Management Review

2020

Brett McElligott, HSEQ Manager
Grindrod Shipping

CONTENTS

Date of Review

Date: 18 June 2021

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

Quentin Foyle

Hilton Stroebel

Rajaraman Krishnamoorthy

Rajesh Sharma

Denver Mariano

Henry Dayo

Brett McElligott

Brendon George

Mike Allen

Rennie Govender

Review of previous Management Review (2019)

Report of previous Management Review (2019) was reviewed and found satisfactory. No outstanding issues were noted.

Review of the Action Plan for year 2020

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	Implemented every month
2	Promote health bulletins and upload the same in SHEQ website	DPA	AS REQUIRED	Implemented every month
3	Identify on the job training needs for various shipboard activities and promulgate the same to fleet.	DPA	AS REQUIRED	Implemented
4	Incorporating maintenance of FFA on BASSNet	SUBU	JULY 2020	Implemented
5	Review manning levels of all vessels in the fleet as required by MPA circular	HILTON	AUG 2020	Completed
6	Consolidate Navigational services to single service provider (chart world)	DPA	JAN 2020	Completed
7	Migration of SHEQ to OneDrive	ZAIN	DEC 2020	PENDING
8	Implementation of new training modules in SEAGULL	MIKE MELLY	MAR 2020	Completed
9	Changeover of ECDIS from FURUNO to Chartworld if installation date of Furuno ECDIS exceeds 5 years	Ship Manager	AS REQUIRED	during dry dock
10	Revising quarterly store forms	HILTON	JUL 2020	Completed
11				
12				
13				

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 2020 were reviewed and incorporated in our SMS system if the SMS required updating. A few circulars are reissued with new 2021 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 2020:

External Audit Type	No. Of Audits	No. of NCR	No. Observations
ISM + ISPS	6	0	0
MLC	2	0	0
ISO9001	-	-	-
ISO14001	-	-	-
DOC (MPA+MI)	1	0	0

The following **internal** audits were completed onboard the vessels during 2020:

Internal Audit Type	No. Of Audits	No. of NCR	No. Observations
ISPS + ISM	33	70	291
Navigation	25	10	71

Analysis of Internal Audits

The following analysis of the audits was completed. Please note that for analysis purposes, the audit findings are usually entered in BASSNet.

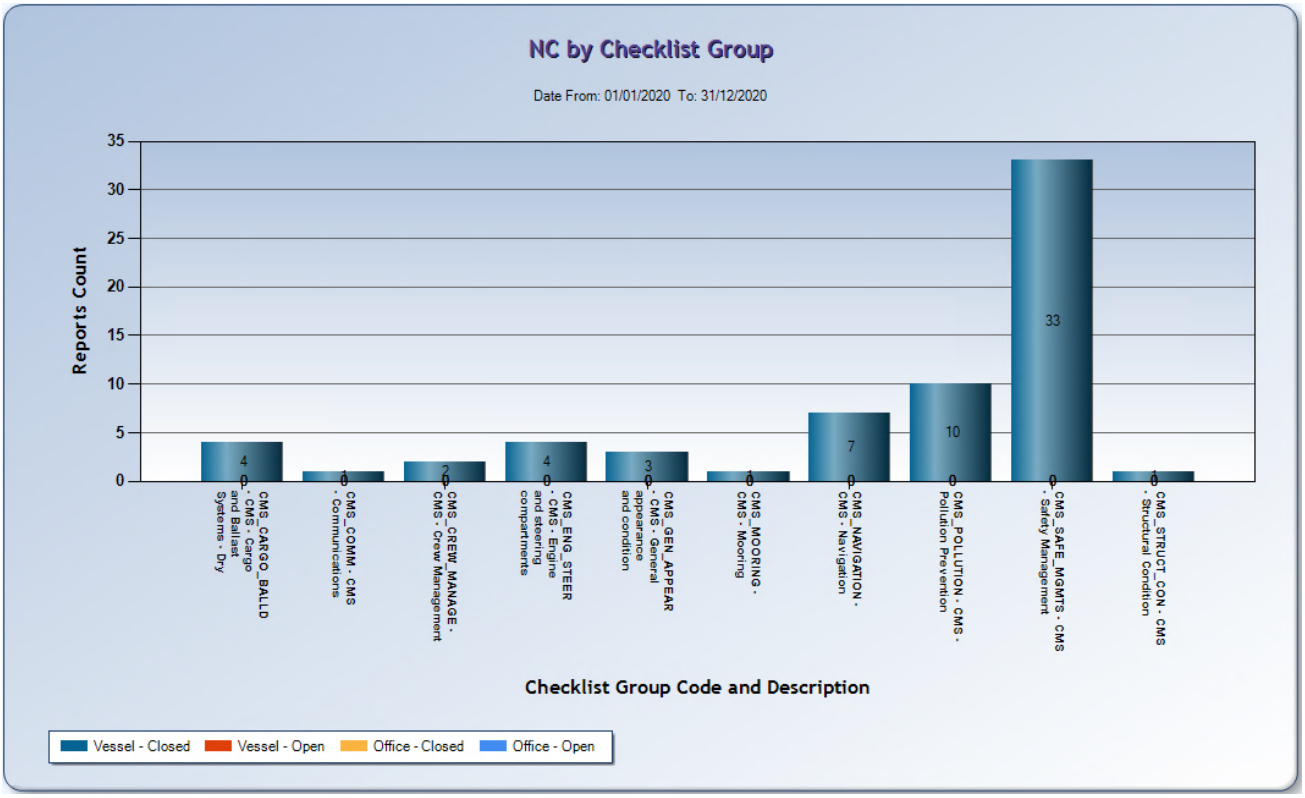
Internal ISM Audits:

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.

However, it should be noted that 50% (30% in 2019) of all NcN's are Safety Management related. This is a very concerning increase in percentage of safety management defects. It should be noted

that most 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 work 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** identified the following areas of improvement for 2021:

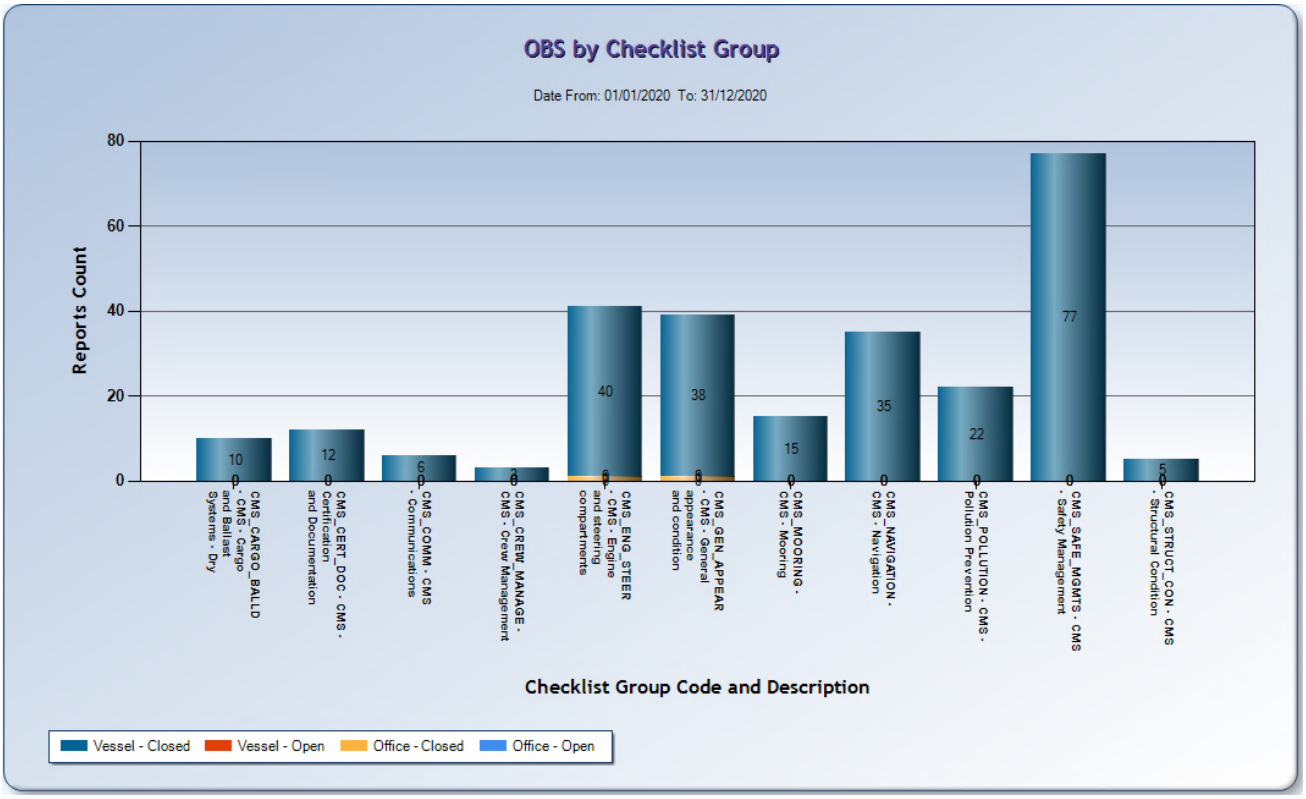
1. Safety Management: Enclosed space and hot wok permits not correctly filled in (5 NcNs).
2. Safety Management: is the rescue boat including its equipment and launching arrangements in good working order. (3 NcNs).
3. Navigation: does the operator provide guidance on a momentum under keel clearance and squad? (2 NcNs)
4. Safety Management: is the Life-boat including its equipment and launching arrangements in good working order. (2 NcNs).

