



**STAFF CENTRE**  
SHIPMANAGEMENT LTD.



# **Staff Centre Shipmanagement Annual Performance Report 2017**

**Technical and Safety Management**



**STAFF CENTRE**  
SHIPMANAGEMENT LTD.



# **Staff Centre Shipmanagement Annual Performance Report 2017**

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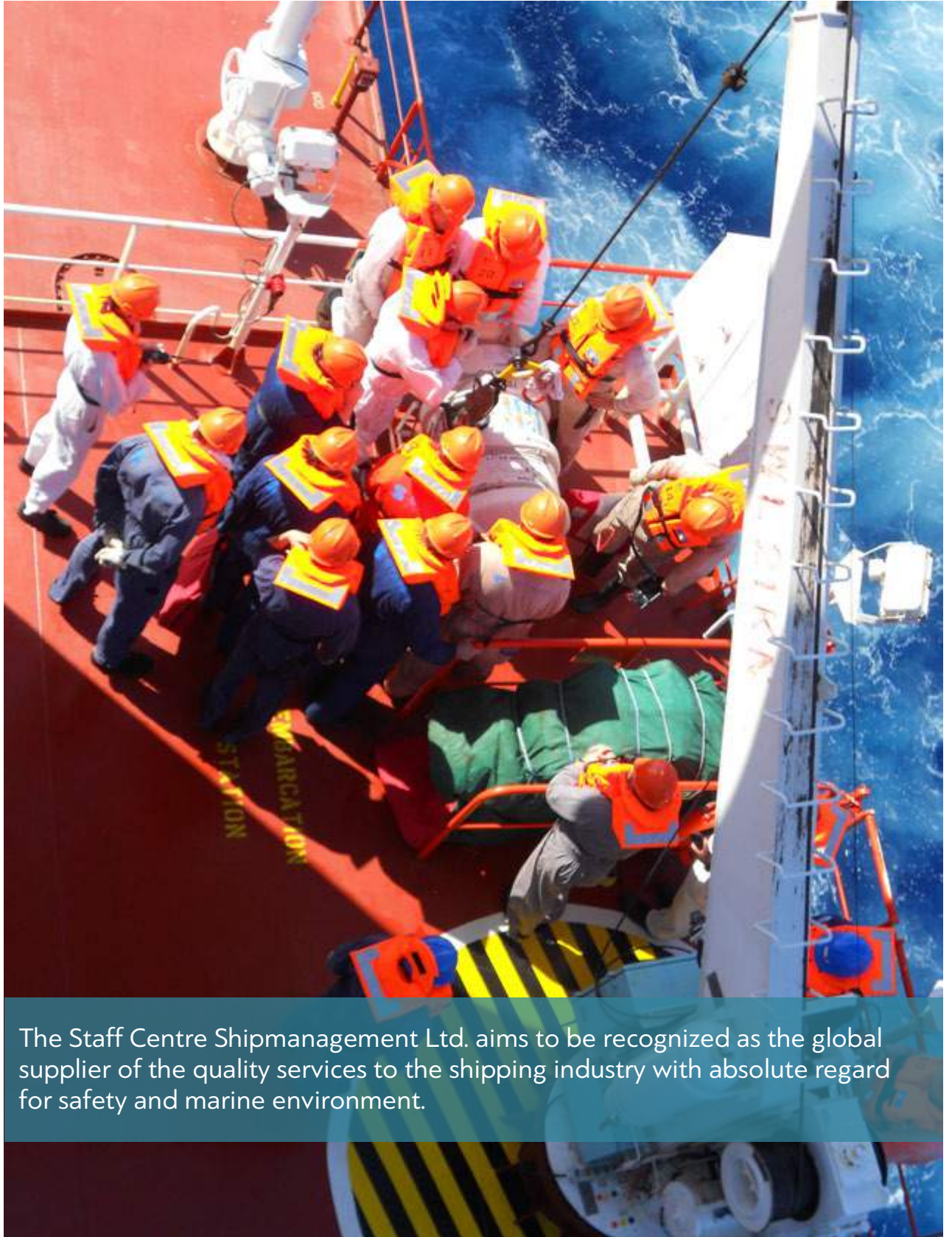
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# STAFF CENTRE SHIPMANAGEMENT LTD.



The Staff Centre Shipmanagement Ltd. aims to be recognized as the global supplier of the quality services to the shipping industry with absolute regard for safety and marine environment.

# Corporate Introduction

## Staff Centre Shipmanagement Ltd.

provides ships with technical, safety, security and operational shore-based management.

The Company offers the extensive spectrum of ship management and marine consultancy according to the highest international standards, designed to relieve the Shipowners of the routine workload related to operation of their vessels.

We are fully IACS ISM certified Company, which allows us to provide our services in full compliance with the highest international management standards.

## Technical Management

undertakes a full technical maintenance of vessels in optimum operational efficiency and robust condition while ensuring full compliance with current and upcoming international and national rules and regulations as well as efficiently and effectively in accordance with Shipowners' and Charterers' requirements:

- Technical consulting and project management;
- Registration services;
- Dry Docking;
- Own Planned Maintenance System;
- Fleet condition monitoring;
- Fuel efficiency performance monitoring;
- Ship supply management.

## Safety Management

ensures that the fleet is well documented with all certificates, manuals and other documents, required for world-wide trade, and many other services, ensuring the compliance of each vessel with all regulatory requirements such as IMO, SOLAS, MARPOL, etc. - and all of that being as parts of the Company's overall Safety Management System:

- ISM and ISPS Codes;
- MLC 2006 Convention;
- Local/National/State regulations compliance;
- ISO 9001:2008;
- QHSE data analyze and monitoring;
- Rightship Performance Monitoring.

## Vessel Accounting Management

aims to provide Shipowners with timely and accurate reports of relevant financial statements 24/7/365:

- Daily updates;
- Functionality to review every invoice;
- Clarification of each item of expenses;
- Deviation tables overview;
- Transparent and accountable.

**UKMAR**  
Shipmanagement  
Provides services  
for 37 vessels of  
Handymax and  
Panamax sizes

Staff Centre  
Company  
was established to  
perform recruitment  
of Ukrainian  
seafarers for foreign  
Shipowners

Staff Centre  
Shipmanagement  
Ltd.  
was established as  
a head quarter of  
the group

Technical and  
Safety  
Management  
of 10 Supramax  
size vessels with  
High performance  
level under the  
Paris MoU



- Our OPEX usually **15%** lower than the average level observed by Moore Stephens Annual
- ShipVisor program developed by own IT department provides an organized approach to recording and reviewing shipboard equipment, inventory, and maintenance related data.
- A multi-disciplinary team of professionals, with decades of seagoing experience in the positions of Chief Engineers certified by the Lloyds Maritime Academy in the field of:
  - Superintendency and Dry Docking.

- High Performance Company under the Paris MoU
- Half of our fleet with **4 stars** under Rightship Performance Monitoring
- A multi-disciplinary team of professionals, with decades of seagoing experience in the positions of Masters certified by the Lloyds Maritime Academy in the field of:
  - Incident Investigation.
- Confirmation from the Consulting Company that our Company "is capable of managing bulk carriers trading internationally safely and efficiently to a high standard."

- Transparent accounting system without hidden payments
- Clear and clean audit tracing
- Direct access to Shipowners **24/7/365**



# Corporate Introduction

## Crew Management

employment of competent crew is one of the most important factors in order to provide the safety of life at sea, the protection of maritime environment and avoidance of damage or loss of the ship and her cargo.

Our policy is to obtain the best possible standards of crew through selection, assessment and training in close cooperation with our Principals.

- Recruiting;
- Coordination of crewing needs for vessel;
- STCW endorsements;
- Protection and Indemnity services;
- Payroll services;
- Travel coordination.

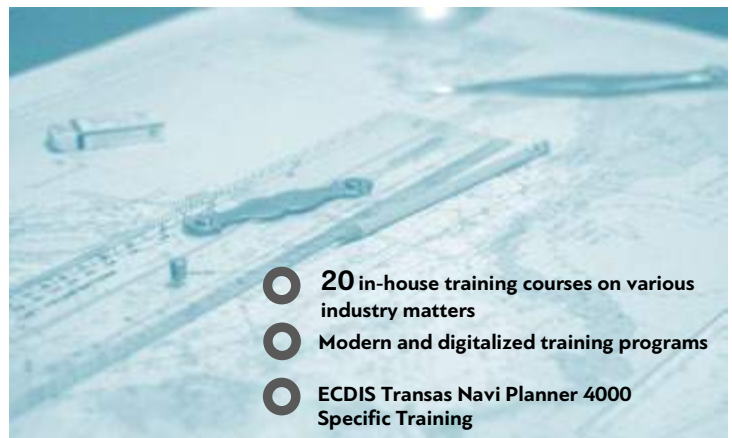


○ A centralized system of seafarers' information monitoring for compliance with Flag and national requirements

○ Over 87% retention rate

## Training Centre

provides professional development for the Company employed seafarers. Various training programs, useful information about safety, technical, commercial, legislation, and human resources issues help our seafarers to achieve and maintain the highest quality of service in ship operations in compliance with the International Conventions STCW, SOLAS, ISM code, ISPS, IMO recommendations, National requirements and requirements of Shipowners.

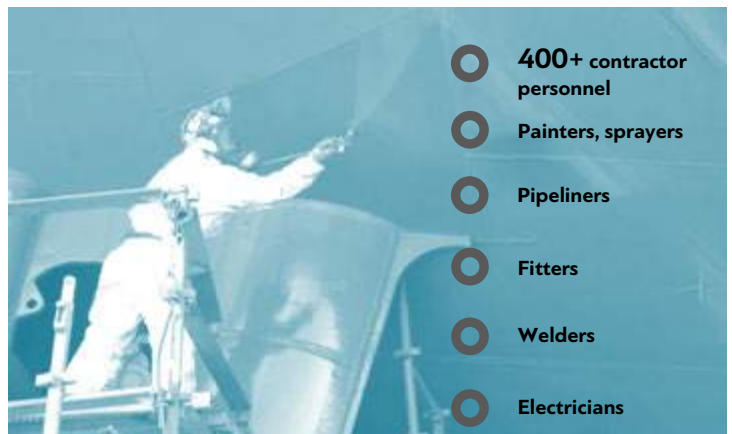


- 20 in-house training courses on various industry matters
- Modern and digitalized training programs
- ECDIS Transas Navi Planner 4000 Specific Training

## Riding Squads

Chesva Enterprises. Ltd. provides our clients with riding squads for the ship repair and shipbuilding industry around the world. Companies related to our Group use these squads for the purpose of repairs during operation, dry-docking and other cases by embarking the repair squads on board the vessels during the voyages.

Compact traveling squads are designated to mobile and major ship repair and can carry out all types of works on all types of vessels for our respected customers with wide range of jobs on board the vessels or any offshore marine units.



- 400+ contractor personnel
- Painters, sprayers
- Pipeliners
- Fitters
- Welders
- Electricians

# Top Management Team



**Korneliu Russu**  
Managing Director

Graduated from Odessa State Maritime Academy with Master's Degree in navigation in 1984. Started his career in Black Sea Shipping Company as navigational officer. In 1995 got diploma of Deep Sea Captain and till 2007 was working as Captain on the vessels of Staff Centre Shipmanagement Ltd.

Joined Staff Centre Shipmanagement Ltd. team in 2007 in position of DPA. From 2011 till now is working in position of Managing Director of Staff Centre Shipmanagement Ltd.

On May 2016 completed a professional development course and has been awarded a Diploma in Marine Accident Investigation issued by North West Kent College and Lloyd's Maritime Academy.

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**Andrey Litovenko**  
Technical Manager

Graduated from Odessa State Maritime Academy on 1993 with a degree - operation of ship power plants. Started his carrier in Black Sea Shipping Company in 4-th Engineer position. In 2002 received diploma of First Class Engineer and till 2005 was working in position of Chief Engineer on board of Staff Centre Shipmanagement Ltd. vessels.

Joined Staff Centre Shipmanagement Ltd. team on 2005 in position of Technical Superintendent.

On 2016 completed a professional development course at North Kent College of Lloyd's Maritime Academy and has been awarded a diploma in Ship Superintendency with distinction and commendation for outstanding achievement.

From December 2017 till now is working in the position of Technical Manager of Staff Centre Shipmanagement Ltd.

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**Yuiy Krylov**  
Crewing Manager

Graduated from Odessa Higher Engineering Marine School in 1981 and started his career in Black Sea Shipping Company as a navigational officer. In 1991 got Captain's diploma and had been working as a Shipmaster on the BLASCO bulk carriers until 1998. During 1998 – 1999 was working as Crewing Manager in UKMAR Ukraine and UKMAR Shipmanagement Ltd. In 2000 resumed his sea career and was working as a Master on the bulk carriers operated by Ocean Agencies Ltd. In 2003 joined Staff Centre as Crewing Manager.

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# Top Management Team

**Vasyl Vasylyev**

Marine Safety & Quality Superintendent / Designated Person /  
Company Security Officer

Graduated from Kaliningrad High Naval College with Master's Degree in Naval Navigational support & Sea Navigation in 1975. Completed naval carrier in 1998 and same year joined Merchant Fleet. Since 1998 was working as Shipmaster on Bulk Carriers operated by Ocean Agencies Ltd, London and under management of Staff Centre Shipmanagement Ltd. Joined Staff Centre Shipmanagement Ltd. in September 2011.

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**Stanislav Sergeychik**

Purchasing and Commercial Manager

Graduated from University of Westminster in London with degree in Economics for Business in 2004. Same year he was employed by Staff Centre Shipmanagement Ltd. as a Purchasing operator.

In the end of 2017 successfully completed KPIs courses of Lloyd's Maritime Academy and achieved Certificate in KPIs for Shipping.

Currently occupies position of Purchasing and Commercial Manager.

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**Tatyana Garnyk**

Financial Manager

Graduated from Odessa Marine Engineering Institute. Since 1993 till 1995 was working as economist in Black Sea Shipping Company. In 1995 continued her carrier as Financial Manager in Marnel, Ukmar. Since 2000 till 2005 worked in Chesva Enterprises Ltd. as Financial Manager. Joined Staff Centre Shipmanagement Ltd. in June 2005.

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# Fleet list

In the beginning of 2017 the Company Staff Centre Shipmanagement Ltd. had 10 ocean-going bulk carriers in management. More than half of managed fleet vessels are new-buildings built in 2010-2012.


