 HSE INCIDENT STATUS – HOW ARE WE DOING?</b>							
<b>INJURIES AND DEATHS</b>	<b>2021</b>	<b>Quarterly Results</b>				<b>2022</b>	
	<b>Results</b>	<b>1Q</b>	<b>2Q</b>	<b>3Q</b>	<b>4Q</b>	<b>Target</b>	<b>Actual</b>
<b>Deaths</b> <i>(Unnatural or Accidental)</i>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Lost Time Injury</b> <i>(Day Away from Work)</i>	<b>5</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>9</b>
<b>Medical Treatment Cases</b> <i>(External treatment/assistance req'd)</i>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>9</b>	<b>2</b>
<b>First Aid Cases</b> <i>(On-board treatment only)</i>	<b>4</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>12</b>	<b>5</b>

<b>SPILLS AND EMISSIONS</b>	<b>2021</b>	<b>Quarterly Results</b>				<b>2022</b>	
	<b>Results</b>	<b>1Q</b>	<b>2Q</b>	<b>3Q</b>	<b>4Q</b>	<b>Target</b>	<b>Actual</b>
<b>Spill</b> <i>(Into the Environment)</i>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Minor Spill</b> <i>(Contained and &lt; 1 bbl)</i>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Contained Spill</b> <i>(Contained and &gt; 1 bbl)</i>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Spill</b> <i>(Any quantity into the water)</i>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>MATERIAL LOSSES</b>	<b>2021</b>	<b>Quarterly Results</b>				<b>2022</b>	
	<b>Results</b>	<b>1Q</b>	<b>2Q</b>	<b>3Q</b>	<b>4Q</b>	<b>Target</b>	<b>Actual</b>
<b>Catastrophic Damage/Loss</b> <i>(Greater than \$1 000 000)</i>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Massive Damage / Loss</b> <i>(\$500 000 TO \$1000 000)</i>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
<b>Serious Damage / Loss</b> <i>(\$5000 to \$500000)</i>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>
<b>Minor Damage / Loss</b> <i>(Less than \$5000)</i>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>



<b>Quality and Customer Service</b>	<b>2021</b>	<b>Quarterly Results</b>				<b>2022</b>	
	<b>Results</b>	<b>1Q</b>	<b>2Q</b>	<b>3Q</b>	<b>4Q</b>	<b>Target</b>	<b>Actual</b>
<b>Unplanned off hire as a result of our management failure</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Cargo Contaminations</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Customer Complaints</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>

- Items marked with an asterisk are reflected within the Un-planned off hire records, and are recorded separately for analysis purposes only

<b>Best Practise</b>	<b>2021</b>	<b>Quarterly Results</b>				<b>2022</b>	
	<b>Results</b>	<b>1Q</b>	<b>2Q</b>	<b>3Q</b>	<b>4Q</b>	<b>Target</b>	<b>Actual</b>
<b>Near Miss Reports FOR IVS FLEET only</b>	<b>963</b>	<b>220</b>	<b>213</b>	<b>233</b>	<b>215</b>		<b>904</b>

### Positive outcomes

- No fire incidents
- No permanent total disability / Permanent partial disability

### Areas which require improvement

- Navigation
- The vessel completing forms which have been supplied via the SMS.
- Average PSC deficiencies per vessel per inspection is about 0.66 (0.71 in 2021)
- Office Ship Managers to visit the vessels – COVID 19 permitting.

## Action plan for continual improvement 2023

Refer to attached sheet for action plan:

S.NO	Item	PIC	Target date	Status
1	Enhance safety culture on board through monthly campaigns and upload the same in SHEQ website	DPA	MONTHLY	
2	Promote health bulletins and upload the same in SHEQ website	DPA	AS REQUIRED	
3	Identify on the job training needs for various shipboard activities and promulgate the same to fleet.	DPA	AS REQUIRED	
4	Endeavour to maintain RIGHTSHIP safety score of at least 4 on all vessels	DPA	NA	
5	Review manning levels of all vessels in the fleet as required by MPA circular	FELICIA	MAY 2023	
6	Obtain USCG QUALSHIP PROGRAM certification on vessels calling US ports	DPA	JUNE 2023	
7	Changeover of ECDIS from FURUNO to Chartworld during dry dock	Ship Manager	During drydock	
8	Installation of EPL on vessels as applicable	BRETT / JAKE	Prior annual survey	
9	Upgrading BASSNET to version 2.11	SUBU	DEC 2023	
10	Relocate Durban and Singapore Offices	Hilton	AUG 2023	
11	Open Manila Office	Hilton/Henry	DEC 2023	
12	Commence Electricians Cadet Scheme	Brett	SEP 2023	
13	New software for SMS	Hilton	DEC 2023	