Internal ISM Audits:

Observations

An analysis of the **Internal Observations** identified the following areas of improvement for 2021:

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 Maintenance and record keeping associated with that Maintenance.



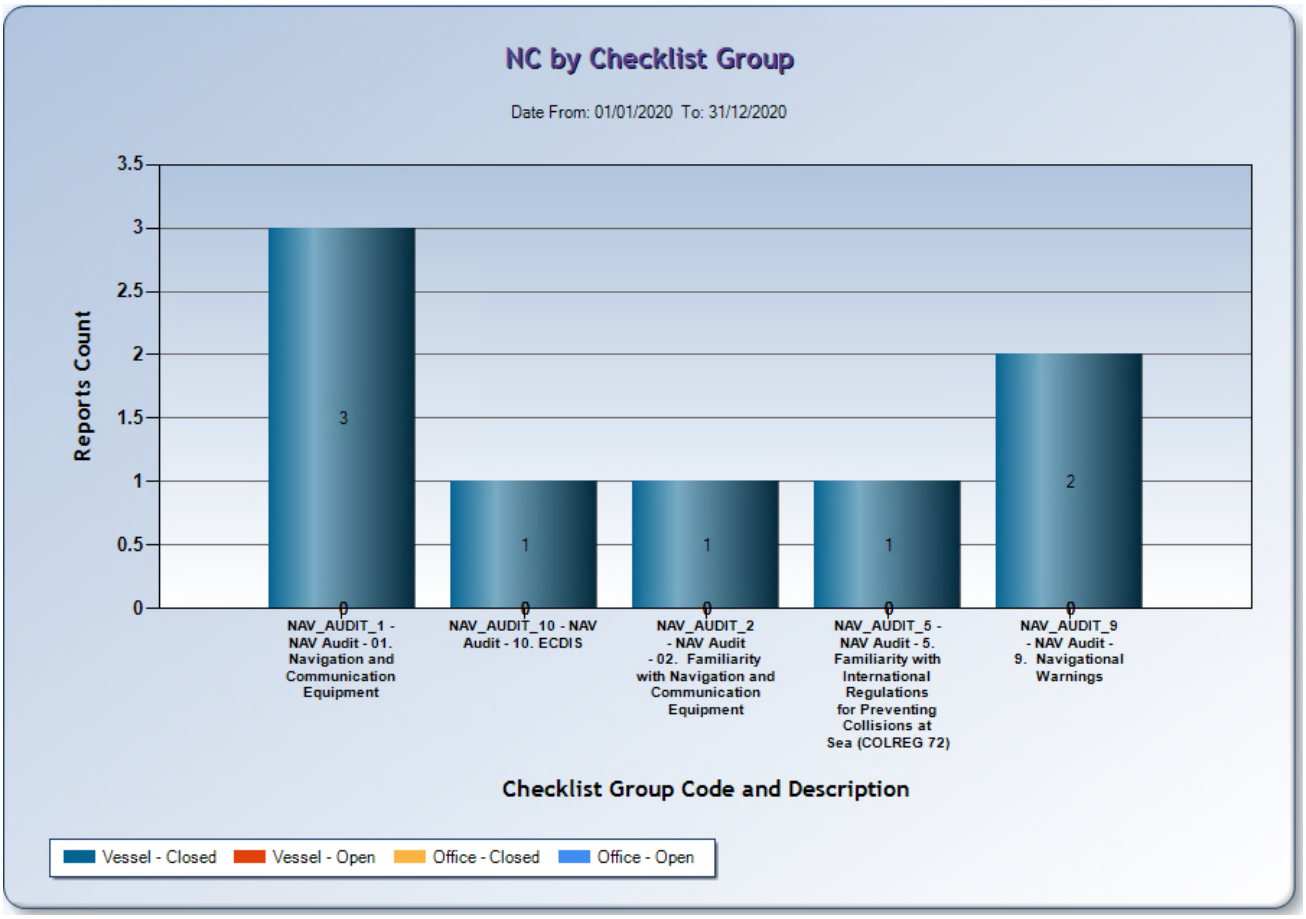
An analysis of the **Internal Observations** identified the following areas of improvement for 2021:

1. Engineering: Is a planned maintenance system being followed and is it up to date? (6 Obs)
2. Mooring: are the windlasses, anchors and locking bars and cables in good order and operating effectively? (6 Obs)
3. Navigation: Are Deck log-books and engine movements (bell) books correctly maintained and adequate records kept. (6 Obs)
4. Navigation: our checklists for pre-arrival, pre-departure, watch handover, pilot/master exchange and the pilot card effectively completed? (6 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 2021 (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.

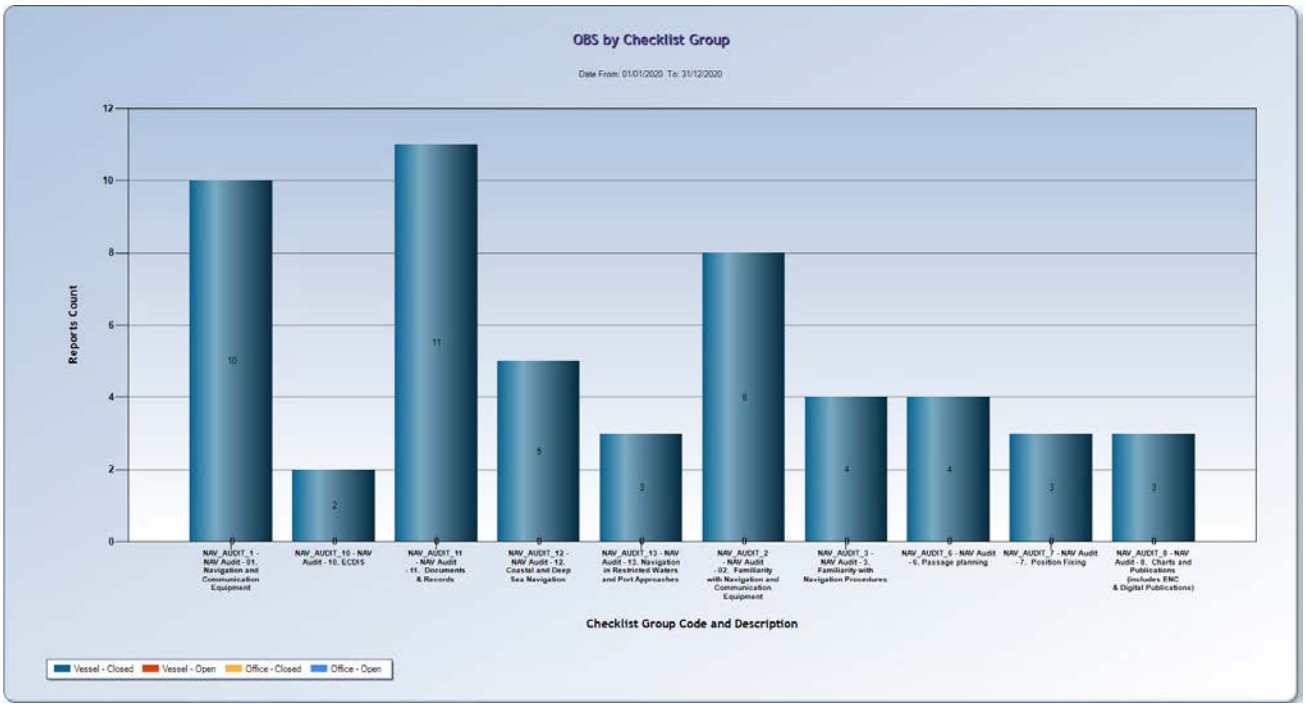
Internal Navigation Audits:



An analysis of the **Internal Non-Compliances** identified the following areas of improvement required for 2021:

The HIGH RISK non compliances are as follows:

1. Navigation Warnings: file for NAVTEX warnings not adequately kept up to date. (2NcN's)
2. Equipment: defective x-band radar (1 NcN)
3. COLREGS: familiarity with international regulations for preventing collisions at sea - sound and light signals. (1 NcN)
4. Equipment: properly adjusted magnetic compass. (1 NcN)



An analysis of the **Internal Observations** identified the following areas of improvement required for 2021:

1. Documentation: are all bridge checklists such as pre-arrival pre-departure watch handover pilot / master interchange check list being completed and filled out (4 Obs)
2. Navigation Equipment: Internal telephone system function checked (2 Obs)
3. Documentation: Deck Logbook not adequately kept. - (2 Obs)
4. Navigation – Parallel Indexing completed (2 Obs)

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 2021/2.

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 Colligo/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 ensures that they are familiar with their responsibilities, authority and interrelationships.

Analysis of Incidents and Near misses

Incidents

There were 147 incidents for the Grindrod Fleet in 2020 (87 in 2015; 110 in 2016; 104 in 2017, 187 in 2018, 145 in 2019), this covers both the IVS and Unicorn Fleets. As lessons learned are distributed to both fleets and usually common to both fleets, the analysis does include both fleets where relevant.

The following incidents below are a summary of the most severe incidents for 2020 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:

IVS KNOT Overflow from DOT1P October

The Vessel commenced bunkering in Algeciras. At 23h15 an oil spill occurred from DOT1P vent heads, overflowed from the save-alls on to the deck. 2EO at the port side bunker manifold saw the spill and activated emergency stop. All crew called to muster and started cleaning up operation. The spill was contained onboard with no oil noted in the water surrounding the vessel.

It appears that the spindle of the butterfly valve was bent and the spade was therefore not sealing correctly as it had not swung closed.