Nº	Vessel's name	Built	Type	DWT	Flag	Class
1	ANARITA	2012	Bulk Carrier	58018	Liberia	BV
2	ARCADIA	2012	Bulk Carrier	58018	Liberia	BV
3	ARVIKA	2012	Bulk Carrier	55848	Liberia	NKK
4	ALMERIA	2011	Bulk Carrier	57002	Liberia	BV
5	AVIONA	2011	Bulk Carrier	56898	Liberia	BV
6	ARIZONA	2010	Bulk Carrier	56969	Liberia	BV
7	ARNICA	2010	Bulk Carrier	56106	Liberia	NKK
8	ARALIA	2003	Bulk Carrier	48104	Liberia	NKK
9	IRON KOVDOR	1998	Bulk Carrier	72474	Liberia	NKK
10	USOLIE	1990	Bulk Carrier	68789	Liberia	NKK






<b>Vessel:</b>	ANARITA
<b>Type:</b>	Bulk Carrier
<b>Built:</b>	2012, China
<b>IMO Nº:</b>	9636008
<b>DWT:</b>	58018
<b>GRT:</b>	32839
<b>Main Engine:</b>	Man B&W 6S50MC-MK7
<b>Flag:</b>	 Liberia
<b>Class:</b>	BV
<b>In management:</b>	Since 2012




<b>Vessel:</b>	ARCADIA
<b>Type:</b>	Bulk Carrier
<b>Built:</b>	2012, China
<b>IMO Nº:</b>	9635999
<b>DWT:</b>	58018
<b>GRT:</b>	32839
<b>Main Engine:</b>	Man B&W 6S50MC-C7
<b>Flag:</b>	 Liberia
<b>Class:</b>	BV
<b>In management:</b>	Since 2012




<b>Vessel:</b>	ARVIKA
<b>Type:</b>	Bulk Carrier
<b>Built:</b>	2012, Japan
<b>IMO Nº:</b>	9624043
<b>DWT:</b>	55848
<b>GRT:</b>	31538
<b>Main Engine:</b>	DU Wartsila 6RT-Flex50
<b>Flag:</b>	 Liberia
<b>Class:</b>	NKK
<b>In management:</b>	Since 2015




<b>Vessel:</b>	ALMERIA
<b>Type:</b>	Bulk Carrier
<b>Built:</b>	2011, China
<b>IMO Nº:</b>	9592721
<b>DWT:</b>	57002
<b>GRT:</b>	33044
<b>Main Engine:</b>	MAN B&W 6S50MC-C
<b>Flag:</b>	 Liberia
<b>Class:</b>	BV
<b>In management:</b>	Since 2011




<b>Vessel:</b>	AVIONA
<b>Type:</b>	Bulk Carrier
<b>Built:</b>	2011, China
<b>IMO Nº:</b>	9592745
<b>DWT:</b>	56898
<b>GRT:</b>	33044
<b>Main Engine:</b>	MAN B&W 6S50MC-C
<b>Flag:</b>	 Liberia
<b>Class:</b>	BV
<b>In management:</b>	Since 2011




<b>Vessel:</b>	ARIZONA
<b>Type:</b>	Bulk Carrier
<b>Built:</b>	2010, China
<b>IMO Nº:</b>	9592733
<b>DWT:</b>	56969
<b>GRT:</b>	33044
<b>Main Engine:</b>	MAN B&W 6S50MC-C
<b>Flag:</b>	 Liberia
<b>Class:</b>	BV
<b>In management:</b>	Since 2010






<b>Vessel:</b>	ARNICA
<b>Type:</b>	Bulk Carrier
<b>Built:</b>	2010, Japan
<b>IMO Nº:</b>	9514418
<b>DWT:</b>	56106
<b>GRT:</b>	31759
<b>Main Engine:</b>	MAN-B&W /6L50MC-C
<b>Flag:</b>	 Liberia
<b>Class:</b>	NKK
<b>In management:</b>	Since 2010




<b>Vessel:</b>	ARALIA
<b>Type:</b>	Bulk Carrier
<b>Built:</b>	2003, Japan
<b>IMO Nº:</b>	9263253
<b>DWT:</b>	48104
<b>GRT:</b>	26574
<b>Main Engine:</b>	MAN B&W 6S60MC-C
<b>Flag:</b>	 Liberia
<b>Class:</b>	NKK
<b>In management:</b>	Since 2017



<b>Vessel:</b>	IRON KOVDOR
<b>Type:</b>	Bulk Carrier
<b>Built:</b>	1998, Japan
<b>IMO Nº:</b>	9168465
<b>DWT:</b>	72474
<b>GRT:</b>	37818
<b>Main Engine:</b>	MAN-B&W 6S60MC
<b>Flag:</b>	 Liberia
<b>Class:</b>	NKK
<b>In management:</b>	Since 2011



<b>Vessel:</b>	USOLIE
<b>Type:</b>	Bulk Carrier
<b>Built:</b>	1990, Korea
<b>IMO Nº:</b>	8800315
<b>DWT:</b>	68789
<b>GRT:</b>	37519
<b>Main Engine:</b>	B&W 6S 60MC
<b>Flag:</b>	 Liberia
<b>Class:</b>	NKK
<b>In management:</b>	Since 2011



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## Company Highlights 2017

### Staff Centre Rebranding

Brand development can be a catalyst for innovation – an opportunity to develop our current processes. It can bring clarity and alignment to our stakeholders and spur employee motivation. In the end this tunes up our company's internal engine where the end result is customer satisfaction and increased profitability. In the middle of June 2017 the Top Management of Company made a decision to rebrand to logo breathing a new life into our business focusing on strategy, clearly understood process and creative vision.



**STAFF CENTRE**  
SHIPMANAGEMENT LTD.



**STAFF CENTRE**  
TRAINING



**STAFF CENTRE**  
CREWING COMPANY

#### Main Benefits of Rebranding

##### Re-invigorate our business image:

A fresh new brand identity can add energy to a business, both inside and out;

##### Connecting with a new audience:

Perhaps the biggest advantage to refreshing the look and feel of your brand is the ability to reach new potential customers;

##### Sending the right message to stakeholders:

Company rebranding makes a clear statement to stakeholders: "We're a growing, evolving, ambitious company who can move with the times";

##### Reflecting new goals, products, offers, or values:

We include more services and set new goals for ourselves, and therefore rebranding is a great way to show that our business is evolving;

##### Setting yourselves apart from our competitors:

Differentiating our brand shows potential clients that our services are unique - and that we're the experts;

##### Simplifying a complicated offer:

By rebranding not only our Company but also any sub-brands, we can simplify our offer and appear more professional;

##### Staying ahead of the curve:

Ensuring that our look is always ahead of the curve shows our customers that we pay attention, signaling that we're also savvy about trends within your industry;

##### Boosting our bottom line:

Together, all above benefits of rebranding will help make our Company more profitable.



## Team Building Approach

Team bonding brings people together by encouraging collaboration and teamwork. Fun activities that help people see each other in a different light allow them to connect in a different setting. People on your team are asked to think about the implications of these activities at their workplace. Eventually such an event as a team building was arranged on 1 July 2017 assembling all Staff Centre offices together. Through a series of planned team bonding events that are fun and motivational, our staff built skills like communication, planning, problem-solving and conflict resolution. Team bonding ideas that work help facilitate long term team building through fostering genuine connections, deeper discussions and processing.

Here is a list of the top reasons from team building that Company gets from team bondings programs:

- 1. Communication and working better together:**  
One of the best reasons for team building is that the activities actually work to accomplish improved communication;
- 2. Collaboration and the fostering of innovation and creativity:**  
Successful team building events not only bring people closer together but they also lead to more successful and creative workplace ideas;
- 3. Teamwork and boosting team performance:**  
After completing team building activities together, our employees better understand each other's strengths, weaknesses, and interests. This understanding helps them work even better together on future progress vital to a company;
- 4. Networking, socializing, and getting to know each other better:**  
Socializing and making friends in the workplace is one of the best ways to increase productivity in the office. Not only does it increase morale in the office, it also allows for the office to work better solving everyday workplace issues.



Teamwork is the ability to work together toward a common vision. It is the fuel that allows common people to attain uncommon results.





## Launching of Training Seminars

The biggest challenge is a poor quality of crew training, lack of experience and the crew not adhering to the principles of safety.

Extensive experience enables crew to predict, recognize and prevent hazardous situations. From our extensive experience we've learned that the most effective measures are those which involve us working closely with our seafarers.

Sharing best practice information and case studies in a concise and relevant way will interest and engage with today's seafarer. Staff Centre Shipmanagement jointly with Staff Centre Training is looking into a number of different ways to enhance the learning experience of seafarers, such as through crew seminars.

The expense of proper and effective training of crew and shore side personnel must be seen as a short-term loss to benefit the Company and crew over the long-term. There must be the understanding that both half of the business, on shore and at sea, are working towards a common goal.

### Why to invest in crew training:

1. Boost safety and minimize accidents;
2. Ensure critical thinking and problems solving;
3. Ensure effective communication and collaboration;
4. Expand creativity and innovation.



Training plays an integral part in ensuring business success, especially when it comes to shipping industry: training is not important – it's vital.



## ISO 9001:2015 Standard Certification

ISO 9001 – Quality Management System, the world's most popular management system standard, is used by over one million organizations around the world, helping them run more efficiently and profitably. It provides a clear framework for consistent performance, reliable service and long-term continuous improvement.

In 2015 the standard was revised reflecting the needs of modern day businesses.

### Continuous Improvement

The standard ensures that quality management is completely integrated and aligned with the business strategies of our organization, embedding performance improvement processes over time.

### Leadership

Top management is responsible for the system's effectiveness and make sure the whole organization understands how they contribute to the Quality Management System (QMS).

### Risk and Opportunity Management

The use of risk and opportunity management into our management system reinforces its use as a governance tool. This makes it quicker and easier to implement multiple management systems, saving both time and money.

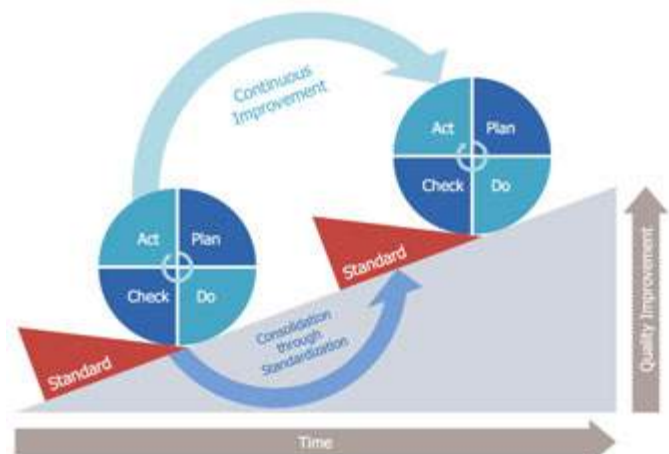
### The Integrated Approach

Known as the high level structure, ISO has introduced a common structure and core text for all its management system standards. Using risk-based thinking throughout, it promotes a proactive approach to identifying risks and taking opportunities making continual improvement systematic.

### E-SCMS Review

E-SCMS Procedures were completely reviewed providing a full compliance with new requirements under ISO 9001:2015 Standard. As a result the external verification under BV Class supervision was performed in February 2018 with successful results.

- **Top Management commitment and engagement**
- **Keeping staff well informed**
- **The organization works as a team**
- **Review system, policies, procedures and processes**
- **Close relationship with customers**
- **Internal Audits**





## Digitalization of Business Processes

Digitalization and advanced data analytics became the top priorities for all industries, including shipping. Considering these challenges, our Company is increasingly building the strategies around digitalization opportunities. We are encouraging operation, fleet management and departments to innovate and explore opportunities for driving cost efficiencies and new revenue streams through gradual digitalization.

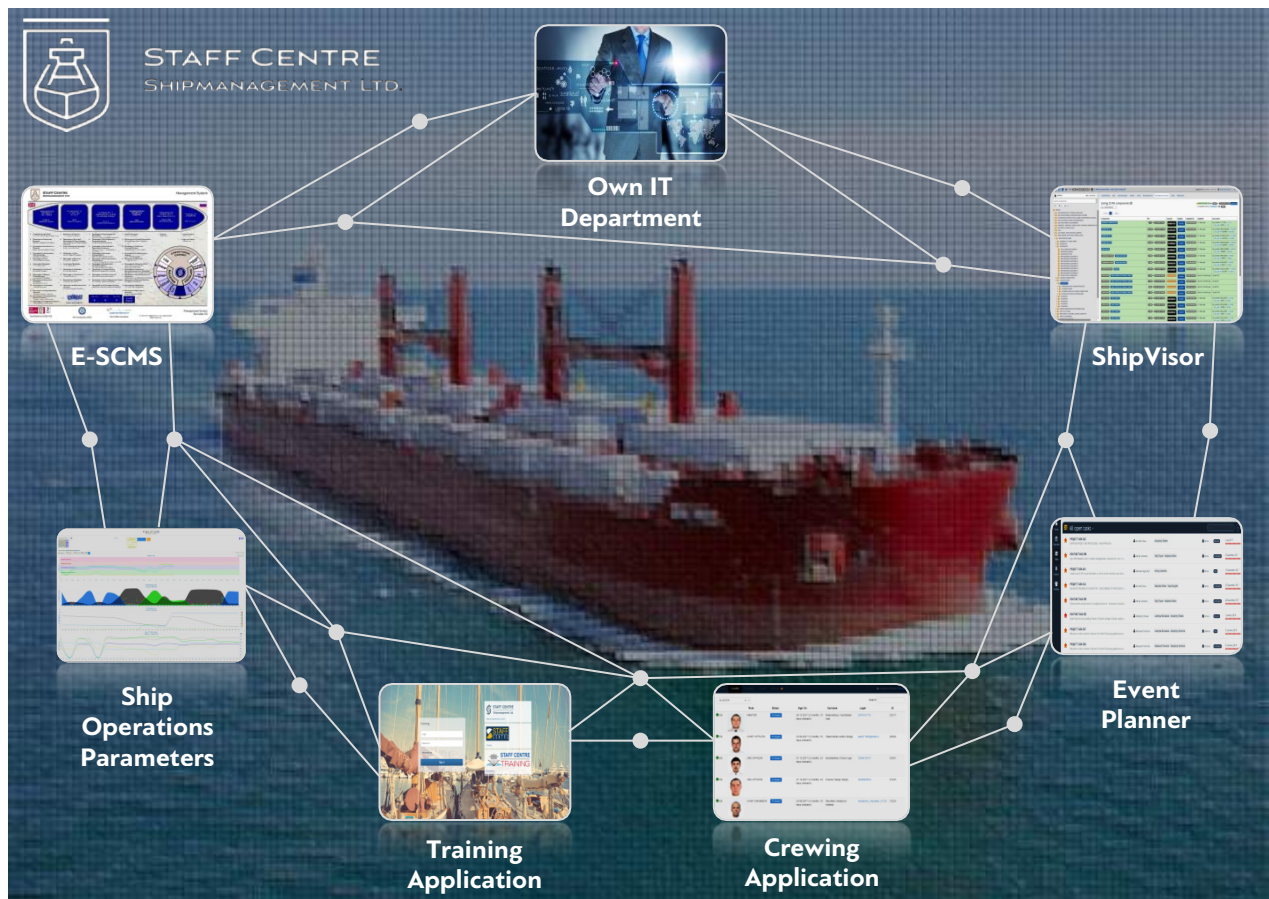
Our clients have identified several measures leading to cost reductions in way of improvements of all fleet management activities, such as voyage execution (fuel/oil consumption), as well as engine, system and hull performance, in addition to the commercial side of the business.

This is a fact that the shipping industry has always pushed towards increasing efficiency and bringing down the cost of transport. Subsequently digitalization and the smart use of data are now fuelling these trends. Increased safety, better environmental performance and compliance as well as seafarers' convenience are driven by the same technological advances.

Summarizing all above, digitalization is a new opportunity for the shipping industry to further increase overall efficiency, reduce OPEX and improve safety. From other side it's a perfect chance to improve a Company's differentiation vs. competitors and possibly even identifying new, data driven business opportunities.

At the same time the digital transformation is challenging the traditional business models employed in the shipping industry, and will introduce new forms of interaction between stakeholders. Being one step ahead to embrace the transition will gain a unique competitive advantage as our Company gains better control of our operations and keep costs down in an increasingly demanding industry.

With aim to succeed in personal digital transformation, Staff Centre Shipmanagement takes a strategic approach, redefine priorities and develop a clear plan of step-by-steps actions resulting in developing unique products by own IT Department facilitating fleet management in different ways.