# Appendix 1: Masters review

## Summary of Masters Review – 2022 review

<b>Vessel</b>	<b>SUGGESTION</b>	<b>ACTION PLAN</b>	<b>PIC</b>	<b>STATUS</b>
TEMBE	NIL	NA	NA	CLOSED
WENTWORTH	NIL	NA	NA	CLOSED
HIRONO	NIL	NA	NA	CLOSED
GLENEAGLES	NIL	NA	NA	CLOSED
SWINLEY FOREST	NIL	NA	NA	CLOSED
BOSCH HOEK	NIL	NA	NA	CLOSED
RAFFLES	NIL	NA	NA	CLOSED
PHINDA	NIL	NA	NA	CLOSED
THANDA	NIL	NA	NA	CLOSED
SENTOSA	NIL	NA	NA	CLOSED
ORCHARD	NIL	NA	NA	CLOSED
KNOT	SMT suggest that reporting forms (monthly and weekly) and checklist forms must be reviewed thoroughly and sincerely as such duplication will be avoided and mistakes will be dealt specifically and accordingly. Redundancy reports can only lead to	Continual process	SHEQ MANAGER	CLOSED

	confusion which adds workload and stress both shipboard and shore personnel. Unnecessary company forms should be removed from the system and monthly/ weekly reporting list should be established and updated by the HSEQ manager.			
KINGLET	NIL	NA	NA	CLOSED
SUNBIRD	NIL	NA	NA	CLOSED
NORTH BERWICK	NIL	NA	NA	CLOSED
IVS MERLION	NIL	NA	NA	CLOSED
SPARROW HAWK	Master requesting for weather routing services			Closed
IVS PRESTWICK	<p>Form 5.2.8 A (26 July 2017, rev 2.0) is not compatible with the "Filing System" list. (08 Oct 2020):</p> <ul style="list-style-type: none"> <li>• 3.2.1 – (Drill planner) - not in use as planner is included in Bassnet</li> <li>• 3.2.4 – (Ballast Log) - not in use</li> <li>• 3.5.6 – (Security Drill) – now is included in 3.2.3</li> </ul>	To review form 5.2.8 A	Raja/ Brett	CLOSED
IVS KESTREL	NIL	NA	NA	CLOSED

IVS KINGBIRD	Ship's Certificates: BASSnet Certificates Module was already rolled out, to further utilize this system I would suggest that the Fleet Procedures Manual Section 11.3 Ship's certificate will be also updated and to incorporate what was the intention and how the Company would like to implement this BASSnet certificate Module.	To review	Raja/ Brett	CLOSED
	Laundry Allowance: on Fleet Procedures Manual Section 15.1 ACCOMMODATION AND RECREATIONAL SPACES statement regarding laundry allowance was not updated yet. As far as I am aware this was already removed but confusion still arise since this section was not yet updated.	To review	Raja	CLOSED
	MEMO section, Posters Displayed on the Ship for Wheelhouse at item no. 18: Still stating Form 3.2.1 which is not already on the filing system might confuse ship staff and these details are already incorporated on BASSnet.	To review	Raja	CLOSED
	MEMO section, ECM USA Emergency reporting Placard not updated to the latest revision	To review		CLOSED
	MSDS part should be regularly updated with the latest revision coming from the suppliers.	To review		CLOSED
IVS OKUDOGO	NIL	NA	NA	CLOSED

**Reviewed by:**

 Hilton -  
Marine  
Manager

 K.  
Rajaraman –  
DPA

 Rajesh  
Sharma –  
Alternate  
DPA

 Brett –  
SHEQ  
Manager

 Warren King  
– Crewing  
Manager

h - Marine superintendent Warren King – Crewing Manage K. Rajaraman - DPA

---

## Appendix 2: SEEMP review

Date of Review	Reviewed by	Remarks
09 June 2022	Brett	<ul style="list-style-type: none"> <li>SEEMP reviewed and found adequate for the intended trade of each vessel.</li> <li>Monthly environment reporting form updated by each vessel and sent to Company.</li> <li>Data required for computation of energy efficiency operational index (EEOI) is received from the vessels at defined interval.</li> <li>SEEMP data was tracked and monitored through Podium software.</li> <li>SEEMP III was developed and approved for the fleet during 2022 to cover EEXI and CII.</li> <li>Each vessel is in compliance with EU MRV and IMO DCS requirements</li> <li>Maintenance policy continually reviewed to stop leakages, wastages and to ensure optimum performance of machinery through regular monitoring of PMS reports and defect reports from vessels and through feedback from vessel staff.</li> </ul>

Energy efficiency Measures	Compliance (Yes/ No/N.A )	Remarks
Speed Selection Optimization	Yes	Satisfactory
Optimized Route Planning	Yes	Satisfactory
Optimized Heading Control / Auto-pilot Function	Yes	Satisfactory
Optimum Ballast	Yes	Satisfactory
Optimization of Load on Generators	Yes	Satisfactory
Boiler and Steam load optimization	Yes	Satisfactory
Exhaust Gas Economizer Efficiency	Yes	Satisfactory
Mooring and Winches	Yes	Satisfactory
Port / Anchorage Operations	Yes	Satisfactory
Cargo Loading and Unloading	Yes	Satisfactory
Lighting on board	Yes	Satisfactory
Working in Galley	Yes	Satisfactory
Ship's Laundry Equipment	Yes	Satisfactory
Hull and Propeller Condition	Yes	Satisfactory
Handling of Oil Residue (Sludge)	Yes	Satisfactory
Bunker Heating	Yes	Satisfactory
Variable frequency drive ( where applicable)	Yes	Satisfactory
Company's ENVIRONMENTAL REPORT form	Yes	Satisfactory
Fuel oil consumption	Yes	Satisfactory
Biofouling measures	Yes	Satisfactory
Switching off equipment when not in use	Yes	Satisfactory
Just in time operations	No	Extended anchorages
Propulsion System Maintenance	Yes	Satisfactory