Losses:

IVS ORCHARD: Loss of Anchor May

The vessel was at anchor off west Australia. The weather deteriorated causing the anchor to drag. The windlass seized whilst retrieving the anchor. The anchor chain had to be cut in order that the vessel could proceed to safety.

Additional Noteworthy Event:

IVS Raffles

A faulty sewage overboard discharge valve caused a leakage of treated sewage water into the harbour of Poti Georgia. Local port legislation does not allow for any overboard discharge of treated sewage water. The vessel was fined for the transgression.

LTI’s and MTC’s:

IVS North Berwick February (LTI)

A box was being transferred through the engine room skylight. While the box was being lowered to about 2.5 meters above the floor, the box slipped off from the sling and fell down onto the receiving trolley. The trolley was badly damaged due to the impact and a wheel flew into the crew member’s ankle. He suffered a mild pain with light inflammation and contusion. He rested the leg for a day to decrease the swelling.

IVS KESTREL March (LTI)

A crew member was washing down the main deck. He climbed into the crane mast house to wash the crane post. While he was cleaning the structure he suddenly slipped and fell on the main deck. He suffered a swollen right knee. He recovered after 3 days bed rest.

IVS North Berwick March (MTC)

A crew member carried out soot blow down of the exhaust gas economizer as per routine maintenance. He drained the steam condensate first but while doing so failed to control the open valve. The Condensate water splashed on his left hand. He suffered superficial 2nd degree burns.

IVS KESTREL June (LTI)

Bosun tripped on a steel pipe inside the forecastle store. He fell and hit his face on the tripod stowed on the forecastle floor. He suffered minor cut on his right upper eyebrow, bridge of his nose, and cut inside his upper lip (internal parts.

IVS TEMBE June (MTC)

The crew member was working on the weather tight door using electric sander machine. While working on the edge, the brass hit the rubber seal and suddenly bounced back, hit the crew in the face, causing abrasions to the face and a cut to the tongue.

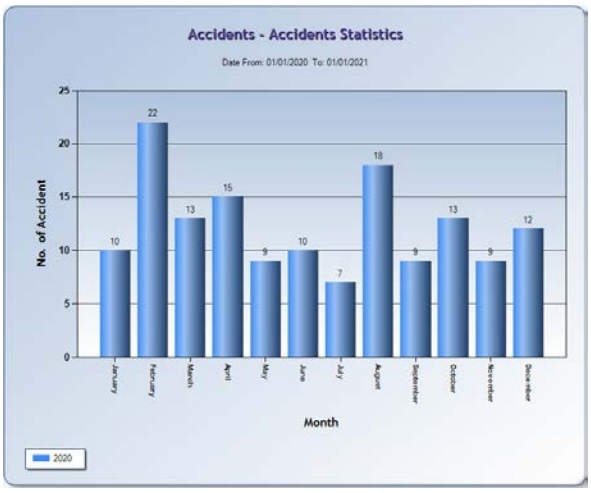
IVS WENTWORTH August (LTI)

Second engineer was cleaning a plunger using lathe machine wearing gloves. The gloves got caught in the rotating plunger and he injured his left hand.

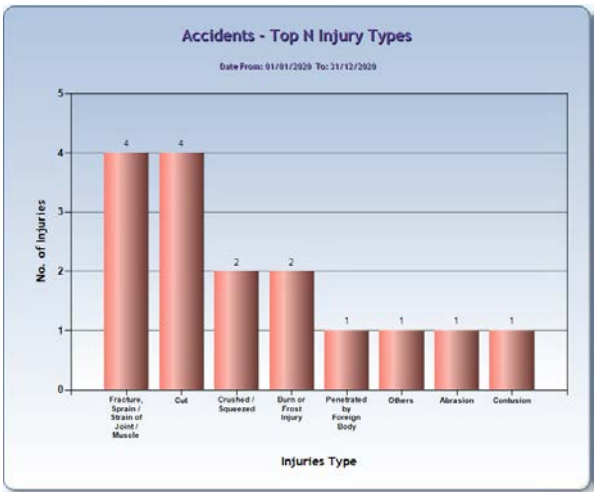
IVS Orchard: September (LTI)

During Drydock at Port HRDD Shanghai, while receiving deck stores the crew member felt a dull pain in her back whilst carrying/lifting some stores.

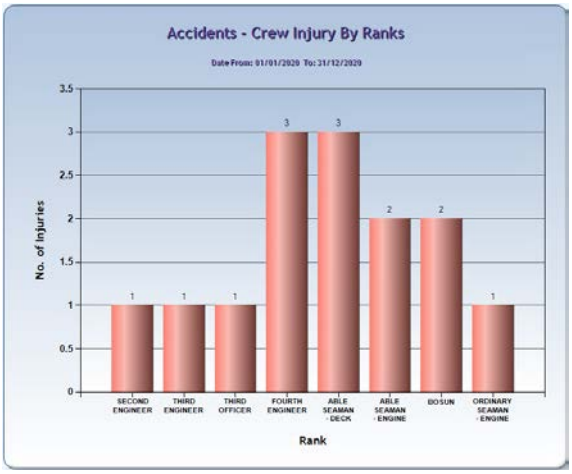
The following Accidents occurred in the IVS Fleet during 2020:



Grindrod: Incidents by month

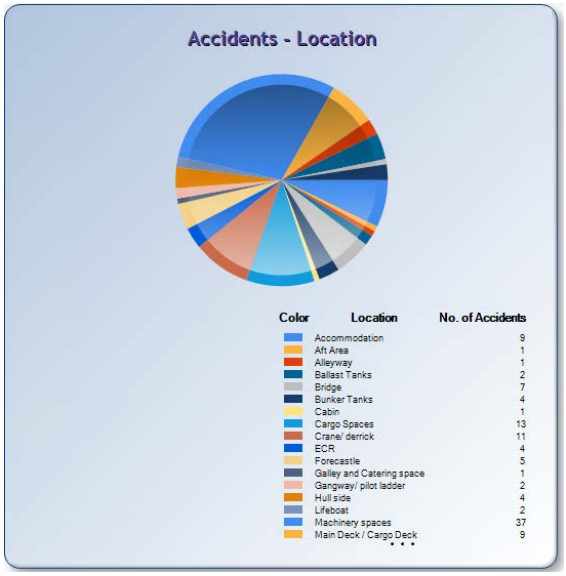


Incidents by Injury type



Incidents – Crew injuries by Ranks

As can be seen in this analysis the fourth Engineer and the Deck ratings were most likely to be injured.
Back sprains resulting from incorrectly carrying objects were most frequent.
The most high risk was a lathe incident where a crew's glove got entwined on a rotating chuck.

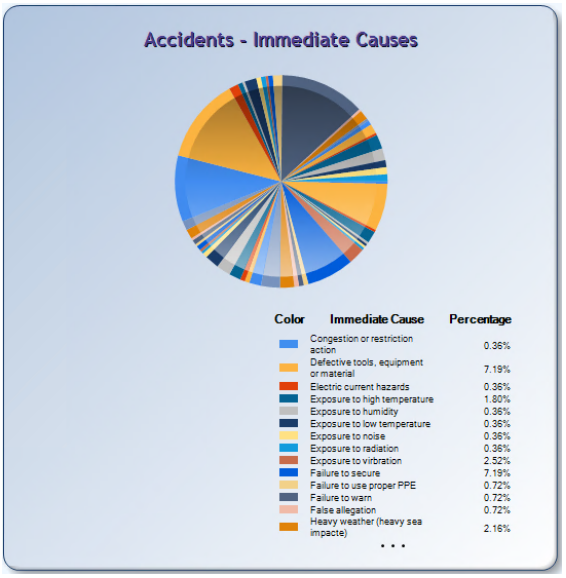


Incidents – Location

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

- 27% Engine Room
- 9.4% Cargo Spaces
- 8% Crane

In summary - 27% of incidents occurred in the Engine Room spaces, this is down from 28% in 2019.

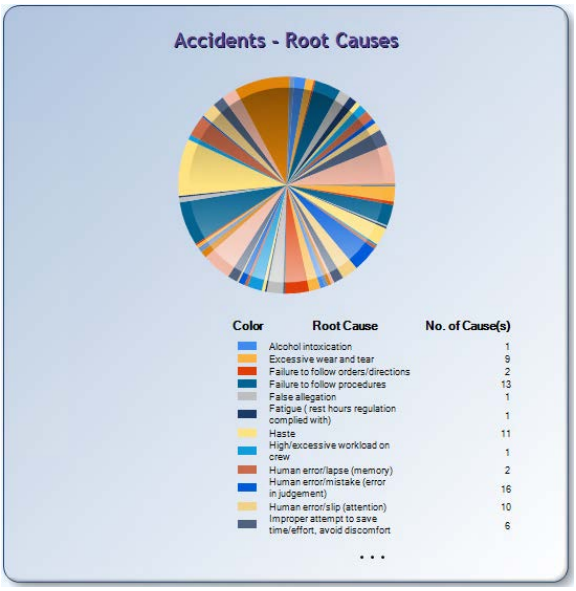


Incidents – Immediate Causes

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

- 13% Machinery Malfunction
- 13% Procedural Error
- 10.1% Machinery Breakdown
- 7.9% Malfunction tools or equipment
- 7.9% Failure to Secure

In summary – 21% Immediate causes of incidents are directly attributable to human error and lax practices on the crew's behalf. In 2015 it was 24%. This result is a little More than 2019.