## Implementation of BIMCO KPI Methodology

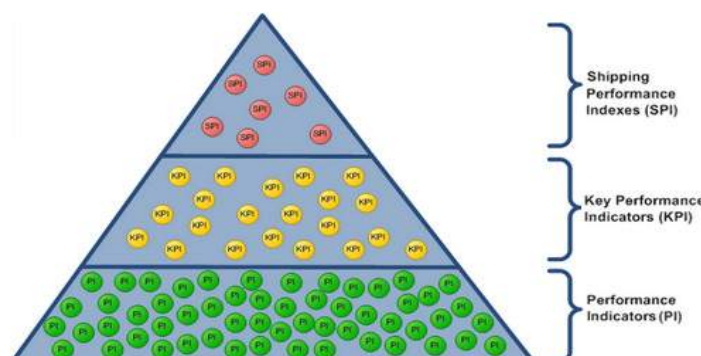
During the Management Review meeting the Top Management decided to use a list of KPI's (Key Performance Indicators) based on BIMCO methodology to monitor and (if necessary) adjust Company's activities.

The BIMCO Shipping KPI System will be the preferred and trusted tool of all ship owners, operators and managers allowing them to benchmark and monitor their company, fleet and ship performance. The system will add value to the users' businesses by highlighting opportunities to drive sustainable improvements.

The Shipping KPI System is a global shipping industry tool for defining, measuring and reporting information on operational performance. The Shipping KPI Standard is built up hierarchical with 8 Shipping Performance Indexes (SPIs), 33 Key Performance Indicators and 64 Performance Indicators (PIs).

There is a mathematical relation between SPIs (high level indexes) which are calculated from Key Performance Indicators, and KPIs which are calculated from Performance Indicators (lowest level).

The Key Performance Indicators (KPIs) are expressions of performance within a specific area. The KPIs ratings will form basis for the Shipping Performance Index (SPI) score. The KPIs can be expressed in two ways; a KPI Value which is a mathematical combination of relevant Performance Indicators Values and a KPI Rating which is an expression of the KPI Value on scale between 0 and 100 where a high rating (100) is a result of high/excellent performance. Some PI Values can be included in the calculation of more than one KPI Value.



The Performance Indicators are the only elements that must be reported manually or by means of implemented ICT solutions. Focus has been to provide the hierarchy with unambiguous definitions of measurable low level parameters based on existing measurements in the industry. Each PI may be used in the calculation of several Key Performance Indicators (KPIs).

In general the KPI standard is ship oriented. Performance Indicators (PIs) are captured and reported by ships.

Nº	KPI	Description
1.	KPI028	Releases of substances
2.	KPI001	Ballast water management violation
3.	KPI007	Contained spills
4.	KPI011	Environmental Deficiencies
5.	KPI014	Port State Control Performance
6.	KPI015	Health and Safety Deficiencies
7.	KPI019	Navigational deficiencies
8.	KPI020	Navigational incidents
9.	KPI002	Budget Performance
10.	KPI010	Dry-docking Planning Performance
11.	KPI004	Cargo Related Incidents
12.	KPI024	Operational deficiencies
13.	KPI027	Port State Control Detention
14.	KPI032	Ship Availability
15.	KPI029	Security Deficiencies
16.	KPI006	Condition of class
17.	KPI012	Failure of critical equipment and systems
18.	KPI013	Fire and explosions
19.	KPI026	Port State Control deficiency ratio

Data should be presented in a format that enables monitoring of key performance indicators on vessel/fleet level, whether this is technical, operational, environmental, safety, crew welfare or commercial.

At the initial stage of process and taking into account available information Staff Centre Shipmanagement made decision to use 19 Key Performance Indicators for measuring, monitoring, analysis Company performance on annual basis and if necessary adjust its activities. Further chapters of this report will define clear measurable requirements of each KPI and ways of achievement.



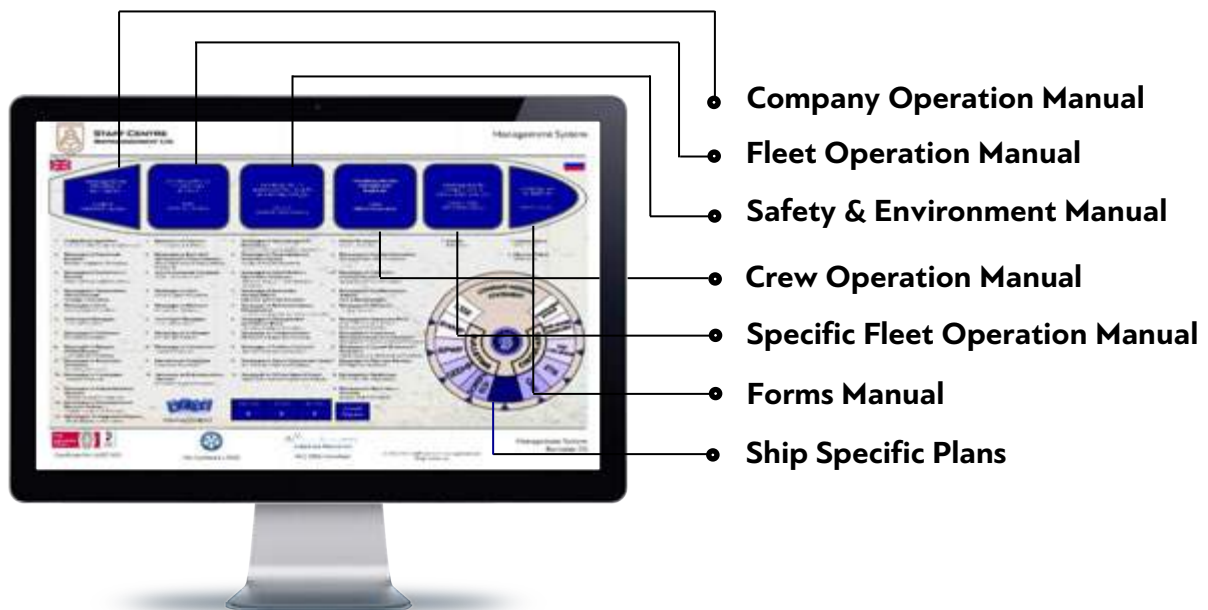


## E-SCMS: Electronic Staff Centre Shipmanagement System

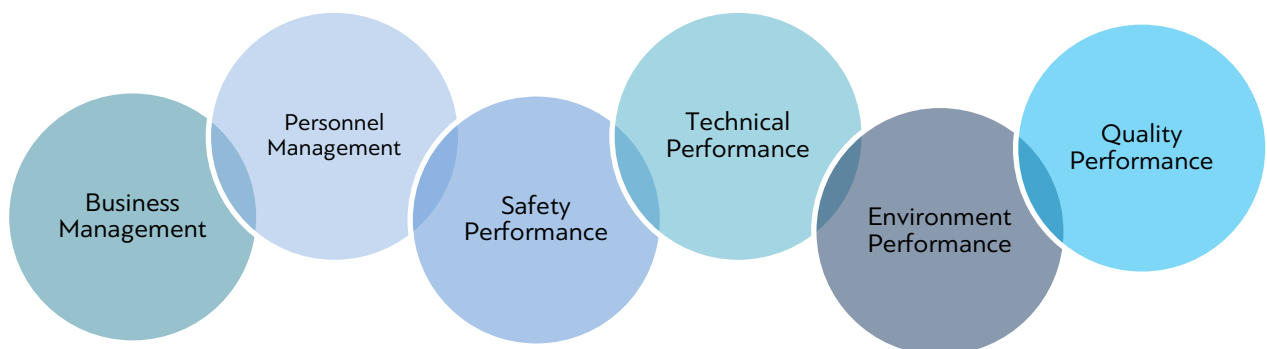
The E-SCMS incorporates business, personnel and technical management and the execution of all activities deemed as vital in obtaining safety, environmental and quality performance in service and customer satisfaction.

The system is written in compliance with ISM Code, ISPS Code, MLC Convention and ISO 9001:2015 Standard.

E-SCMS applies to all critical activities executed by the Company ashore and onboard. Activities performed on behalf of the Company by contractors and suppliers are monitored accordingly. The Company ensures that contractors and suppliers maintain a similar level of safety, environmental and quality performance.



**E-SCMS main page**



**Scope of E-SCMS**

For additional information about E-SCMS please watch the video or download E-SCMS presentation in MS PowerPoint 2011 format from our official website: <https://www.staff-centre.com/management#scms>



## Annual Performance Report 2017 Highlights

Staff Centre Shipmanagement Ltd. provides a strong focus on health, safety, environment and competence and shall always be prioritized during operation.

The main risk from our activities and services is the possibility of incident occurring during operations and possible impact on the safety of our seafarers, environment and any resulting economic consequences for Shipowners, local community and reputation of our Company. In this connection, Management of Company employs advanced risk management procedures and aims to implement a strong safety culture.

The chapters of Staff Centre Shipmanagement Annual Performance Report 2017 cover relevant topics and describe our performance in aspects that have been determined as appropriate to us as the ship management company.

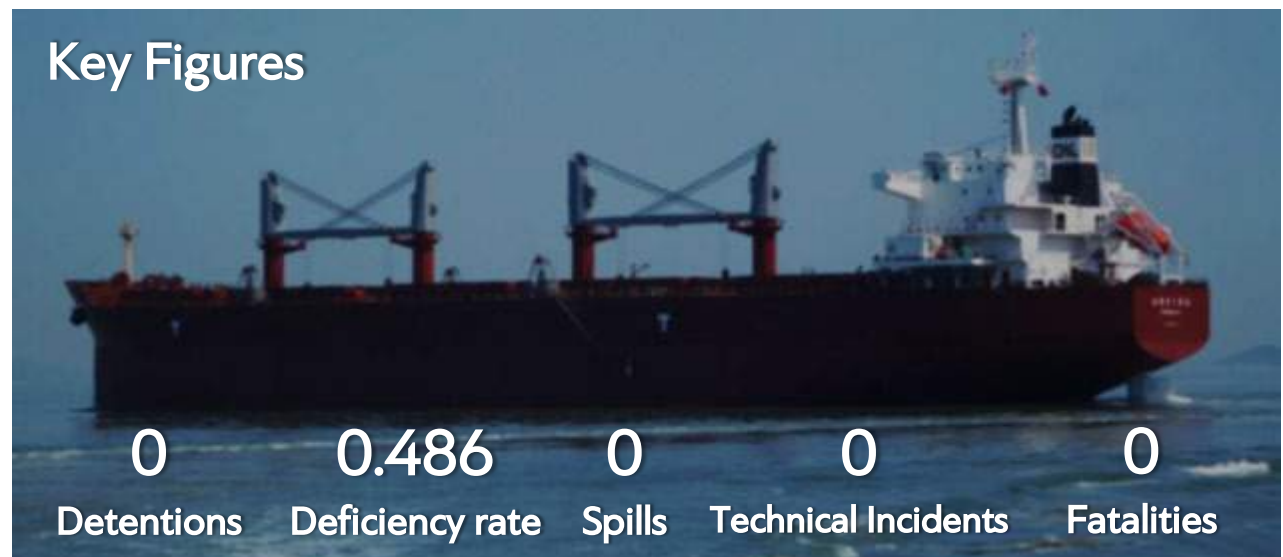
We have grouped the issues identified into three key subject areas which are addressed in this report:



This report covers activities in the calendar year 2017 and addresses areas we believe are of material importance to the Staff Centre Group and our stakeholders. We made every effort to ensure that all gathered and presented data contained in this report is as accurate and reliable as possible for further presentation to our stakeholders.

We are committed to deliver safe and sustainable solutions to the maritime industry meeting the highest expectations of our Shipowners. We continuously work to improve our environmental footprint, our efforts on compliance, to increase our employees' safety and contribute to the communities in which we operate.

### Key Figures





## Technical Performance Overview

Ensuring the technical availability of the fleet in management and balancing maintenance costs is a key competence of Staff Centre Shipmanagement which is achieved by a synergistic effect from combination of skills and practical experience of both sides – Chief Engineers onboard and responsible Technical Superintendents in the office.

During 2017 no technical incidents were registered on the SCM fleet resulting in severe hull damage, loss of propulsion or technical unseaworthiness. In its turn in the course of year 2017 there were 38 cases associated with main equipment malfunction and damage:

Cases of Equipment Malfunction by Categories				Reason of Malfunction	
Hull Structure	2	Auxiliary Machinery	6	Poor quality of parts	1
Main Engine	5	Electric/Automatic Equipment	2	Natural wear and tear	17
Propulsion Unit	1	Cargo Gear Equipment	6	Failure to follow E-SCMS	11
Steering Gear	1	Deck and Mooring Equipment	2	Using substandard fuel	1
Auxiliary Engines	4	Radio-navigational Equipment	5	Latent defect	7
Auxiliary Boiler	3	Life-saving Equipment	1	Lack of training	1

### Our Technical Management Progress

- Third-party PMS product
- Manual ship's operation data analyze
- Time Based Maintenance approach
- Standard methods of ship performance improvement
- Shipboard weather routing analyze by pilot charts

- Own developed Planned Maintenance System – ShipVisor
- Computer-based ship's operation data analyze
- Implementation of Condition Based Maintenance principles
- Dry-Docking planning optimization
- Computer-based weather routing analyze and optimization
- Propulsion modernization
- ME Cylinder lubricator upgrade
- Electronic diagnosing performance of ME







## ShipVisor – Planned Maintenance System

ShipVisor – is the technical management system for planned and unplanned maintenance, technical assessment and data management, as well as defect reporting which was implemented on all SCM vessels during 2017.

The newly developed software has modular architecture and can be introduced in ‘simple to implement’ modules, with optional added value functionality to meet the needs of individual vessel with its inherent equipment.

The PMS's interface provides a simple traffic light system to highlight any equipment that requires attention and indicates dates when tasks are due.

### ShipVisor provides:

- a single platform for engineers onboard and Superintendents ashore;
- the centralized management of specific vessel equipment and maintenance jobs;
- a defined and scheduled based calendar for jobs;
- categorized jobs such as routine, safety, critical and class related;
- a record of running hours of each equipment;
- a possibility of attaching digital forms, manufactures instructions and etc.;
- check stock and create requisitions for spare parts directly (future option);
- an automatic exchange of information between ship and shore and vice versa.

The screenshot displays the ShipVisor software interface for vessel ARNICA (IMO: 9514418). The main window shows a 'Listing 25 RH components' table. The table has columns: Component, RH, Counter, Update, Assigned to, Updated, and Last action. The components listed include Emergency Generator Set, Generator Set 1, Generator Set 2, Generator Set 3, Main Engine, Compressor System, Compressor System 2, Compressor System 3, Compressor System 4, Compressor System 5, Compressor System 6, Compressor System 7, Compressor System 8, Compressor System 9, Compressor System 10, Compressor System 11, Compressor System 12, Compressor System 13, Compressor System 14, Compressor System 15, Compressor System 16, Compressor System 17, Compressor System 18, Compressor System 19, Compressor System 20, Compressor System 21, Compressor System 22, Compressor System 23, Compressor System 24, and Compressor System 25. The table also shows the running hours (RH) and counter for each component, and the last update date and time.

For more details please visit the relevant page on our website:

<https://www.staff-centre.com/management#shipvisor>



## Wärtsilä EnergoProFin Installation

The Wärtsilä EnergoProFin is an energy saving device in form of a propeller cap with hydrofoil section fins, on the post-swirl side of the propeller. It can be easily mounted on fixed pitch propellers (FPP) and controllable pitch propellers (CPP) and it rotates with the propeller.

The EnergoProFin is designed to minimize the losses in the rotating flow leaving the propeller, by transforming rotational energy into effective thrust, resulting in an efficiency increase that brings up to 5% fuel savings. Depending on the hull and propeller interactions, the payback time for the investment is less than a year.

### Key benefits:

- Brings fuel savings up to 5 %;
- Reduces propeller hub vortex;
- Reduces emission levels;
- Reduces vibrations & pressure pulses;
- Reduces cavitation;
- Easy to install, underwater installation also possible;
- Return on investments less than one year even at low fuel prices.



Taken into account economical aspects, Shipowners became interested in EPF installation on board of the m/v ARVIKA and subsequently the EPF fitting was performed during her dry-docking period on 3 July 2017. After the dry docking a ship engine staff took a performance of main engine at sea in good weather condition. This performance was compared with analogue performance with more/less similar parameters: draft of vessel, main engine load, speed, etc.

**0.85** mts/day of HFO  
reduction after installation of EPF

In the extremely competitive world of shipping, every drop of fuel matters.



## ME Cylinder Lubricators Upgrade

HJ mechanical lubricators are Hans Jensen Lubricators' conventional lubricators, which can be combined with both non-return valves and SIP valves. The mechanical lubricators are characterized by being sturdy and reliable, and are therefore the obvious choice for Shipowners who are pro-mechanics.

The basic purpose of the HJ Mechanical Cylinder Lubricators is to supply cylinder lube oil to the cylinders in order to reduce wear and corrosion of the pistons and cylinders. Without cylinder lubrication, the cylinder liners and piston rings will wear out quickly and the operation conditions of the engine will therefore deteriorate rapidly.

The original design concept of the HJ Mechanical Cylinder Lubricators has proved to be stable and reliable and therefore the principle still applies today. The design, however, has been continuously improved to meet the customers' increasing demands. The design concept is based on a pump principle where a cam shaft activates a number of piston pumps synchronously with the engine revolutions. Each piston pump thereby supplies fresh cylinder lube oil to each valve at each engine revolution.

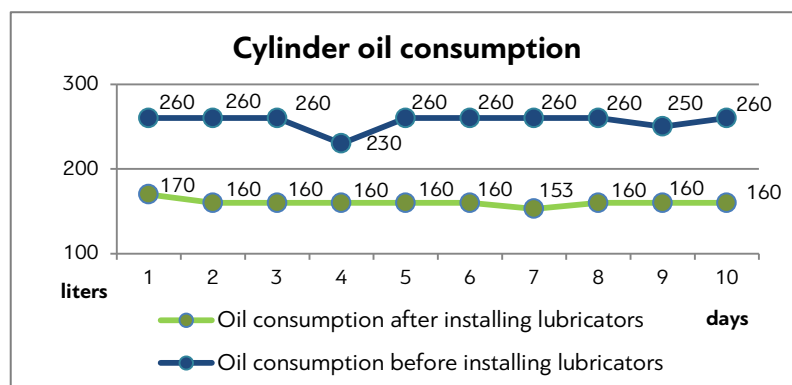
Our Company received an offer from the Company Hans Jensen Lubricator for upgrading of cylinder oil lubricating system of main engine MAN 6S50MC-C.

HJ Mechtronic is an electronically controlled and mechanically driven lubrication system designed to improve lubrication performance i.e. optimize cylinder liner and piston ring condition and at the same time reduce the cylinder oil consumption.

Extensive customer feedback from a vast number of installations proves very good operational experiences in terms of savings and cylinder liner condition. The payback period is normally less than 2 years.

Taken into account the economic aspects Shipowners took a decision to arrange lubricator upgrading on board of the m/v AVIONA.

Daily consumption of cylinder oil was 250-260 liters/day depending on main engine load before upgrading of lubricator. General reason of upgrading was to reduce cylinder oil consumption for main engine with guaranteed avoidance of wear down increasing for cylinder unit component.



**100 liters**

daily economy





## Bunker Alerts Tracking

Every single day vessels experience operational difficulties of different sorts. It may appertain to minor irregularities like a clogged filters or more severe cases like massive filter clogging, centrifuge sludging, fuel pump sticking, scuffing, combustion problems etc.

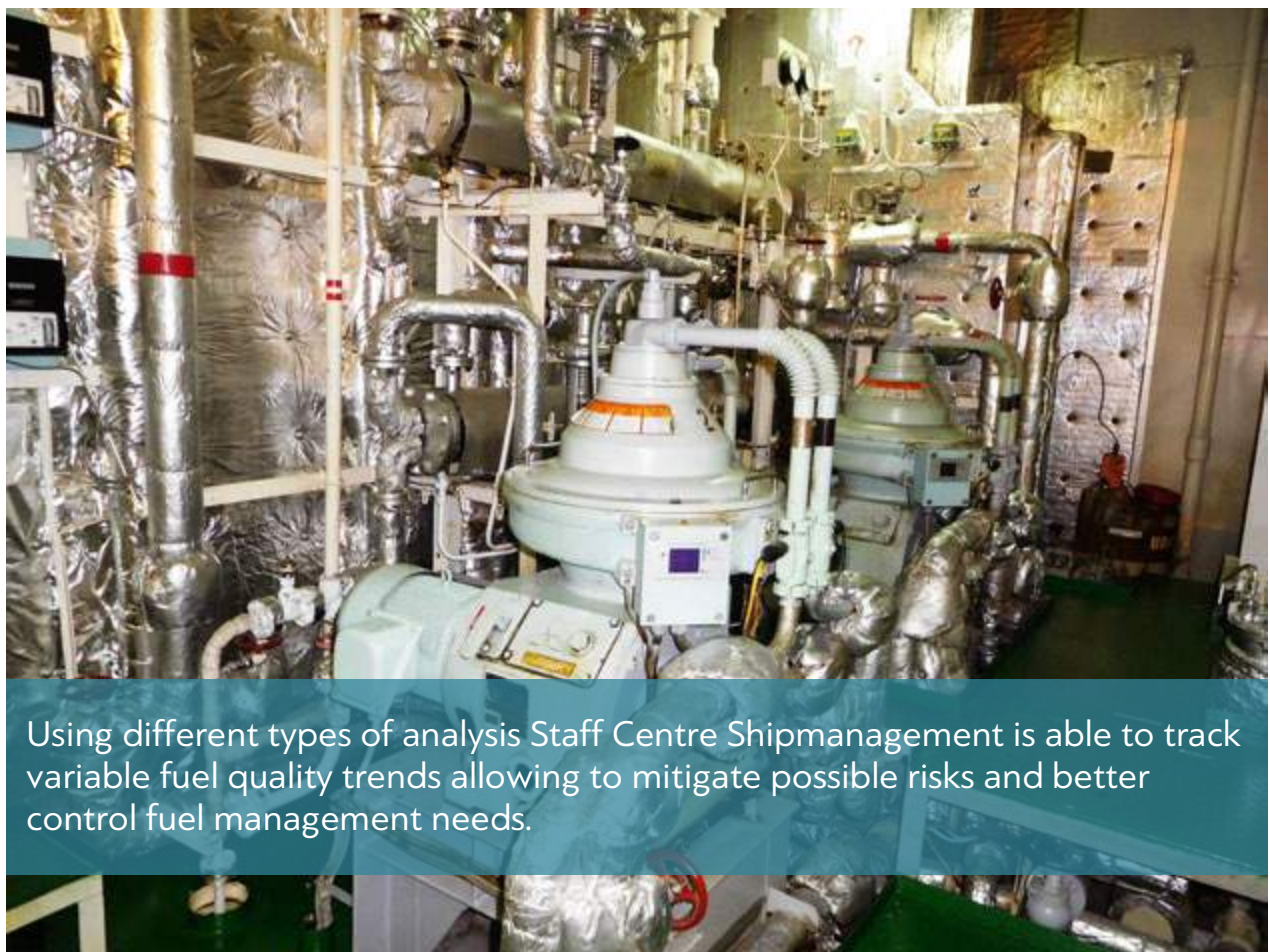
Even ships with good household and maintenance practices may experience problems if the fuel in use contains contaminants; is unstable; has poor cold flow properties; has poor ignition combustion properties; or has not been treated efficiently onboard.

Associated costs for such cases may be significant, not only due to the spare parts costs, but also corresponding off-hire. Additionally, the risks and consequences of losing power in areas with dense traffic must be considered.

A designated company Veritas Petroleum Services (VPS) delivers testing, inspection and advisory solutions that help shipping companies achieve improvements to fuel management, fuel cost, operational efficiency and compliance with marine fuel regulatory requirements.

As a part of their activities VPS constantly monitors global fuel quality and fuel oil trends in numerous ports and in this connection issue VPS Bunker Alerts on potentially problematic fuels in certain areas. The Bunker Alerts do not necessarily reflect the overall fuel quality supplied in the alerted ports but are intended to increase awareness, especially if the bunkering is expected in the subject port.

Staff Centre Shipmanagement has received an access to the constantly updated database of bunker alerts and uses them as precautionary measures before each bunkering to mitigate possible consequences of substandard fuel.







## Condition Based Maintenance Principles – New Diagnostic Equipment

Condition-Based Maintenance (CBM) is a maintenance philosophic approach used by the industry to actively manage the health condition of assets in order to perform maintenance only when it is needed and at the most convenient times. CBM can reduce operating costs and increase the safety of assets requiring maintenance. The associated corrective/reactive maintenance can have severe performance costs, and preventive/ scheduled maintenance replaces parts before the end of their useful life. CBM optimizes the tradeoff between maintenance costs and performance costs by increasing availability and reliability while eliminating unnecessary maintenance activities. The shipping product market provides a wide range of instruments for analyzing the critical environmental conditions that have an impact on bearing and machine performance and our Company as the adherent of proactive approach has supplied the SCM fleet with the following diagnostic equipment:

**The electronic Pressure Measuring Instrument (PMI System)** is designed to measure dynamic cylinder pressures of large two- and four-stroke Diesel and gas engines. The high accuracy data collected by the DPI is essential for optimizing engines' performance and reducing emissions. Following values can be monitored by using the DPI:

- Power/MIP calculation;
- P-Max;
- PV-plot;
- P-comp;
- DP (Derivative plot);
- RPM.

The DPI is the most straightforward solution to reach optimum performance of your engine.



**The SKF Machine Condition Advisor (CMAS 100-SL)** provides an overall "velocity" vibration reading that measures vibration signals from the machine and automatically compares them to pre-programmed International Organization for Standardization (ISO) guidelines. An "Alert" or "Danger" alarm displays when measurements exceed those guidelines. Simultaneously an "enveloped acceleration" measurement is taken and compared to established bearing vibration guidelines to verify conformity or indicate potential bearing damage. The SKF Machine Condition Advisor also measures temperature using an infrared sensor to indicate uncharacteristic heat. When performing measurements, the SKF Machine Condition Advisor's acceleration sensor input signal is processed to produce two different measurements for each point on the machinery – overall velocity and enveloped acceleration. At the same time, the SKF Machine Condition Advisor's non-contact infrared sensor measures the surface temperature of the measurement location and simultaneously displays all three measurement values.



Since the dawn of the industrial age, temperature has been used to provide an indication of machine's condition. It's well known that abnormal temperatures often indicate a potential problem. To obtain a quantifiable indication of temperature, direct contact thermometers are often used; a safer method than using the back of your hand, but with some similar safety concerns. Infrared thermometers are often used for hazardous and difficult to access applications.

**The thermal camera** is a proactive way to help you detect problems before they occur and improving safety. They allow you to be able to visualize possible problems by presenting a picture of the heat distribution of an asset. The thermal image, presented on a LCD screen, shows you where the temperature is either too hot or too cold allowing you to detect potential problems fast. For the current moment only one SCM vessel is equipped with such device.





## Dry-Docking Optimization

Dry docking is the most vital activity in ship maintenance to ensure that the vessel remains sea worthy at all times and continues to bring profit to Shipowners. Therefore dry docking is the huge pillar in ship manager's maintenance budget.

Adhering to the best management practices Staff Centre Shipmanagement has in its staff a special and dedicated team of superintendents taking care of all dry docks across the fleet ensuring the following benefits:

### Advanced Preparation

- Advanced preparation for dry-docking at least before **6 months**;
- Such approach allows to reduce unplanned works for about **15 percent**;

### Permanent Ship Condition Control

- **Routine visits** to the fleet by the Technical Superintendents;
- **Periodical reports** from vessels about hull and structure conditions;

### Established Network of Shipyards

- **Smooth negotiations** with shipyard management;
- **Improved quotations** (cost and time) based on the **unified** ship repair specification;

### Resource Allocation and Training

- Ship's staff spend less time for docking preparation;
- The designated team has awarded with **Lloyd's Certificate in Dry-Docking Planning**;

### Transparency to Clients

- Technical, financial, time progress updates;
- **Comprehensive** dry-docking report upon completion;

### Continuous Improvement

- **Expanding** available database of shipyards;
- Implementation of **Project Management**.





## Technical Management Targets 2018

Nº	KPI	Title	Section	KPI <sub>min req</sub> 0%	KPI <sub>target</sub> 100%	Actions
1.	KPI028	Releases of Substances	Environment	1	0	1. Ensure compliance with MARPOL and local rules requirements; 2. Adhering to Shipvisor maintenance intervals; 3. Crew awareness and involvement; 4. Regular training sessions and drills;
2.	KPI001	Ballast water management violation	Environment	1	0	1. Ensure compliance with MARPOL and local rules requirements; 2. Information update in respect of any changes/trends/risk alerts; 3. Crew awareness and involvement; 4. Regular training sessions and drills;
3.	KPI007	Contained Spills	Environment	1	0	1. Ensure compliance with MARPOL and local rules requirements; 2. Information update in respect of any changes/trends/risk alerts; 3. Crew awareness and involvement; 4. Regular training sessions and drills;
4.	KPI011	Environmental Deficiencies	Environment	3	0	1. Ensure compliance with MARPOL and local rules requirements; 2. Adhering to Shipvisor maintenance intervals; 3. Crew awareness and involvement; 4. Regular training sessions and drills;
5.	KPI002	Budget Performance	Operational Performance	5	2	1. Enhanced and precise budget planning from both departments;
6.	KPI010	Dry-docking Planning Performance	Operational Performance	25	5	1. Enhanced and precise budget/period of repair planning;
7.	KPI032	Ship Availability	Operational Performance	97	100	1. Enhanced and precise planning of ship operation;





Nº	KPI	Title	Section	KPI <sub>min req</sub> 0%	KPI <sub>target</sub> 100%	Actions
8.	KPI006	Condition of class	Technical Performance	1	0	1. Maintenance of vessel in accordance with applicable requirements of RO; 2. Adhering to Shipvisor maintenance intervals; 3. Implementation of industry best practices;
9.	KPI012	Failure of critical equipment and systems	Technical Performance	2	0	1. Maintenance of vessel in accordance with all applicable rules and requirements; 2. Adhering to Shipvisor maintenance intervals; 3. Implementation of industry best practices; 4. Unscheduled inspections of critical equipment.

Notes:

KPI<sub>Target</sub> is the KPI<sub>Value</sub> which give KPI<sub>Rating</sub>=100

KPI<sub>Min Req</sub> is the KPI<sub>Value</sub> which give KPI<sub>Rating</sub>=0

Our highly experienced staff utilizes efficient operating systems based on the latest technologies and resources to meet the highest expectations of Shipowners in technical management.