Incidents – Root Causes

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

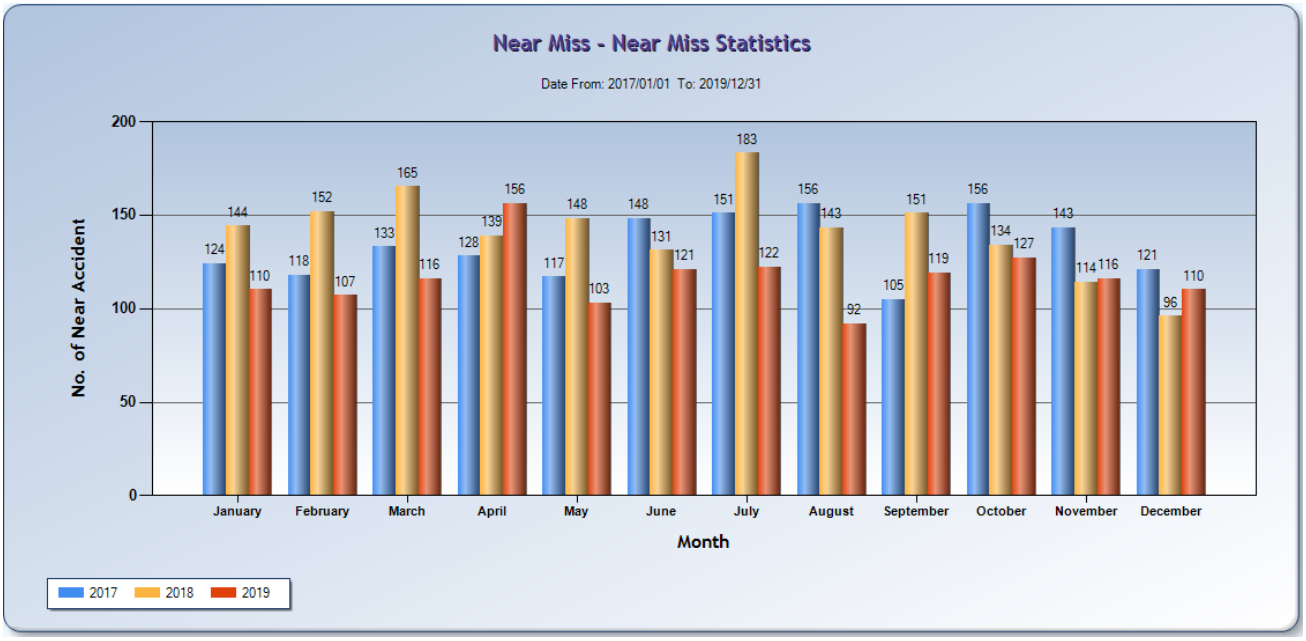
- 8.5% Lack of attention
- 8.4% Lack of situational awareness
- 6.6% Error in Judgement
- 5.8% Excessive wear and tear

In summary – 23.5% 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".

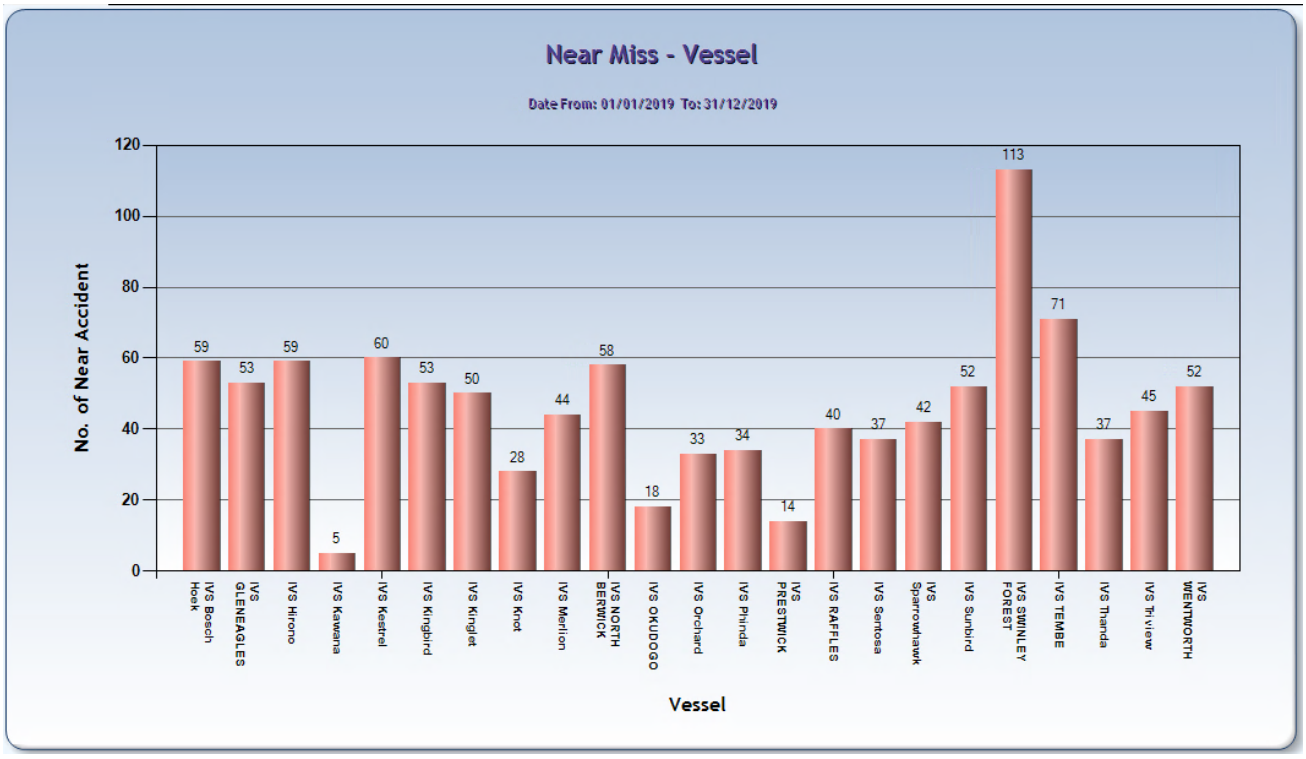
Near Miss

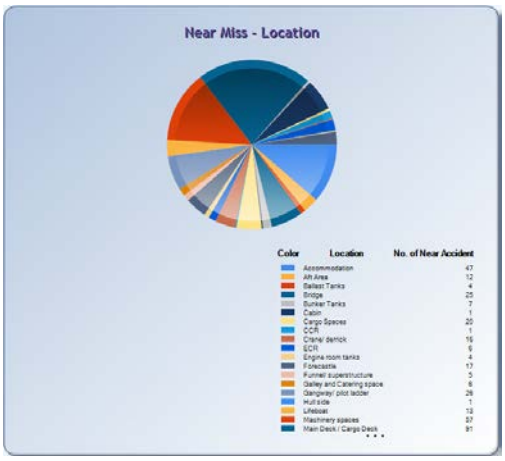
A total of 1011 near misses were raised during 2020 for both fleets. This is a 27% decrease in the number of near misses raised in 2019 (1399 near misses). Further education in the use of the "Fast track wizard" in BASSNet for the ease of reporting has not led to increased reporting of near misses. Near misses are being reported from the IVS Fleet, these account for 82% of the total near misses reported in 2019. It should be noted that 3 of the fleet of 4 Unicorn vessels were sold in 2020 hence the reduction of near misses.

Where applicable the "Lessons learned" in BASSNet are being distributed to both fleets. These are then being read out during the Safety Management Committee meetings held onboard.



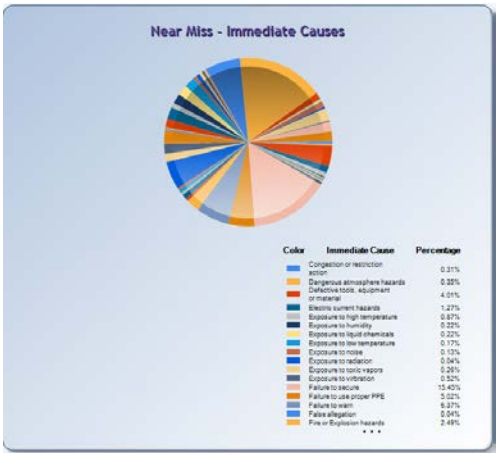
Unfortunately, not all vessels report as diligently regarding near misses. Typically, the Office expects around five near misses per month. Some vessels are much lower than that. Vessel senior management are to ensure that the crew remember “Safety First” and report all near misses.





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

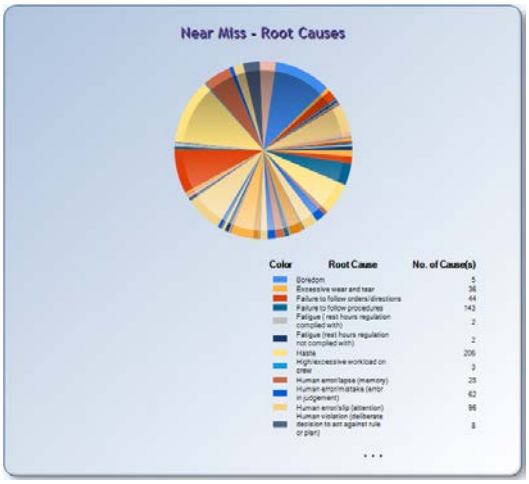
- 22% Main Deck
- 13.7% Machinery spaces
- 11.3% Accommodation
- 6.3% Gangway



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

- 16.7% Procedural error
- 15.5% Failure to secure
- 6.4% Failure to warn
- 6.7% Poor housekeeping

In summary – 37% 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 2 years



Near Miss – Root Causes

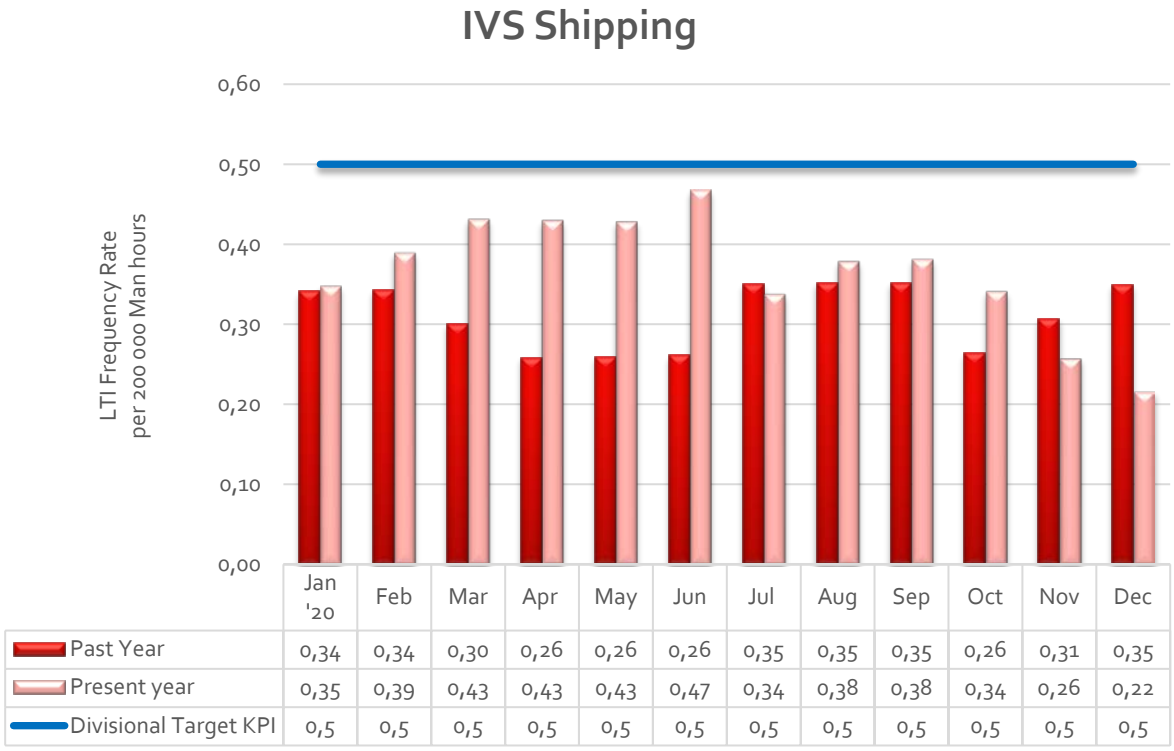
The top six **Root causes** of Near Misses include:

- 11.9% Lack attention
- 10.4% Lack of situational awareness
- 8.1% Incorrect judgment
- 6.6% Inadequate supervision
- 5.7% Haste

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.

Safety Performance

LTIFR



	Jan '20	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Past Year	0,34	0,34	0,30	0,26	0,26	0,26	0,35	0,35	0,35	0,26	0,31	0,35
Present year	0,35	0,39	0,43	0,43	0,43	0,47	0,34	0,38	0,38	0,34	0,26	0,22
Divisional Target KPI	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5

KPI	Comment by exception
Fatality	-
LTIFR	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 2020. 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 had an increase due to 1 incident per month in the First Half of 2020. This has pushed the LTI Frequency Graph close to the set KPI. (please see Incident Section within this report pg.15)

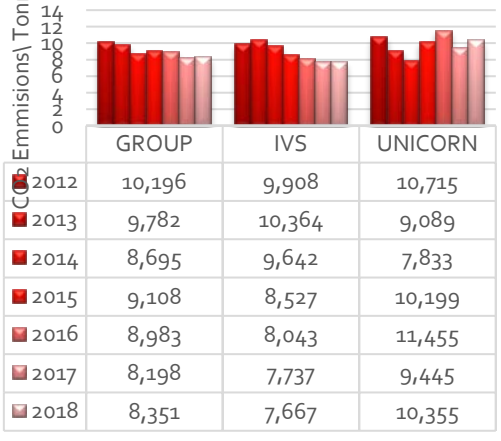
Environmental Performance

EEOI refers to the Energy Efficiency Operational Indicator, which takes fuel type, cargo and distance into consideration. Over all Grindrod Shipping EEOI has increased by 18% compared to 2012 (Base year).

It should be noted that the Unicorn fleet was less efficient than 2014. An analysis of the types of fuel being used showed that in January 2015 50.8% of the fuel burned was HFO which produces significantly higher quantities of CO2. By March 2015 the figure of HFO used was 85%. This trend has continued for the rest of the year with the amount of HFO consumed ranging between 75% and 92%. The increase in HFO consumed is due to the trading patterns of the vessels with most vessels not trading in the ECA areas of Europe and USA. Overall Unicorn total fuel consumption decreased by 14.6%. However, the associated Tonne-Mile variance is 4% more efficient compared to 2012. This indicates that the vessels have been trading with long ballast voyages which has again decreased efficiencies. Our MR tankers have been trading between West Africa and Europe over the last year.

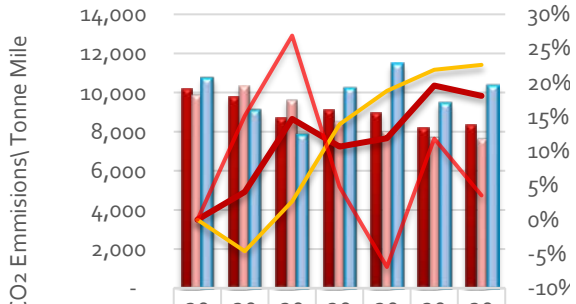
A review of the graphs below confirms that the “2020” objective of becoming 10% more energy efficient on the 2012 base year were achieved in 2018 already.

EEOI for Grindrod Shipping



	GROUP	IVS	UNICORN
2012	10,196	9,908	10,715
2013	9,782	10,364	9,089
2014	8,695	9,642	7,833
2015	9,108	8,527	10,199
2016	8,983	8,043	11,455
2017	8,198	7,737	9,445
2018	8,351	7,667	10,355

Efficiency of Fleet (2012 Base line)



	2012	2013	2014	2015	2016	2017	2018
GROUP	10,	9,7	8,6	9,11	8,98	8,2	8,35
IVS	9,9	10,	9,6	8,53	8,04	7,74	7,67
UNICORN	10,	9,0	7,8	10,2	11,	9,45	10,3
Efficiency GROUP	0,00	4%	15%	11%	12%	20%	18%
Efficiency IVS	0,00	-5%	3%	14%	19%	22%	23%
Efficiency UNICORN	0,00	15%	27%	5%	-7%	12%	4%

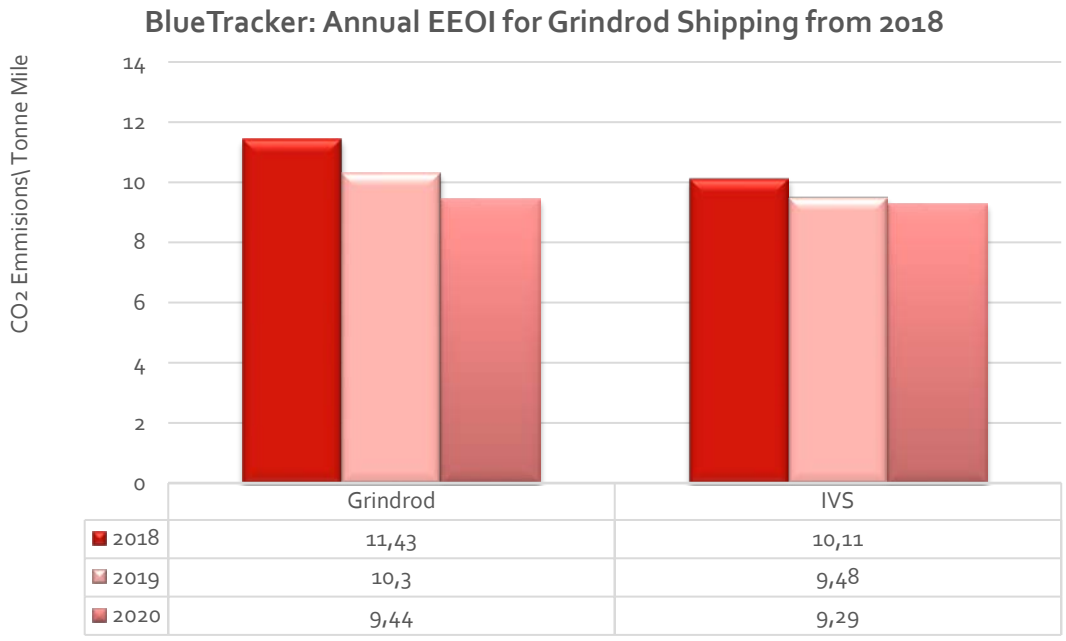
The following are the reasons why Grindrod was able to achieve the results:

- In an effort to increase the efficiency of vessels, Grindrod has been pursuing an active policy of environmentally efficient designs with regard to new-build projects.
- Variable frequency drives are showing positive results with vessels on average being able to save 15 tons of fuel oil per month per vessel. This can be seen in the increased

efficiencies continue to be realised in the IVS Fleet. The two Tankers are also contributing significantly and are saving on average around 25 Tonnes of fuel per vessel per month. However the Tankers have been sold and therefor the IVS Fleet are the only vessels using the VFD's.