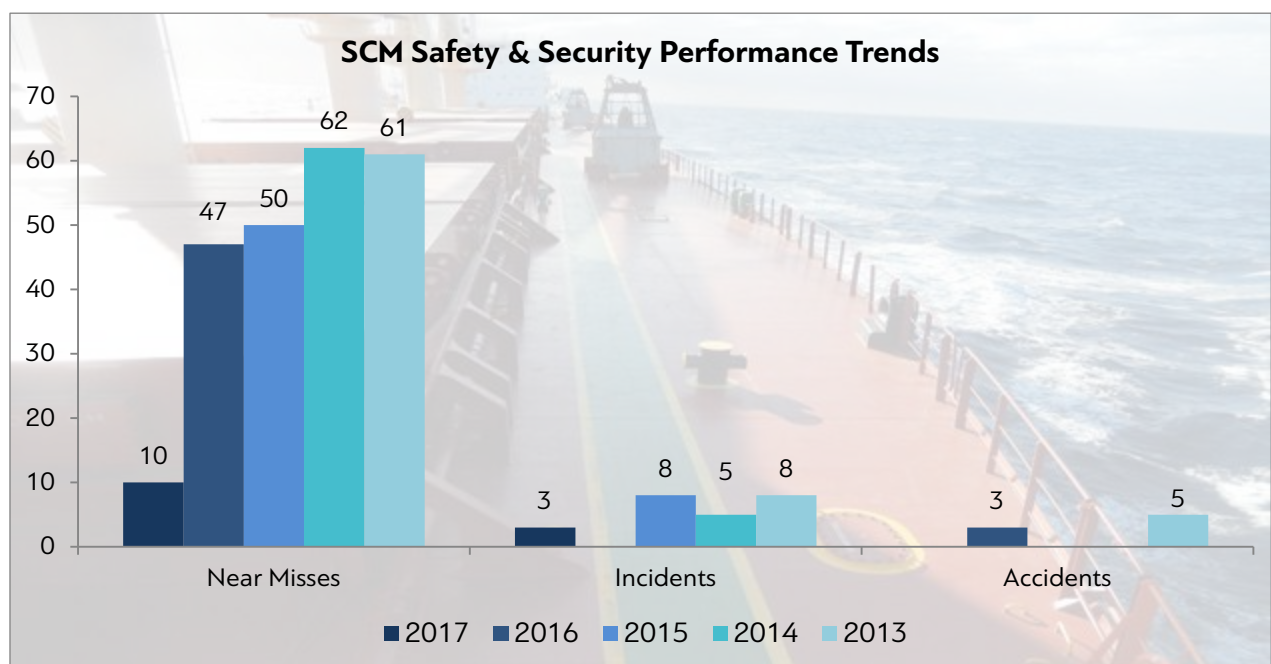


## Risk Management Preview 2017

A well-structured Health, Safety, Security, Quality system contributes to improving safety not only within a Company or an organization but also within the marine environment that the Company works in. There are several advantages that Company can benefit from an integrated HSSQ management system. First of all, there is a combined HSSQ policy; everyone is working towards the same direction. Environmental issues are dealt along with health and safety issues in terms of risk management or hazard identification and there is no an overlap. Most importantly, the interactive evaluation of all these components results in the simultaneous improvement of a Company's quality standards. An HSSQ policy should be in accordance with the Company policy with targets for improving quality standards and commitment for future improvement related to HSSQ aspects. A Company therefore collects data for measuring its performance by using the following sources: health, safety & security incident management; PSC performance, root cause investigations, annual management review.

### Fleet Overview 2017

Vessel	Near Misses	Incidents	Accidents
ALMERIA	0	0	0
ANARITA	0	0	0
ARCADIA	0	0	0
ARALIA	1	0	0
ARIZONA	0	0	0
ARNICA	9	1	0
ARVIKA	0	1	0
AVIONA	0	0	0
IRON KOVDOR	0	0	0
USOLIE	0	1	0
<b>TOTAL</b>	<b>10</b>	<b>3</b>	<b>0</b>





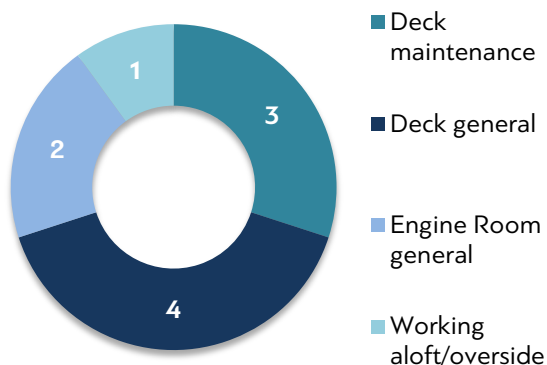
## Near Miss Reporting Overview 2017

The ISM Code requires that hazardous situations are to be reported to the company, investigated and analyzed in order to prevent future happenings. Near-miss reporting gains importance in this respect, because, near-misses are believed to represent experiences and mistakes that should be shared to learn from in order to prevent major accidents. This is a culture in which there is considerable informed endeavor to reduce risks to the individual, ships and the marine environment to a level that is as low as is reasonable practicable (MSC-MEPC.7/Circ.7). During the course of 2017 year total 10 near miss reports were received from SCM managed vessels in accordance with the ISM Code and E-SCMS SEM Chapter 8.4 requirements.

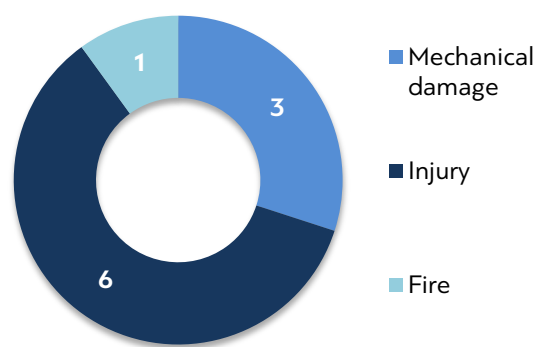
### Statistic of Near Miss Reporting

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
2017	1	0	2	1	1	1	1	1	0	0	0	2	10
2016	4	4	4	6	4	3	4	4	4	4	3	3	47
2015	3	8	7	6	2	2	4	6	3	4	3	2	50
2014	12	20	12	6	6	3	3	0	0	0	0	0	62
2013	0	0	0	0	1	14	12	7	6	1	8	7	61

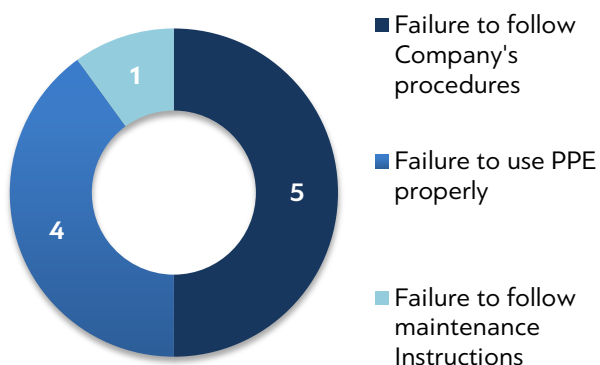
### Shipboard Operations



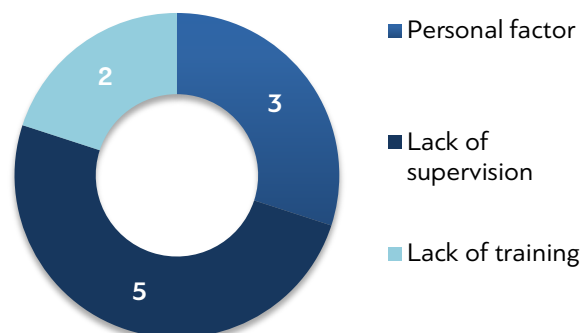
### Possible Consequences



### Direct Cause



### Root Cause





## Safety Awareness Weeks

The main goal of the safety Awareness training is to give attention to safety and to specify why safety is so essential in terms of our policies. Through knowledge in near-misses and their causes and root causes, our crewmembers must be able to recognize specific dangers in their work. A number of safety awareness weeks were held during 2017 as the Company response on planned actions for improving safety, particularly on prevention of smoking and correct PPE wearing.



### Key Figures

83 %

decrease of near miss reports in connection with smoking

74 %

reduction of near miss cases appertaining to inadequate PPE

85 %

decrease of near miss cases with possible injury of crewmembers

75 %

drop of near miss cases connected with lack of supervision





## Accidents Overview 2017

At sea, just as ashore, most accidents are preventable. However, the environment and working conditions aboard seagoing vessels pose additional hazards not found ashore. The responsibilities to avoid accidents flow from the top down; from the shore establishment to the Master, to each and every individual aboard. "Safety awareness" by all hands is the biggest single factor in reducing accidents.

In the Staff Centre Shipmanagement Ltd., all involved staff aim for a corporate culture making health, safety and security an integral part of seafarer's mindset, supported by the Company policy to have a workplace free from accidents. All our employed seafarers work under challenging conditions and the Management of our Company with its high professional staff do their utmost to control risks to seafarers' health and safety from work activities.

### Statistic of Accidents

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
2017	0	0	0	0	0	0	0	0	0	0	0	0	0
2016	0	1	0	0	0	0	0	2	0	0	0	0	3
2015	0	0	0	0	0	0	0	0	0	0	0	0	0
2014	0	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	1	0	1	2	1	0	0	0	0	5





## Health Performance Overview 2017

Staff Centre Shipmanagement continuously works towards the overall goal of zero injuries and maintaining health and safety standards on a high level. With aim to achieve this goal, our Company maintains high standards of health and safety to prevent hazards and incidents for all our seafarers.

### Review of Shipboard Staff Illness Cases

Vessel	Nature of sickness	Treatment	Status of employee
IRON KOVDOR	Rank AB: Acute pain in the left part of lumbago	Medical treatment ashore	Unfit for duty and repatriation
IRON KOVDOR	Rank AB: Pain in the left flank kidney area	Medical treatment ashore and medicines	Fit for duty
ALMERIA	Rank 3 <sup>rd</sup> Engineer: Kidney stones	Medical treatment ashore	Unfit for duty and repatriation
ALMERIA	Rank Oiler-turner: Finger Contusion	Medical treatment ashore and medicines	Fit for duty
ALMERIA	Rank Oiler-turner: Leg patella	Medical treatment ashore	Unfit for duty and repatriation
ANARITA	Rank Deck Cadet: Acute gastroenteritis	Medical treatment ashore and hospitalization for 3 days	Fit for light dues for 7 days
ANARITA	Rank 3 <sup>rd</sup> Engineer: Festering cyst of coccyx	Medicine treatment with antibiotics	Fit for duty
USOLIE	Rank Engine Cadet: Onychia Lateralis	Medical treatment ashore and medicines	Fit for duty
ARNICA	Rank 2 <sup>nd</sup> Engineer: Skin infection	Medical treatment ashore and medicines	Fit for duty
ARNICA	Rank 2 <sup>nd</sup> Engineer: Tooth pain, inflammation of the gum	Medical treatment ashore	Fit for duty
ARIZONA	Rank AB: Back pain	Medical treatment ashore	Fit for duty
ARIZONA	Rank Chief Officer: Foot pain	Medical treatment ashore	Fit for duty

### Health Performance

**33 %**

reduction of illness reports comparing with previous year

**25 %**

decrease of repatriation cases

**83 %**

drop of tooth related cases

**53 %**

reduction of illness related cases within ratings



## Incident Overview 2017

Staff Centre Shipmanagement Ltd. is committed to safe fleet operations and preventing incidents. The Company works in unison to ensure safety by prudent enhancing all aspects of operations, including technologies, systems, frameworks, education and training programs. We also comply with various international regulations designed to promote navigational and operational safety and strive to properly meet needed requirements.

Despite all efforts undertaken by the Company in the form of trained crew, established procedures and risk based as well as proactive approach 3 incidents took place in 2017 mainly concerned with security measures breaching, nevertheless the Company continues to work towards preventing incidents and operating our vessels safely.

### Incidents Statistic

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
2017	0	0	0	0	1	0	0	0	1	0	1	0	3
2016	0	0	0	0	0	0	0	0	0	0	0	0	0
2015	0	0	2	0	2	1	1	1	0	1	0	0	8
2014	0	1	1	0	0	0	3	0	0	0	0	0	5
2013	0	0	0	3	0	0	0	0	1	2	2	0	8



**3 incidents**  
in the course of 2017

Despite of all preventive actions and proactive approach the incidents have taken place revealing areas for special attention and improvement.





## Security Incidents with Stowaways

The main maritime security issue in 2017 was the deteriorating security situation with stowaways in West and South Africa due to rise of our vessels' call at ports of these regions. In 2017 we experienced two stowaways boarding which led to additional repatriation costs and raising PSC deficiency in this connection.

- On 25 May 11 stowaways were discovered on board of m/v ARNICA in the rudder trunk compartment and ship's crane after sailing from port of Lagos, Nigeria. Afterwards all stowaways were disembarked at the origin port of Lagos involving P&I representatives' assistance and cooperation.
- On 25 November 1 stowaway was found on board of m/v ARVIKA in ship's crane after sailing from loading port of Casablanca, Morocco. As it was revealed he boarded the vessel via terminal loading belt with preliminary preparation for a long time. Subsequently the discovered stowaway was disembarked at the Mexican port, however with resistance of local authorities contradicting ratified FAL Convention.

Meanwhile, the same numerous boarding attempts were prevented on the rest of SCM fleets while port stay at Durban, South Africa.

Improvements in security have not reduced the number of stowaways or the number of incidents and it is seafarers who have to cope with the extra work, delay, uncertainty and possible violence.

**3 attempts**  
of boarding prevented



Stowaways matter remains the main maritime security concern for our Company and we implement all adequate resources to mitigate this risk by providing comprehensive instructions and detailed information, dog searches and additional shore watchmen.



## Incident with Collision

During the early morning of 20 September 2017, while unjustified and risky overtaking maneuver m/t SEATROUT run against of m/v USOLIE at the bend of Western Scheldt, Holland. The collision damaged the port bow of USOLIE and the starboard quarter of SEATROUT, which also ran aground and required salvage assistance.

The collision took place within Belgium territorial waters, the International Regulations for Preventing Collisions at Sea 1972 (as amended) (the "COLREGs") COLREGs to apply, along with any local regulations in place.

The relevant COLREGS rules to be considered are: Rule 2 Good seamanship; Rule 5 Look-out; Rule 6 Safe Speed; Rule 7 Risk of collision; Rule 9 Narrow channels; Rule 13 Overtaking; Rule 17 Action by Stand-on Vessel; and Rule 34 Manoeuvring and warning signals.

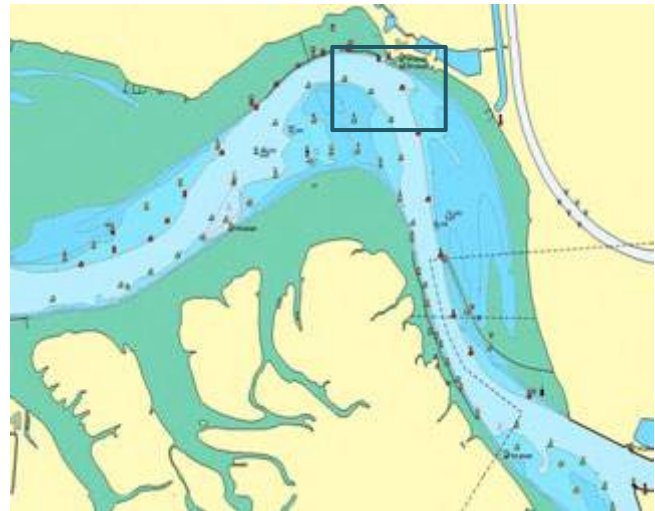
The official investigation is still in progress.