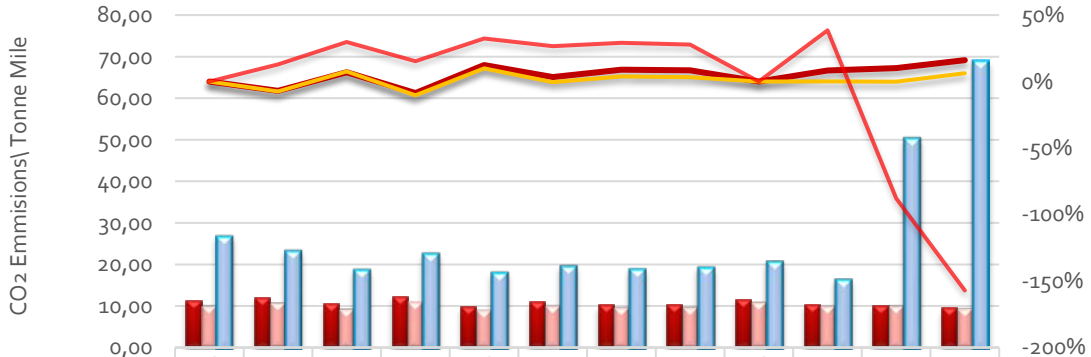
As of the beginning of 2018 the Company has been using Bluetracker software to compile much more accurate results. The vessels are required to submit on a daily basis consumption onboard. These are reviewed and validated on a daily basis. Additionally, further clarification has been provided by Classification Societies on how to correctly calculate EEOI. A new parameter is to increase efficiencies of the fleet by 2% per annum based on the Bluetracker database.

Previously the Company had employed Excel forms to track Environmental and Fuel consumption performance for the fleet to fulfil the requirements of the SEEMP manual. Blue tracker Software is now performing this duty. A review of the vessel's performance as shown in the graphs below indicate that the requirements of the SEEMP manual continue to be met. See Appendix 2.



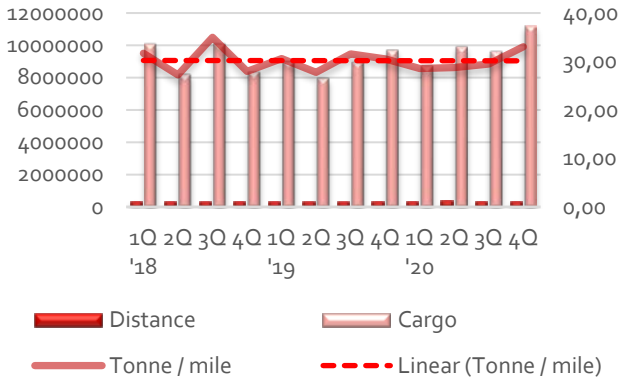
Grindrod Shipping showed an improvement in EEOI efficiency of 17% for 2020 based on the 2018 EEOI results. Unicorn showed an improved efficiency for 2019 of 15% over 2018 consumption figures. However with the sale of the Unicorn Fleet and some of the older IVS vessels, the efficiencies have been made in the Grindrod Shipping Fleet.

BlueTracker: Quarterly EEOI of the Grindrod Shipping Fleet from 2018

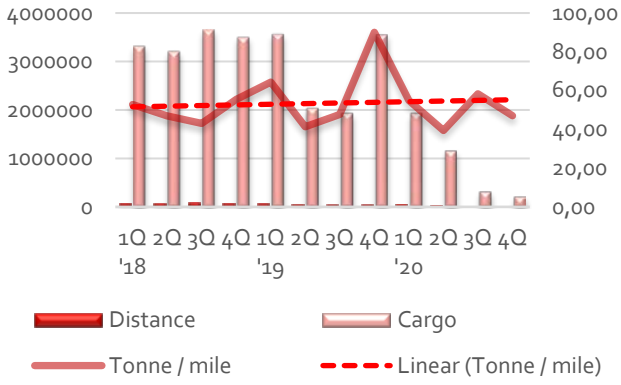


	1Q '18	2Q	3Q	4Q	1Q '19	2Q	3Q	4Q	1Q '20	2Q '	3Q '	4Q '
GROUP	11,26	12,04	10,46	12,23	9,86	10,88	10,24	10,30	11,53	10,32	10,11	9,44
IVS	9,92	10,65	9,16	10,94	8,93	9,97	9,53	9,59	10,82	9,90	9,93	9,29
UNICORN	26,84	23,37	18,84	22,71	18,13	19,70	19,00	19,37	20,80	16,49	50,40	69,00
Efficiency GROUP	0,00	-7%	7%	-9%	12%	3%	9%	8%	0,00	8%	10%	16%
Efficiency IVS	0,00	-7%	8%	-10%	10%	0%	4%	3%	0,00	0%	0%	6%
Efficiency UNICORN	0,00	13%	30%	15%	32%	27%	29%	28%	0,00	39%	-88%	-157%

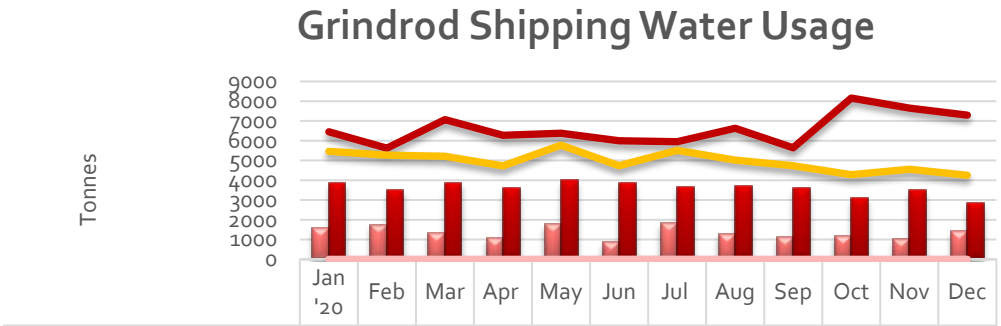
IVS Shipping Cargo vs Distance Travelled



Unicorn Shipping Cargo vs Distance Travelled



During 2020 most of the Unicorn product carrier fleet was sold off, leaving only the BREEDE. She is presently acting more as a storage platform hence the very low distance travelled.



	Jan '20	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
From Shore	1595	1756	1331	1087	1777	885	1847	1308	1118	1186	1051	1419
Manufactured	3870	3513	3884	3638	4000	3850	3668	3714	3617	3097	3503	2833
Previous year	6452	5623	7071	6273	6383	5999	5954	6633	5643	8159	7652	7294
Present year	5465	5269	5215	4725	5777	4735	5515	5022	4735	4283	4554	4252
Ratio: Shore Supply Vs Manufactured	41%	50%	34%	30%	44%	23%	50%	35%	31%	38%	30%	50%

Water consumption is less 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.

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
Average no observations per inspection	1.5	0.9	0.7	0.65	0.60	0.51	0.81	0.69
Detentions	Nil	Nil	Nil	Nil	1	2	Nil	Nil

IVS vessels continue to be the subject Port state control inspections. In 2020 there were 42 (64 in 2019) inspections with 29 (54 in 2019) deficiencies and **0 detentions (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.

IVS SPARROWHAWK Map Ta Phut, Thailand 28 December 2020: 5 PSC Deficiencies

1. *Fire control plan - Crew list not signed by Master*
   Managers comments:
   The updated crew list was kept in the fire plan box outside the accommodation on the port and stbd side. The Master had signed the crew list kept on the stbd side but did not sign the crew list kept on the port side which resulted in this deficiency.
2. *Oil trays not purged*
   Managers comments:
   The drain plug of one save-all tray was not put back in place after draining the rain water which resulted in this deficiency.
3. *Certificate for Chief officer - The certificate was not signed by the Chief officer*
   Managers comments:
   The Chief officer did not insert his signature at the bottom of his certificate of competency which resulted in this deficiency.
4. *Rat guards not in place on ropes*
   Managers comments: All rat guards were in place on the mooring ropes but one rat guard was displaced off the mooring rope due to the blowing wind and the same was not noticed by ship crew which resulted in this deficiency.
5. *Access control to ship not controlled (Funnel door kept open)*

Unfortunately the PSC inspector was not particularly open to discussion and he appeared to want to make a statement. The above deficiencies do not represent a breakdown in the System onboard – they do raise the question on the PSC Inspectors motives.

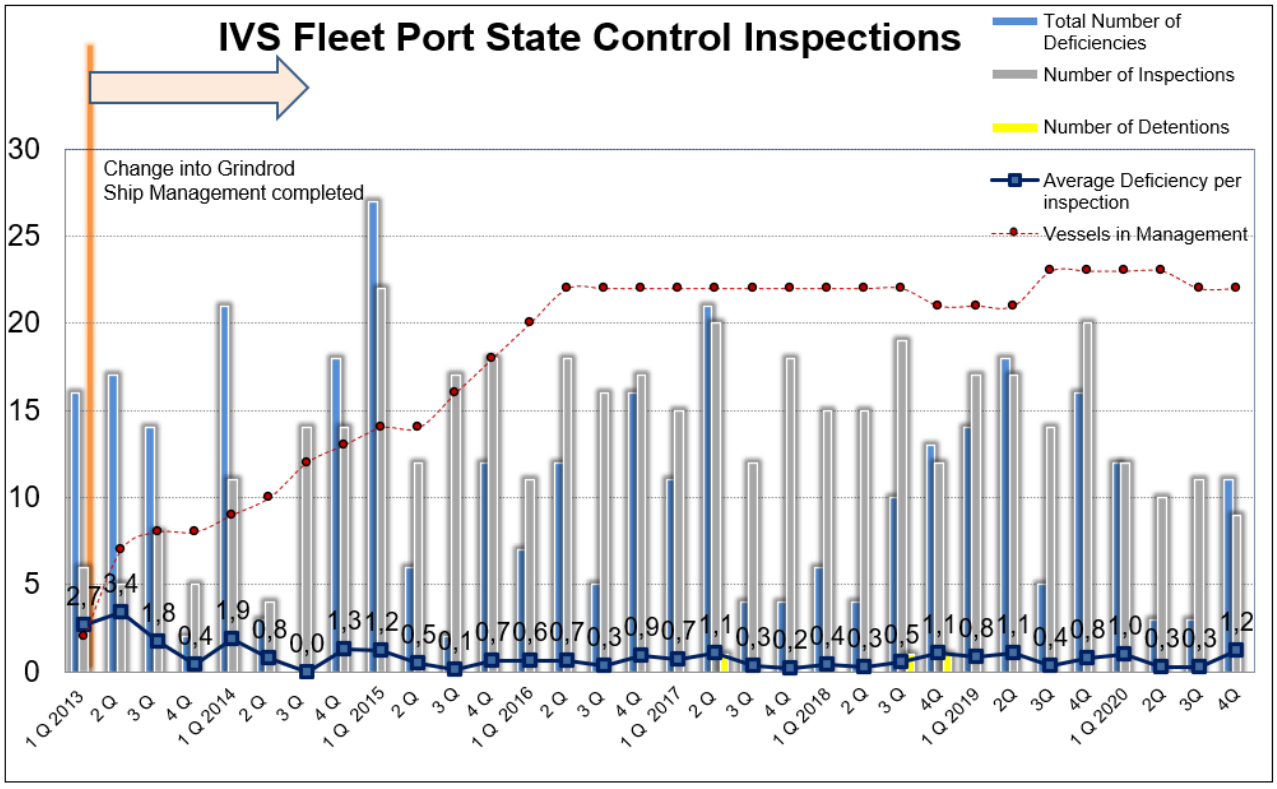
IVS ORCHARD Devonport Australia 14 February 2021: 10 PSC Deficiencies

1. *Port Boiler water level gauge glass inoperative*
   Comments: Boiler water gauge level was unreadable as the sight glass was not clear. Ship staff immediately blew down the sight glass which cleaned the sight glass and the water level was clearly sighted.
2. *Starboard Boiler water level gauge glass inoperative*
   Comments: Boiler water gauge level was unreadable as the sight glass was not clear. Ship staff immediately blew down the sight glass which cleaned the sight glass and the water level was clearly sighted.
3. *Boiler safety valve discharge pipe and safety valve drains blocked. Water accumulated above safety valve*
   Comments: Ships staff immediately cleared the boiler safety valve discharge pipe and safety valve drains.
4. *A60 automatic closing fire doors between engine room and steering flat not self-closing*:
   comments: Ship staff immediately adjusted the door closing actuator and rectified the deficiency.
5. *Accumulation of large amount of operational waste in machinery space*
   Comments: In the machinery space, Ship staff had kept operational waste in a drum not intended for storage of operational waste and the drum was also not kept covered. Ship staff immediately put the operational waste in the drum intended for storing the operational waste.

6. *Domestic fresh water pressure vessel pressure relief valve defective*
   Comment: AMSA Inspector found that the handle of manual pressure relief valve of the Hydrophore tank was missing. Ship staff fabricated a new handle and fitted it.
7. *Hours of work and rest do not match actual hours worked*
   Comments: During AMSA PSC inspection, the inspector compared the oil record book and engine log book and observed that Chief engineer did not record the work hours for bunkering operations and manoeuvring operations on Dec 2019 and Jan 2020.
8. *Meat room latch internal actuator not operative*
   Comment: AMSA Inspector found that the meat room door could not be opened from inside as the internal actuator was not operative. The actuator was adjusted and the door tested for proper operation from inside and outside the meat room.
9. *Deficiencies 1,2,3,4,6,8,9 are objective evidence that there is a failure in ensuring the vessel is maintained effectively as required by the company's health, safety, environment and quality system, Technical section and ISM Code element 10*

All these were in the engine room and domestic fridges. The Ship Manger visited the vessel at the next port and found the CEO to be ineffective. He was dismissed.

All the above Port State Control observations do indicate the inconsistencies between different Countries. However, when it comes to Australia – IVS had 13 PSC inspections and 16 observations. Generally, the AMSA PSC inspections have some credence w.r.t their observations. All vessels are to note the instructions given to them by the Office on what typically the AMSA surveyor will look for. There were also 4 PSC Inspections in Japan resulting in 7 Observations.



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. DNV Navigator Software was commissioned to help the Master with Local Regulations. The Company has now replaced this software with BASSNet Port software which is part of the BASSNet suite.

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:

- Chinese ports fuel Sulphur requirements 2020,
- 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,
- The Manufacturer or his representative is to complete annual maintenance, thorough examination, operational testing and overhaul of launching appliances, lifeboat and rescue boat release gears and davit launched life rafts automatic release hooks shall be carried out, starting 01/01/2020.
- IMO Fuel sulphur requirements for all vessels starting 01/01/2020.
- Hazardous Inventory List to be compiled by end of 2020 to comply with EU requirements. This was completed 3Q 2020.
- 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.

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 vendors are as follows:

- Non-Conformance: Bosss-marine was tasked with carrying out the annual service of the galley wet chemical fire fighting system. Bosss-marine issued a certificate confirming the Gally Chemical system had been serviced however all crew confirmed that at no stage was Bosss-marine in attendance in the galley. Bosss-marine did subsequently attend and complete the service.

- Non Conformance: Vessel not provided with BDN in accordance with MARPOL Annex VI Regulation 18.5. Vessel was bunkering 50mt of LSMGO in Cape Town on Eastern Mol on 12/01/2020. Bunker was delivered by WesBulk Logistics Trucking. GSM confirmed that we can no longer accept the delivery of bunkers using Westbulk Logistics Trucking unless they confirm in advance that the Bunker Delivery Note will comply with the requirements of MARPOL VI Regulation 18.5.

- Non Conformance PTC failing to identify false certificates. AB XXX had falsified his OS records and had subsequently had 4 contracts onboard the IVS Fleet. It appears there was collusion in the MARINA Certificate verification website. Responsible persons in MARINA had been replaced and new validation procedures put in place.

- Non Conformance: Non Payment of Balance of Wages by PTC. This was a complaint brought to the Concerned@GrindrodShipping.com that there had been severe delays in the payment of balance of wages for 47 seafarers. PTC CEO confirmed a new accounting system rolled out that month had not functioned correctly. This was subsequently resolved.

One Complaint against Grindrod Shipping were received in 2020.

> Issue: As per MPA circular 13/2020, The extension of the seafarers' SEA must be made in accordance with Regulation 2.1 of the Maritime Labour Convention (MLC), 2006. Two crew of IVS MERLION have completed 12 months on board but Company did not get their contracts extended and approved by MPA.
> Corrective action: Contracts of the 2 crew were extended and approved by MPA. PIC were briefed to pay attention in detail and monitor the contract expiry dates for each crew and obtain extension at least 15 days prior expiry date. MPA to be informed for extension of contracts when the crew completes 10.5 Months.
> Preventative Action: PIC has been reminded to closely monitor the length of time on board of all crew using "Dry Fleet Monitoring sheet" and to ensure seafarer has the COE extension by the time the seafarer has been on board for 10 ½ months.

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. 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 2020. Most of the marine main engine industry had the same issues with slow speed engines however manufacturers were being very secretive about this issue in order to try and protect their brand of engine. As a preventative measure, following discussions with both consultants as well as main engine manufacturers, the type of Cylinder luboil as well as the rate of flow of the cylinder luboil 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 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.

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.

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 is on the increase and the cost of repatriation now according to the South African Government falls on the Ship Owner. The fleet is 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:

IVS Merlion May

In Van Tau port Vietnam thieves broached the forecastle store and stole some ships working equipment and a BA set out of the forward fire locker. The equipment was replaced in the next port- Yangpu, China.

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 Seagull 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, the Management is currently reviewing minimum resourcing levels and is proposing the amendment of 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 present 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 COLLIGO 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.

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.

COLLIGO was also rolled out to the Fleet which is a more streamlined document control and month end reporting system using a more automated process.

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 has been 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 Unicorn/Grindrod and the SMS. All Crew will be obliged to complete this course prior to acceptance into Unicorn 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.

NVOD has been replaced with SEAGULL which is seen to be a more relevant and up to date training software package. Additionally, Officers will be required to complete Bulker BICS prior to promotion. 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.