The following damages were observed:

1. The Shell Plating deformation in the way of Fr. 239 – 253 PS;
2. The Main Deck deformation in the way of Fr. 239-253 PS;
3. The Bulwark and railings deformation in the way of Fr. 238 – 274 PS;
4. TST No. 1 PS: deformation of Web Frame and Brackets Fr. 247, 245, 246, 248;
5. TST No. 1 PS: deformation of sloping Bottom platings in the way of Fr. 242 – 248;
6. Cargo Hold No. 1: deformation of Web Frames No. 245-250 PS with Lower Brackets-Connections;
7. The Double Roller Fairleaders at Fr. 247, 252 completely damaged;
8. The second Bracket from the MD in cofferdam Fr. 253-254 was deformed.

The repair program was divided into two phases which were successfully completed at Lithuanian shipyard under supervision of attending Class Surveyors to the satisfaction of Shipowners on 3 October 2017 and 2 December 2017 respectively.

**1 navigational incident**  
during 2017







## Cyber and Ship Security Training Enhancement

The Liberian Administration has launched a Cyber and Ship Security Computer-Based Training (CBT) programme that provides a comprehensive analysis and overview of cyber-security issues, including concepts such as malware, network security, identity theft, risk management, as well as other common threats to maritime security.

At the same time the CBT program also provides a detailed overview of common maritime security threats, including the risk of criminal activity, threats to ship security, port-based drug-trafficking risks, stowaways matter, security roles and responsibilities on board, and an introduction to the ISPS code.

The two-hour computer-based training program is divided into four modules, with evaluation through a series of questions.

The Cyber and Ship Security Computer-Based Training fulfills the requirements of STCW security awareness training.

All SCM vessels were supplied with LISCR Cyber and Ship Security Computer-based Training (CBT) DVDs for improving maritime safety and security knowledge of seafarers and shore side staff as well as reducing risk to seafarers, vessels and Company.



### Training Purpose and Learning Objectives



- Define cyber-security, list the major issues, and explain why it is important
- Explain best management practices for password security
- Explain the difference between admin and user accounts and give an overview of security privileges
- Explain the importance of updating obsolete operating systems
- Define viruses, Trojans, malware and other invasive programs and explain how to safeguard against them
- Explain what phishing and social engineering are and how to safeguard against them
- Give an overview of security best management practices for transferring files





## A New Era of ECDIS

The introduction of Electronic Chart Display and Information Systems (ECDIS) as officially approved aid to navigation marks a whole new era in the history of marine navigation. ECDIS is a computer based navigation system and automated decision aid, integrating a variety of data and displaying dynamic navigation information on screen. The current performance standards for ECDIS were laid down by the Maritime Safety Committee of the International Maritime Organization (IMO) in resolution MSC.232(82), effective as of January 1, 2009. In the same year IMO approved amendments to SOLAS V (19) making ECDIS mandatory on most ships over 500 GT in accordance with a rolling timetable that began in July 2012.

The electronic system offers many advantages over paper charts, such as real-time display of information, easier passage planning, prompt danger alarms and overall enhanced navigational safety. One of the most essential features of ECDIS that makes it a unique aid to navigation is the capability of generating alarms (anti-grounding, off route, etc.) based on input from various compulsory sensors and analysis of chart information.

In the course of 2017 all SCM vessels were equipped with different types of ECDIS such as Furuno, Transas, Simrad with relevant amendments and notations in the Ship Safety Equipment Certificates. At the same time the relevant Company's navigational procedures were carefully reviewed indicating Company's policies and applicable requirements.

Another important aspect is the training which is required to ensure an efficient and safe operation of ECDIS. Training may be arranged in many forms and the crewmembers shall undergo both generic training to get the full understanding of the ECDIS as a concept, the rules governing ECDIS and the influences on the bridge operation as well as the ECDIS familiarization training, which helps the operator familiarize themselves with the specific ECDIS onboard the vessel, and in this direction Staff Centre Training provides a specific training on ECDIS Transas Navi Sailor 4000.





## Health, Safety and Security Targets 2018

Incidents are evaluated and analyzed by the Safety and Technical departments, and important lessons learned are communicated amongst the functions and relevant business units through safety bulletins, meetings and training seminars. Proactive approach to our safety performance can be adopted only by encouraging the continuous search for innovative ideas, areas of improvement and ensuring that all appropriate information within our E-SCMS is followed. This will be achieved by good cooperation between both our personnel working ashore and those working on board our vessels. As identified by the ISM Code, commitment from the highest level of the Company is vital to ensure that personnel will act safely at all times. Our Company will continue to work towards a strong improvement in affected areas with personal commitment to reduce the risk of possible incidents.

Nº	KPI	Title	Section	KPI <sub>min req</sub> 0%	KPI <sub>target</sub> 100%	Actions
1.	KPI020	Navigational incidents	Navigational Safety Performance	1	0	1. Ensure compliance with all applicable rules, regulations and good seamanship practices; 2. Adhering to Shipvisor maintenance intervals; 3. Crew awareness and involvement; 4. Regular training sessions and drills;
2.	KPI004	Cargo Related Incidents	Operational Performance	7	0	1. Adhering to Shipvisor maintenance intervals; 2. Adherence to enhanced and precise cargo intake planning; 3. Adherence to the COSWP requirements;
3.	KPI013	Fire and explosions	Other	1	0	1. Adherence to safety regulations; 2. Compliance with the best practices of shipping industry; 3. Crew awareness and involvement; 4. Regular training sessions and drills;
4.	KPI029	Security Deficiencies	Security Performance	2	0	1. Ensure compliance with all applicable rules and regulations; 2. Advanced vessel preparation to possible inspections; 3. Information update of recent PSC trends; 4. Crew awareness and involvement; 5. Regular training sessions and drills; 6. Ship specific module on stowaways to be implemented; 7. Additional shore watches to be arranged where necessary.

Notes:

KPI<sub>Target</sub> is the KPI<sub>Value</sub> which give KPI<sub>Rating</sub>=100

KPI<sub>Min Req</sub> is the KPI<sub>Value</sub> which give KPI<sub>Rating</sub>=0



## Port State Control Performance 2017

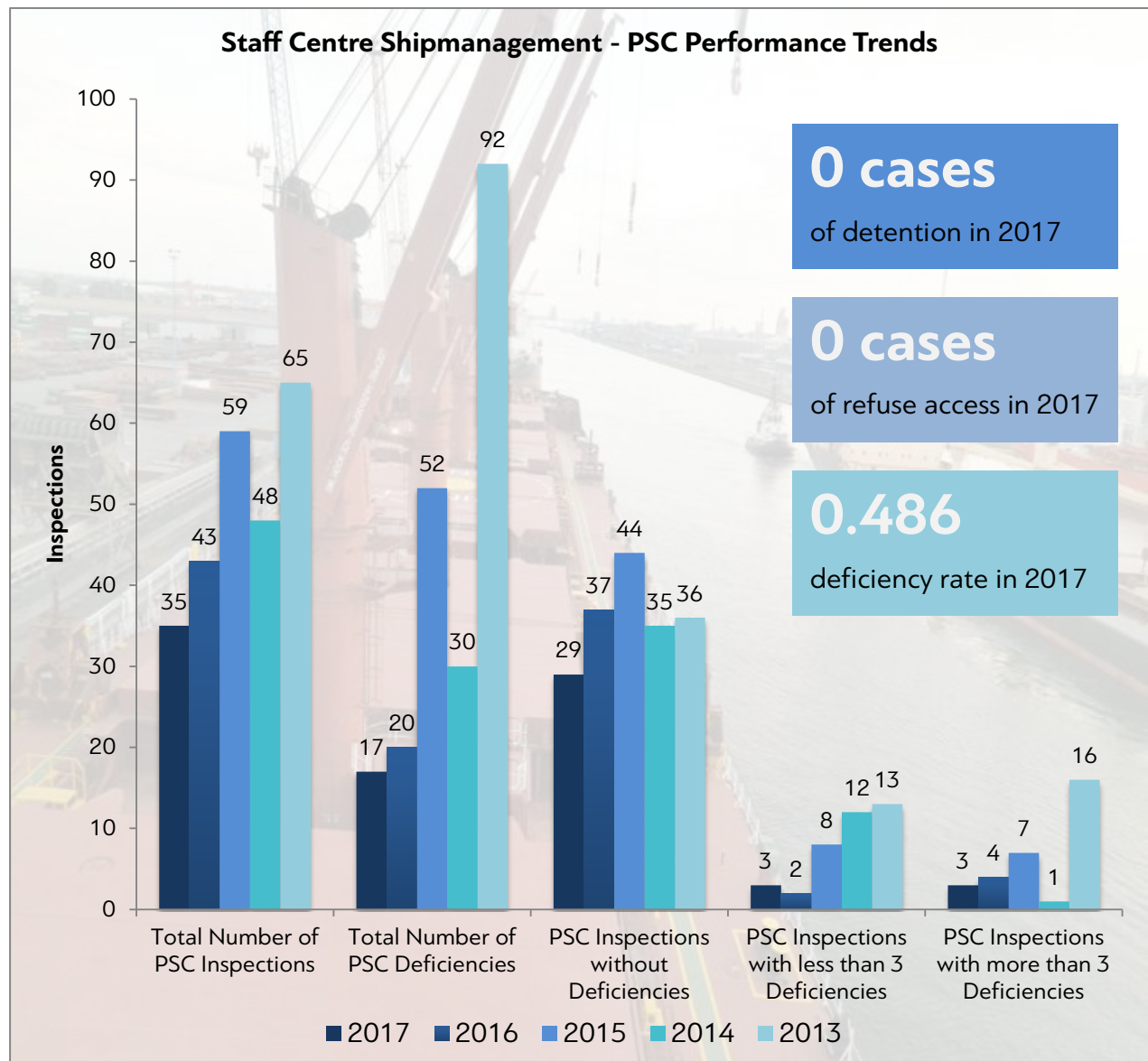
Port state control is the inspection of foreign ships in national ports to verify that the condition of the ship and its equipment complies with the requirements of international conventions and that the ship is manned and operated in compliance with these rules.

If a deficiency is found, this may result in significant consequences:

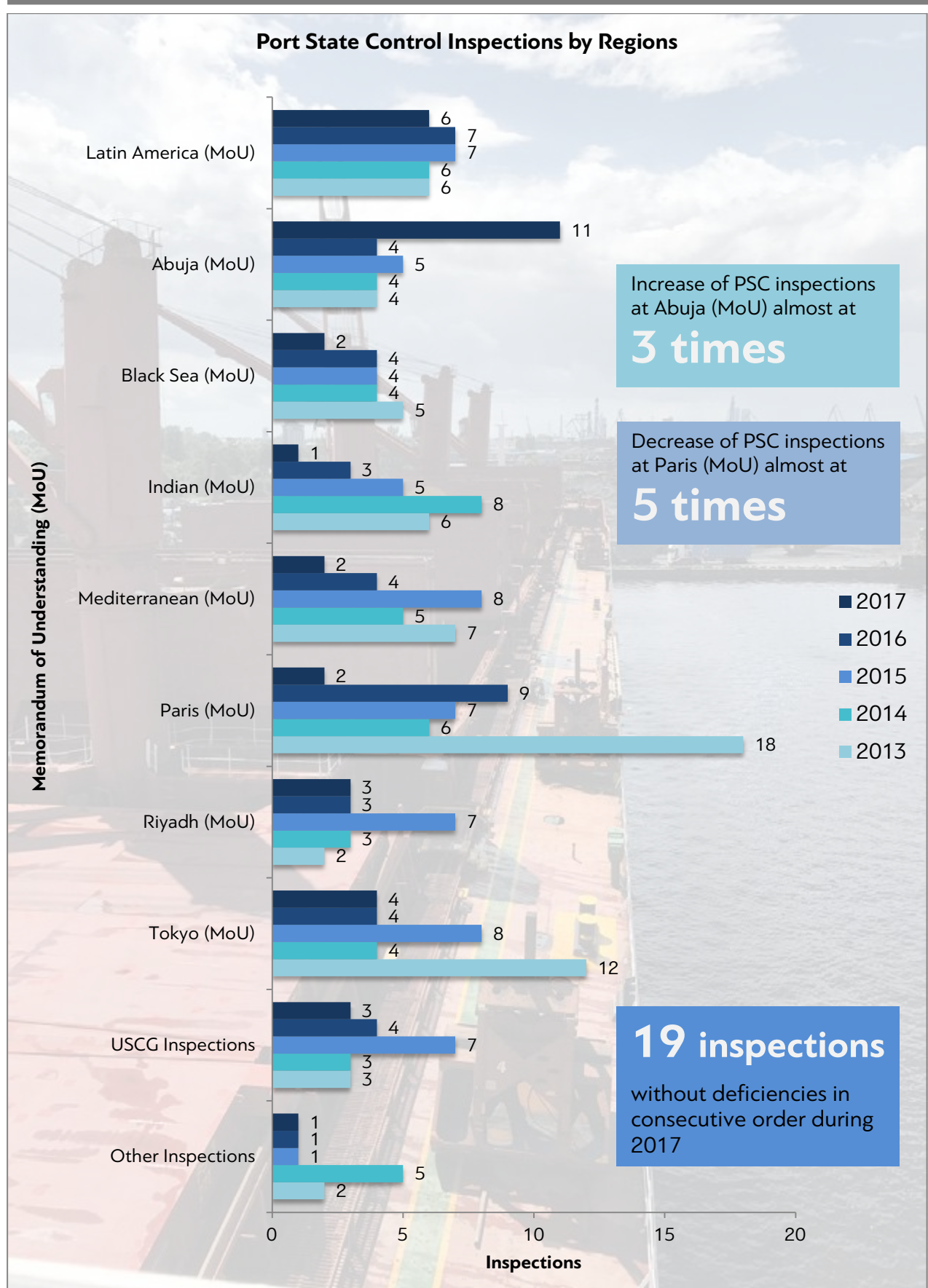
- Possible delays and off-hire times due to detentions;
- Negative impact on Company rating;
- Increased targeting of your ship and company by MoUs, combined with more detailed PSC inspections and increased risk for PSC detention;
- Negative exposure leading to a loss of reputation.

Our clients and their customers treat PSC detentions very seriously and a prospective charterer is unlikely to charter a ship that has a bad history of PSC records.