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 Seagull CBT and training plan to all vessels.
- All crew for new building ships were trained by DPA after selection by interview, and at the shipyard before the ship's delivery.
- Sea staff seminars were conducted by company staff.
- 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

2020 HSE INCIDENT STATUS – HOW ARE WE DOING?							
INJURIES AND DEATHS	2019 Results	Quarterly Results				2020	
		1Q	2Q	3Q	4Q	Target	Actual
Deaths (Unnatural or Accidental)	0	0	0	0	0	0	0
Lost Time Injury (Day Away from Work)	8	2	1	2	0	5	5
Medical Treatment Cases (External treatment/assistance req'd)	5	1	2	0	0	9	3
First Aid Cases (On-board treatment only)	7	1	1	2	1	12	5

SPILLS AND EMISSIONS	2019 Results	Quarterly Results				2020	
		1Q	2Q	3Q	4Q	Target	Actual
Spill *(Into the Environment)*	1	0	0	0	1	0	1
Minor Spill *(Contained and < 1 bbl)*	0	0	0	0	0	0	0
Contained Spill *(Contained and > 1 bbl)*	0	0	0	0	0	0	0
Spill *(Any quantity into the water))*	0	0	0	0	0	0	0

MATERIAL LOSSES	2019 Results	Quarterly Results				2020	
		1Q	2Q	3Q	4Q	Target	Actual
Catastrophic Damage/Loss *(Greater than $1 000 000)*	0	0	0	0	0	0	0
Massive Damage / Loss *($500 000 TO $1000 000)*	0	0	0	0	0	1	0
Serious Damage / Loss *($5000 to $500000)*	0	0	1	0	0	8	1
Minor Damage / Loss *(Less than $5000)*	2	1	1	0	0	13	2

Quality and Customer Service	2019 Results	Quarterly Results				2020	
		1Q	2Q	3Q	4Q	Target	Actual
Unplanned off hire as a result of our management failure	0	0	0	0	0	0	0
Cargo Contaminations	0	0	0	0	0	0	0
Customer Complaints	0	0	1	0	0	0	1

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

Best Practise	2019 Results	Quarterly Results				2020	
		1Q	2Q	3Q	4Q	Target	Actual
Near Miss Reports FOR IVS FLEET only	1167	270	255	285	201		1011

Positive outcomes

- No fire incidents
- No PSC detentions
- 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 0.69(0.81 in 2019)
- Use of BASSNet Risk Assessment Module

Action plan for continual improvement 2021

Refer to attached sheet for action plan

S.NO	Item	PIC	Target date	Status
1	Complete a gap analysis of the DryBMS			
2	Introduce Management of Change into SMS			
3	Further improve the Office w.r.t. Emergency preparedness			
4	Establish ISO compliance in GSM			
5	Reinforce procurement governance for compliance with SOX regulations			
6	Investigate the deployment of the electronic Engine Room log books to vessels.			
7	Investigate the use of existing GPS to transmit vessel coordinates to the Blue tracker software.			
8	IHM Maintenance.			
9	Defect list to be controlled			
10	Monitoring the critical equipment failure for trend analysis.			
11	Introduction of the Barcode reader for spares			
12	Monitoring of dispensations			
13	Introduction of Certificate Module			
14	Ensure EEXI and CII calculations are completed and the necessary vessel hardware is adjusted to comply with the requirements of EEXI			

Appendix 1: Masters review

Summary of Masters Review – 2020 review

Vessel	SUGGESTION	ACTION PLAN	PIC	STATUS
TEMBE	Can vessel have own Excel Form/Spreadsheet for the calculation of Sounding of Ballast, Bunkers and Draft Survey.	NIL Vessel to use only ship yard provided booklets/ plans/manuals for calculation of Sounding of Ballast and Bunkers. No unauthorized software shall be used for this purpose.	NA	CLOSED
WENTWORTH	3.2.2 HSEQ REPORT – Item 2 STCW section A VII/2 part 4 – stated watch keeping in port need to be amend to watch keeping at sea	Form 3.2.2 to be amended	RAJA	Completed on 02 April 2020
	Since we are paper less, suggest to have a tablet or any other portable equipment to do bridge and engine checklists electronically and store data in order to make sure that checks are done in detailed.	Presently our Company is not considering tablet for this purpose and vessel shall continue using the laminated checklists and make entries in log books	NA	CLOSED
HIRONO	Kindly remove the DNV port in item no. 34, DNV program has been removed on board and replaced by ISF and Bassnet port docs.	Form 5.1.6.1 to be amended	RAJA	Completed on 27 Mar 2020
	SHEQ / Slop chest and Bond Section 13.2 with the custodian of the store will receive a monthly payment of USD 50. This payment has been removed from last year	Fleet procedures manual chapter 13.2 to be amended	Warren	Completed on 02 April 2020
	SHEQ / Accounting guidelines Section 18.0 with wrong PIC and e-mail in page 2,3,6 (previous personnel Capt. Salasalan and Capt. Terroza still in this section).	Fleet procedures manual chapter 18 to be amended	Warren	Completed on 20 Aug 2020

	SHEQ / Accounting guidelines Section 18.0 page 9 – b. Allotment computation > Allotment shall commence from the date of departure from the Philippines to join the vessel with the divisor basis in present service period (Service Period January 17 - 31 (15 days) / Service Period February 12 - 28 (17 days) / Service Period April 17 - 30 (14 days). “AS PER CBA , WAGES ARE CALCULATED ON A 30 DAY MONTH”. The SHEQ / Accounting guidelines Section 18.0 - page 9 must change to wages must calculated on a 30 day month.	CBA amended	FELICIA	Completed on 4 Feb 2020
	Technical / 04.00 Diesel Alternator and Auxiliary Machinery / 1.14 Lubricating Oil - Renewal or reconditioning of crankcase oil is to be based upon the results of oil sample analyses . “As per recommendation of Technical manager lubricating oil renewal must be on 3000 running hours to prevent breakdown of turbo charger”.			
BOSCH HOEK	ADP - We have no access to newly bayed areas 1&2. Received activation key in December but it is not work. Master sent several emails regarding that issue. W/out support from IT we are not able to fix the matter.	To liaise with Chart world and fix the issue	RAJA	CLOSED / COMPLETED ON 28 JAN 2020
TRIVIEW	Availability of CBT program on type specific ECDIS on board for Nav Officer that does not have specific training certificate (NM 3.2 Familiarisation Training)	CBT program sent to vessel	RAJA	CLOSED
ORCHARD	The vessels Class approved plans eg: Ballast water Management, Damage control plan, Garbage Management etc. etc. are filed in files that were available on board at the time. It is time that a Standard type of Grindrod file is introduced to keep all these documents in as we have achieved with the Grindrod stationary that is uniform in the fleet now.	All original / drawings plans shall be kept in the original boxes provided by shipyard. All vessels shall follow this procedure.	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 dealth specifically and accordingly. Redundancy reports can only lead to 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	Review on quarterly basis	SHEQ Manager/ DPA	CONTINUAL JOB - CLOSED
SUNBIRD	No. 22 – We suggest that the form indicates on its title for whom exactly the specific form is for (e.g. 4.01.02 B1 Record of Ship Specific Familiarisation Training (GS) DECK OFFICERS) so it's easier for us to download which form is needed rather than downloading and checking the forms one by one.	Title of the forms to be amended	Brett	CLOSED ON 21 JAN 2020
IVS MERLION	In Bassnet especially (2 CARGO MATTERS) A redundancy of cargo documents are need to be uploaded in each sub-folder under Cargo matters, I would suggest that cargo documents must be segregated in every port of loading and discharging to avoid redundancy.	NIL	NA	CLOSED
SPARROW HAWK	Senior officers need to take a far more pro-active role in mentoring; supervising and monitoring subordinates. In order to do so, they must ensure that their own knowledge of the SMS is satisfactory – and that check lists; permits; risk assessments are properly implemented, rather than becoming a paperwork exercise. To this end the use of "generic" risk assessments must be avoided, and the specific hazards of the actual task at hand addressed.	Senior officers should know the SHEQ system and have to play a vital role in mentoring juniors. We request ships senior officers to voluntarily mentor the junior officers. Company has also started a mentoring program and has already sent 4 mentoring letters to entire fleet. Generic risk assessments are just standard templates for any task/activity. Ship staff shall ensure that these are used	NA	CLOSED

	Some form of incentive should be introduced to encourage the reporting of Near Misses; Non Conformances etc. This would ensure that potential threats are not simply ignored or concealed, as seems to be the current norm.	only as guidance and prepare risk assessment based on all the hazards for the specific task in hand. Regarding near miss reporting, We encourage each officer and crew to voluntarily report all near miss situations. At present Company will not offer any initiatives for reporting near miss situations.		
IVS PRESTWICK	Form 1.07.01 Certificates and Documents (GS) (Rev. Date: 28 Dec. 2015) should be revised for easy reference, updating & Filing in 3 Sections such as: Sec. A – Trading Certificates (Class & Flag State issued Certificates) Sec. B – Supplementary / Minor Certificates (attachments to Class & Flag State Certificates, if any including ITF, P & I, US, Canada, etc. Sec. C – Equipment Certificates, Plans & Drawings (Test, Conformity, Services, etc.)	Company will consider this suggestion and will incorporate the same in bassnet by end of this year	SUBU	**ACTION PLAN – DEC 2020**
IVS KESTREL	The use of Chart World Services has begun early this year and like other chart providers (e.g. Voyager 7), the same must be installed in Master's laptop which must updated on a regular basis.	Not required as per chart world.	NA	CLOSED

Reviewed during annual management review by:

Hilton - Marine ManagerBrett – SHEQ Manager

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

Appendix 2: SEEMP review

Date of Review	Reviewed by	Remarks
09 June 2020	Brett	• SEEMP reviewed and found adequate for the intended trade of each vessel. • Monthly environment reporting form updated by each vessel and sent to Company. • Data required for computation of energy efficiency operational index (EEOI) is received from the vessels at defined interval. • SEEMP data was tracked and monitored through Blue tracker software • Each vessel is in compliance with EU MRV and IMO DCS requirements • 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.

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	Yes	Satisfactory
Propulsion System Maintenance	Yes	Satisfactory
Other measures	Yes	Satisfactory