35 Port State Control (PSC) inspections were conducted out on SCM managed fleet during 2017.

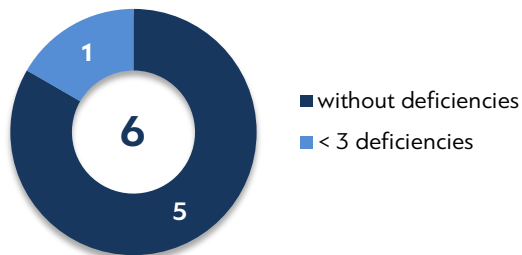








Latin America (MoU)



Abuja (MoU)



Black Sea (MoU)



Indian (MoU)



Mediterranean (MoU)



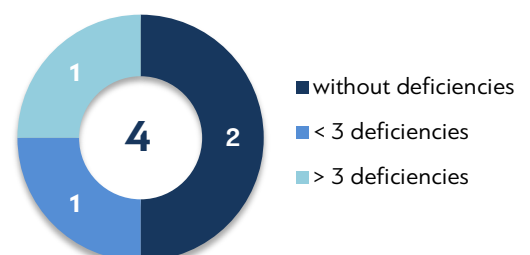
Paris (MoU)



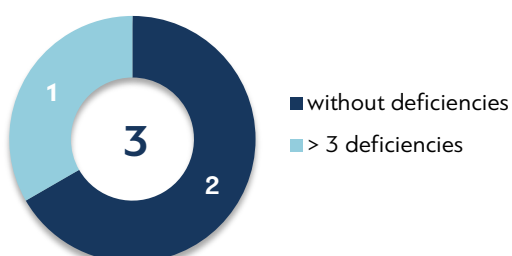
Riyadh (MoU)



Tokyo (MoU)

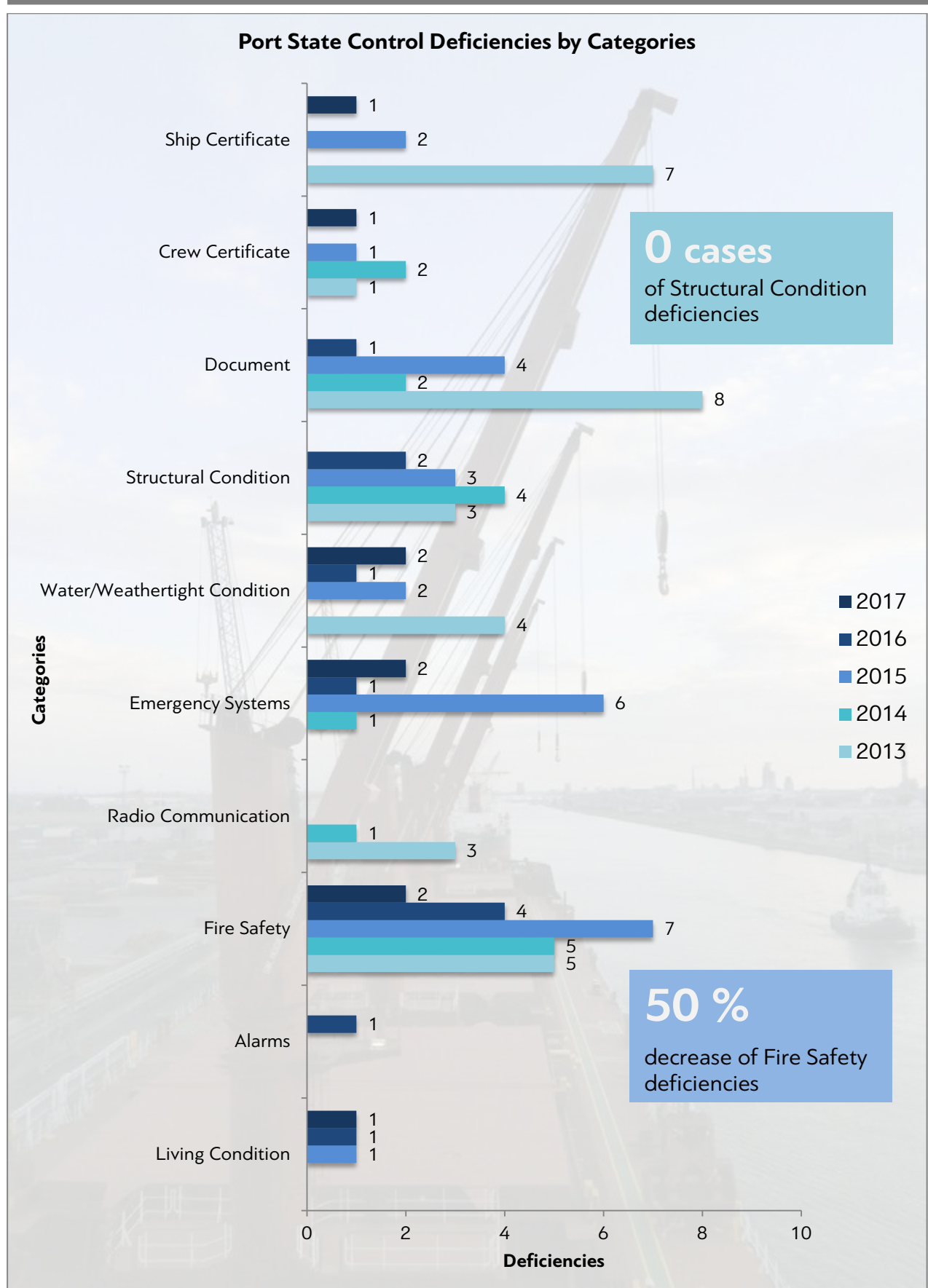


USCG Inspections

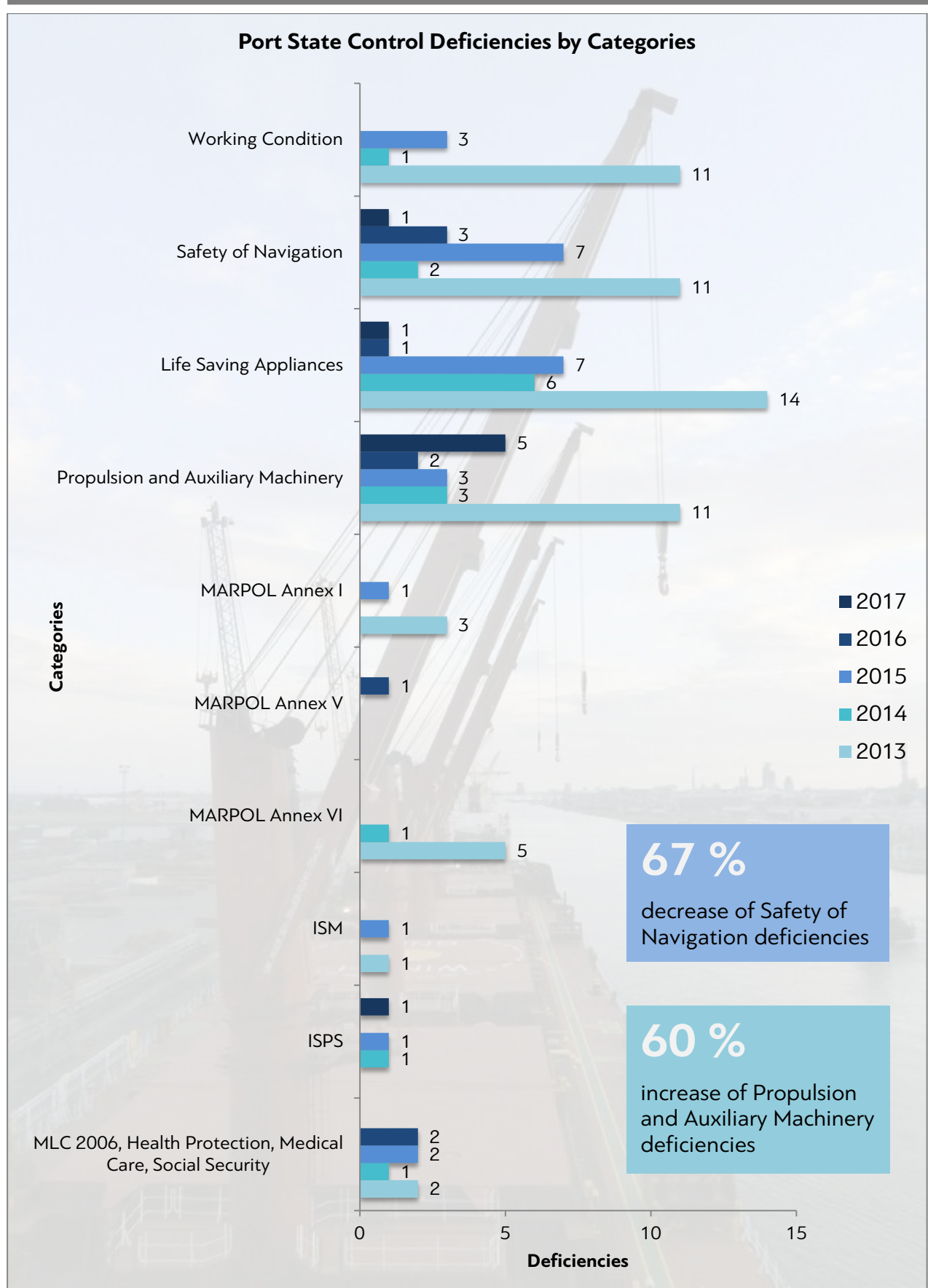


Other Inspections



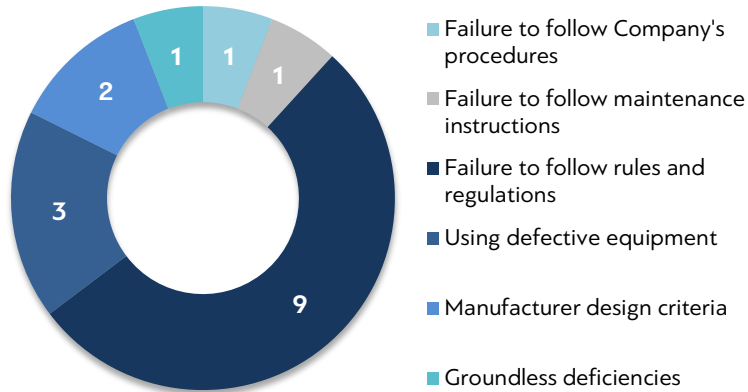








### Direct Cause of PSC Deficiencies 2017



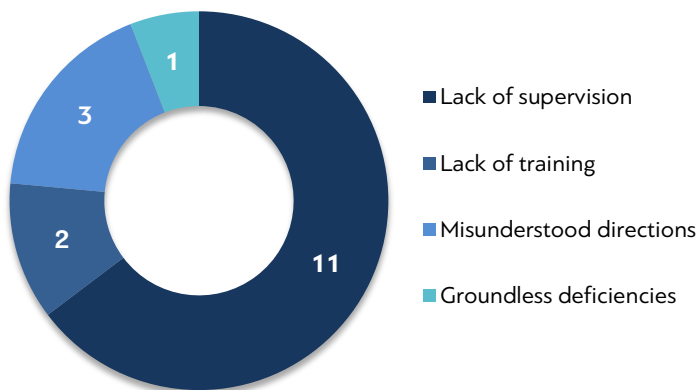
80 %

decrease of deficiencies  
in respect of failure to  
follow Company's  
procedure

84 %

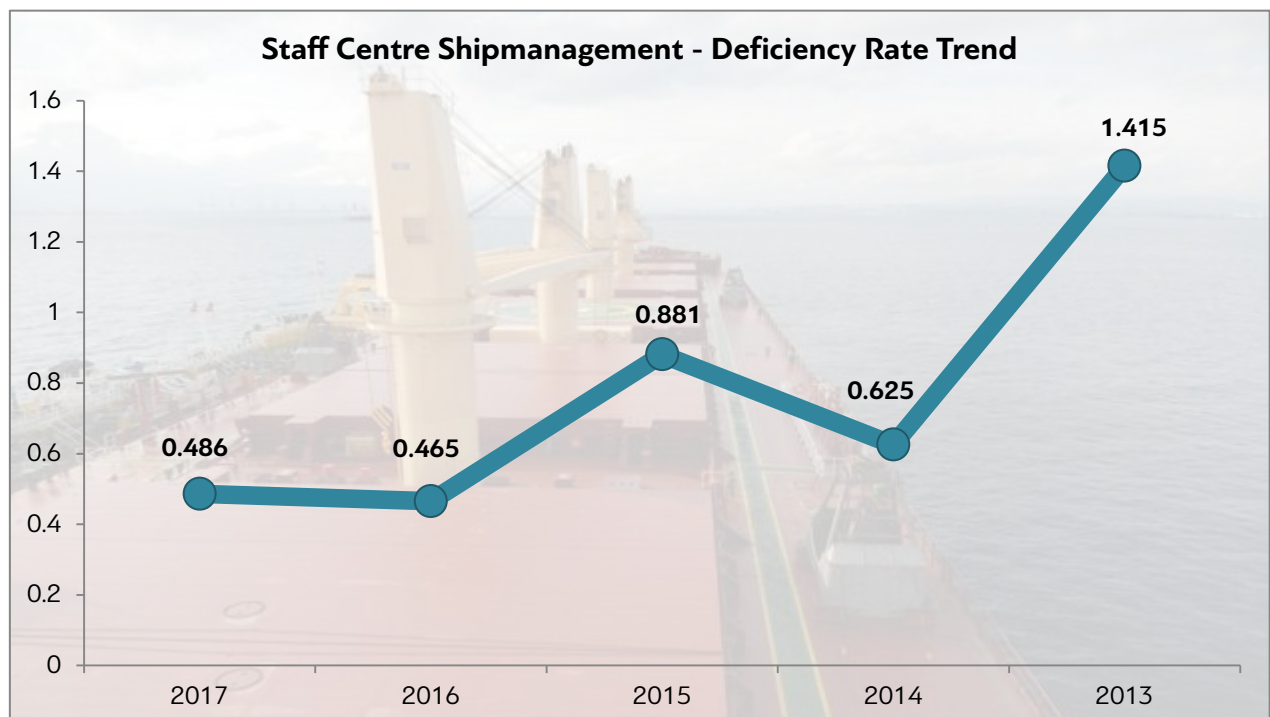
decrease of deficiencies  
appertaining to failure to  
follow maintenance  
instructions

### Root Cause of PSC Deficiencies 2017



29 %

increase of deficiencies  
appertaining to failure of  
rules and regulations





## PSC Concentrated Inspection Campaigns 2017

Port States have conducted the numerous Concentrated Inspection Campaigns (CICs) from 1 September through 30 November 2017 on the following subjects:

1. Black Sea MoU: Safety of navigation;
2. Caribbean MoU: Life-saving appliances;
3. Indian Ocean MoU: Safety of navigation;
4. Mediterranean MoU: Safety of navigation;
5. Paris MoU: Safety of navigation;
6. Riyadh MoU: Crew familiarization for enclosed space entry;
7. Tokyo MoU: Safety of navigation;
8. Vina del Mar Agreement: Safety of navigation;

Company's procedures regarding these matters were checked and reviewed to provide up to dated recommendations and requirements. A self-inspection/assessment on board of SCM fleet was arranged and all crew members were provided with training prior to entering the port of inspection during the CIC period.



### Concentrated Inspection Campaigns on SCM Fleet during 2017

Vessel	Date	Place and type of inspection	Type of CIC	Def.
ARALIA	14 September 2017	Sao Francisco De Sou, Brazil (Latin America MoU)	Safety of navigation	0
ARNICA	27 September 2017	Mesaieed, Qatar (Riyadh MoU)	Enclosed space entry	0
ARVIKA	02 October 2017	Nueva Palmira, Uruguay (Latin America MoU)	Safety of navigation	0
USOLIE	03 October 2017	Klaipeda, Lithuania (Paris MoU)	Safety of navigation	0
ARNICA	19 October 2017	Jurong, Singapore (Tokyo MoU)	Safety of navigation	1
ARIZONA	20 November 2017	Mombasa, Kenya (Indian MoU)	Safety of navigation	0

### Other Special Purpose Inspections on SCM Fleet during 2017

Vessel	Date	Place	Type of inspection	Def.
ARALIA	19 December 2017	Rotterdam, The Netherlands	MARPOL Inspection	0
AVIONA	19 April 2017	Harcourt, Nigeria	MARPOL Inspection	0
AVIONA	26 June 2017	Riga, Latvia	MARPOL Inspection	0
AVIONA	24 July 2017	Constanta, Romania	MARPOL Inspection	0



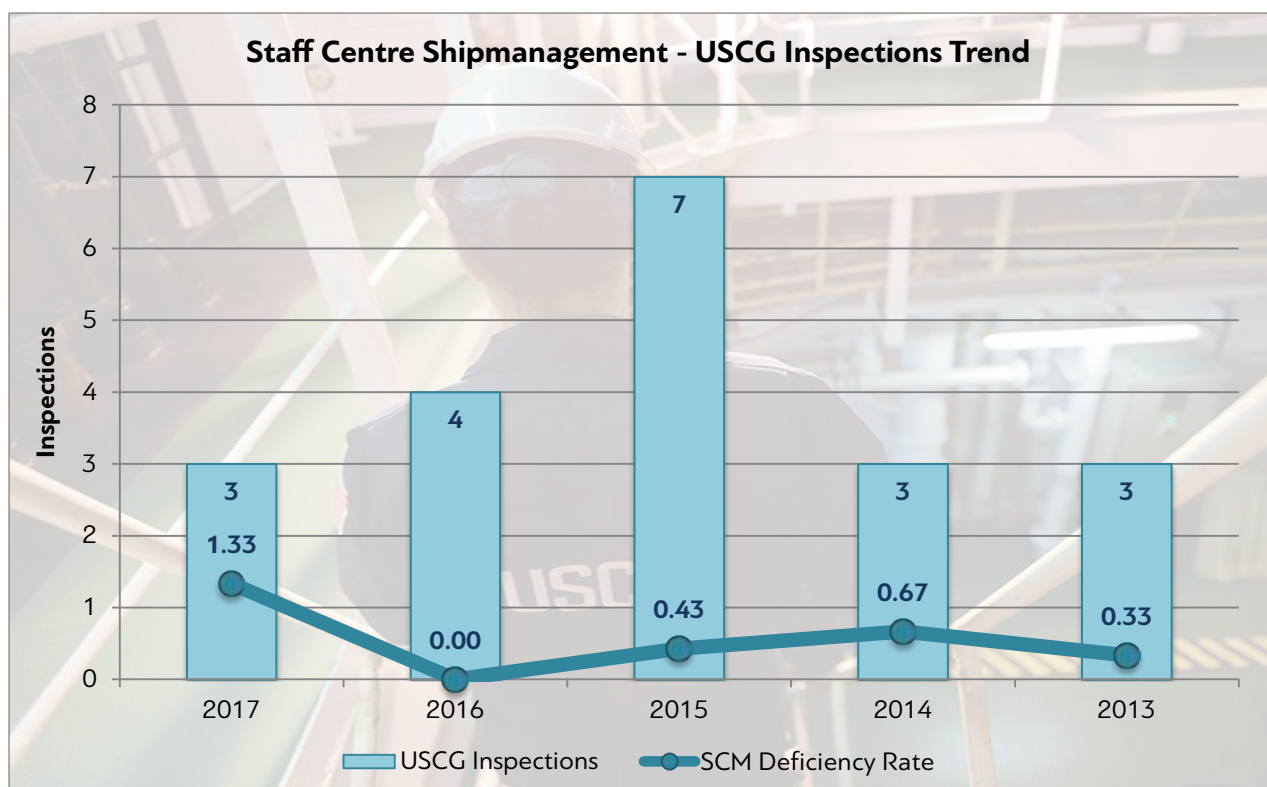


## USCG Inspections 2017

The U.S. Coast Guard administers a wide range of maritime safety laws related to merchant vessels, the protection of merchant seamen, and the protection of the environment. These laws require the development of safety standards, the licensing of operating personnel, and the inspection of vessels to ensure compliance. The Coast Guard's program is not limited to United States vessels. Certain foreign flag vessels coming within United States jurisdiction are required to meet various international and domestic vessel safety standards as well.

The U.S. Coast Guard is responsible for the inspection and regulation of many commercial vessels. The purpose of the inspection process is to ensure that a vessel has a suitable structure, proper equipment, and accommodations. The inspection process begins with the approval of a design and plans, and inspection continues throughout construction. After the initial inspection (upon completion of the vessel), subsequent inspections ensure that the vessel is maintained in a condition consistent with safety of life and property and in conformance with applicable marine safety laws and directives.

Following proactive approach applied by the Company Management, before USA call a comprehensive preparation of each vessel is arranged via throughout maintenance and marking, more frequent drills, earlier annual flag inspection without additional expenses to Shipowner as well as close cooperation of shipboard crew.





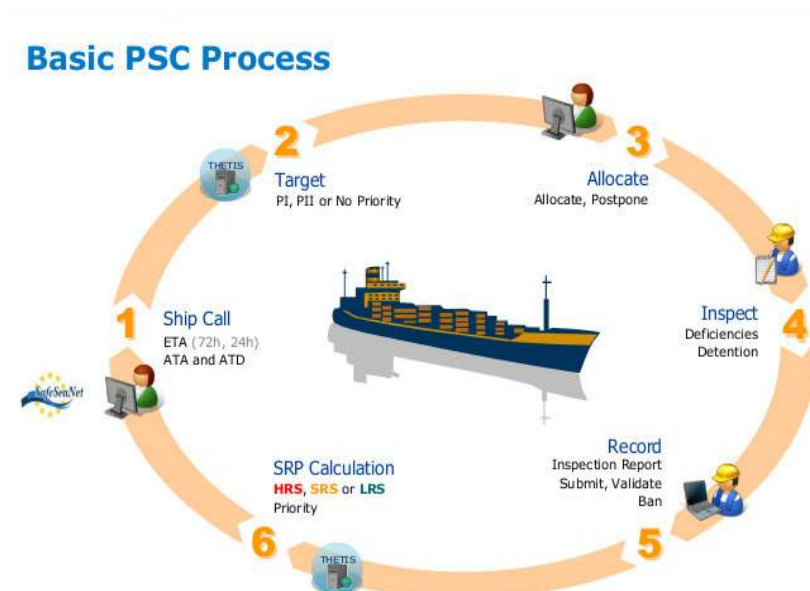
## Paris MoU Performance

### Company Performance Profile

One of the parameters to determine the SRP is the Company Performance, explained in annex 7 of the Paris MoU text. Company performance takes account of the detention and deficiency history of all ships in a company's fleet while that company was the ISM Company for the ship. Companies are ranked as having a very low, low, medium or high performance. The calculation is made daily on the basis of a running 36-month period. There is no lower limit for the number of inspections needed to qualify except a company with no inspections in the last 36 months will be given a "medium performance".

Company performance takes account of the detention and deficiency history of all ships in a company's fleet while that company was the ISM Company for the ship. Companies are ranked as having:

- **Very Low Performance Profile** – significantly increase the risk for all managed vessels to be assigned as "High Risk Ships" automatically, notwithstanding the age and PSC history, with shortening of PSC inspections interval to 5/6 month.
- **Low Performance Profile** – increase the risk for all managed vessels to be assigned as "High Risk Ships" automatically, notwithstanding the age and PSC history, with shortening of PSC inspections intervals to 5/6 month.
- **Medium Performance Profile** – good results adding "0" negative points to managed vessel's Risk Profile and increasing the PSC inspections intervals to 10/12 month. However, not allowing to any managed vessel to become "Low Risk Ship".
- **High Performance Profile** – best possible result adding "0" negative points to managed vessel's Risk Profile and giving to all fleet vessels good chance to become "Low Risk Ship" and increasing the PSC inspections intervals to 24/36 month. In this case the actual "Risk Profile" of all ships in fleet will depends on own PSC history only.



#### Our achievements

**High**  
performance Company  
under Paris MoU

**Low**  
risk vessels under Paris  
MoU

**0 cases**  
of ships banning under  
Paris MoU



### Paris MoU Inspections History over the last 36 Months

No	Vessel's name	Data of inspection	Type of inspection	Port of inspection	ISM deficiencies	Non-ISM deficiencies	Number of detentions
1.	USOLIE	03/10/2017	More detailed	Klaipeda, Lithuania	0	0	0
2.	ARALIA	24/05/2017	Expanded	Lisbon, Portugal	0	0	0
3.	USOLIE	04/11/2016	Expanded	Klaipeda, Lithuanian	0	0	0
4.	ARINAGA*	17/10/2016	Expanded	Aviles, Spain	0	0	0
5.	IRON KOVDOR	06/06/2016	Expanded	Bilbao, Spain	0	0	0
6.	ALMERIA	03/05/2016	Initial	Gibraltar	0	0	0
7.	ARNICA	28/04/2016	Initial	Huelva, Spain	0	1	0
8.	ARIZONA	16/04/2016	More detailed	Porto Marghera, Italy	0	0	0
9.	ARCADIA	26/03/2016	More detailed	Kavkaz, Russia	0	0	0
10.	AVIONA	15/03/2016	Initial	Leixoes, Portugal	0	0	0
11.	ARVIKA	06/02/2016	More detailed	Gibraltar	0	0	0
12.	ALPENA*	02/12/2015	Expanded	Santander, Spain	0	1	0
13.	AMANDA*	19/10/2015	Expanded	Ancona, Italy	0	2	0
14.	USOLIE	29/09/2015	Expanded	Murmansk, Russia	0	0	0
15.	ANARITA	08/06/2015	Initial	Swinoujscie, Poland	0	0	0
16.	ARVIKA	06/06/2015	Initial	Lower Cove, Canada	0	0	0
17.	IRON KOVDOR	14/04/2015	Expanded	Klaipeda, Lithuanian	0	0	0
<b>Total:</b>					<b>0</b>	<b>4</b>	<b>0</b>

\* - including all ships in a Company's fleet while the Company was the ISM Manager for the ship.





## Parameters for Company Performance

General Parameters	Results
How many PSC inspections has the fleet undergone in the Paris MOU region?	10
In how many detentions have these inspections resulted?	0
How many Non ISM deficiencies have been recorded during these inspections?	4
How many ISM deficiencies have been recorded during these inspections?	0
Has a refusal of access order been issued to any ship of the fleet?	No

Since the moment when New Inspection Regime (NIR) of the Paris MoU on Port State Control entered into force on 1 January 2011 for all 27 member states, our Company has initiated campaign targeting the improvement of a risk profile for each managed ship as well as increase the Company's performance level in general.

As result of this campaign and based on the above mentioned statistic, Staff Centre Shipmanagement Ltd. remains the status of **"High Performance Company"** rating in accordance with PSC Paris MoU new.

Main benefit of this rating is increasing of PSC inspection intervals from 10-12 month for Standard Risk Vessels (or even 5-6 month for High Risk Vessels) to 24-36 month for Low Risk Vessels (except ships over 12 years old).

Company Rating and Ship's Risk profile is valid for current moment only (similar to RightShip star rating) and could be reduced at any moment subject to negative PSC inspection results of any managed vessel as well as are affected by Overriding and Unexpected factors.

## Ship Risk Profile

Every day a number of ships will be selected for a port State control inspection throughout the region. To facilitate such selection, the central computer database, known as 'THETIS' is consulted by PSCO's. This information system, hosted by the European Maritime Safety Agency, informs national PSC authorities which ships are due for an inspection. Data on ships particulars and reports of previous inspections carried out within the Paris MoU region are provided by the information system as well.

Each ship in the information system will be attributed a ship risk profile (SRP), in accordance with Annex 7 of the Paris MoU text. This SRP will determine the ships priority for inspection, the interval between its inspections and the scope of the inspection.

Periodic Inspections are carried out at intervals determined by the ship risk profile. Overriding or unexpected factors might trigger an inspection in between periodic inspections. This category of inspection is referred to as an Additional Inspection.

Ships become due for periodic inspection in the following time windows:

- For **HRS** – between 5-6 months after the last inspection in the Paris MoU region.
- For **SRS** – between 10-12 months after the last inspection in the Paris MoU region.
- For **LRS** – between 24-36 months after the last inspection in the Paris MoU region.

Periodic Inspections and Additional Inspections count equally. Therefore the time span for the next periodic inspection re-starts after an additional inspection.

A ship's risk profile is recalculated daily taking into account changes in the more dynamic parameters such as age, the 36 month history and company performance. Recalculation also occurs after every inspection and when the applicable performance tables for flag and R.O.s are changed.



## Parameters for Ship Risk Profile

General Parameters	Results
Type of ship	Bulk carriers – 2 negative points
Is the ship older than 12 years	1 point if Yes / 0 points if No
Flag State performance	Liberia for all fleet / White List – 0 points
Is the Flag IMO Audited	Yes for all fleet – 0 points
Recognized Organization Performance	NKK, BV – HIGH performance – 0 points
Is the RO recognized by one of the Paris MOU member	NKK, BV – 0 points
ISM Company Performance	«High» – 0 points
Historical Parameters in the last 36 months	each vessel in accordance with the table below

## Ship Risk Profile under Paris MoU

Vessel's name	Total number of inspections Paris MOU within last 36 months	Total number of non ISM deficiencies	Total number of ISM deficiencies	Number of detentions	Ship's current Risk Profile
ALMERIA	1	0	0	0	LRS
ANARITA	1	0	0	0	LRS
ARALIA	1	0	0	0	LRS
ARCADIA	1	0	0	0	LRS
ARIZONA	1	0	0	0	LRS
ARNICA	1	1	0	0	LRS
ARVIKA	2	0	0	0	LRS
AVIONA	1	0	0	0	LRS
IRON KOVDOR	2	0	0	0	LRS
USOLIE	3	0	0	0	LRS
<b>TOTAL</b>	<b>14</b>	<b>1</b>	<b>0</b>	<b>0</b>	



## Port State Control Performance Targets 2018

Staff Centre Shipmanagement acknowledges that Port State Control plays a vital role within the shipping industry ensuring that standard of safety and environmental protection is maintained identifying sub-standard vessels.

Our Company believes that important lessons may be learned by the analysis of PSC performance and records which gives a ground for further improvement and perfection.

As the technical and safety managers we are working for greater sharing of inspection records and industry's best practices between our vessels as we believe this will be beneficial for our continuous improvement.

Nº	KPI	Title	Section	KPI <sub>min req</sub> 0%	KPI <sub>target</sub> 100%	Actions
1.	KPI014	Port State Control Performance	Health and Safety	0.33	1	1. Ensure compliance with all applicable rules and regulations; 2. Adhering to Shipvisor maintenance intervals; 3. Advanced vessel preparation for possible inspections; 4. Information update of recent PSC trends;
2.	KPI015	Health and Safety Deficiencies	Health and Safety	4	0	1. Ensure compliance with all applicable rules and regulations; 2. Adhering to Shipvisor maintenance intervals; 3. Advanced vessel preparation to possible inspections; 4. Information update of recent PSC trends; 5. Crew awareness and involvement; 6. Regular training sessions and drills;
3.	KPI019	Navigational deficiencies	Navigational Safety Performance	3	0	1. Ensure compliance with all applicable rules, regulations and good seamanship practices; 2. Adhering to Shipvisor maintenance intervals; 3. Advanced vessel preparation to possible inspections; 4. Information update of recent PSC trends; 5. Crew awareness and involvement; 6. Regular training sessions and drills;





Nº	KPI	Title	Section	KPI <sub>min req</sub> 0%	KPI <sub>target</sub> 100%	Actions
4.	KPI024	Operational deficiencies	Operational Performance	4	0	1. Ensure compliance with all applicable rules and regulations; 2. Adhering to Shipvisor maintenance intervals; 3. Advanced vessel preparation to possible inspections; 4. Propulsion and Auxiliary Machinery – areas of specific focus during PSC preparation; 5. Information update of recent PSC trends; 6. Crew awareness and involvement; 7. Regular training sessions and drills;
5.	KPI027	Port State Control Detention	Operational Performance	1	0	1. Ensure compliance with all applicable rules and regulations; 2. Adhering to Shipvisor maintenance intervals; 3. Advanced vessel preparation to possible inspections; 4. Information update of recent PSC trends; 5. Crew awareness and involvement; 6. Regular training sessions and drills; 7. Arrangement of earlier ASI Flag inspections in USA; Australia/New Zealand;
6.	KPI026	Port State Control deficiency ratio	Other	5	0	1. Ensure compliance with all applicable rules and regulations; 2. Adhering to Shipvisor maintenance intervals; 3. Advanced vessel preparation to possible inspections; 4. Information update of recent PSC trends; 5. Crew awareness and involvement; 6. Regular training sessions and drills.



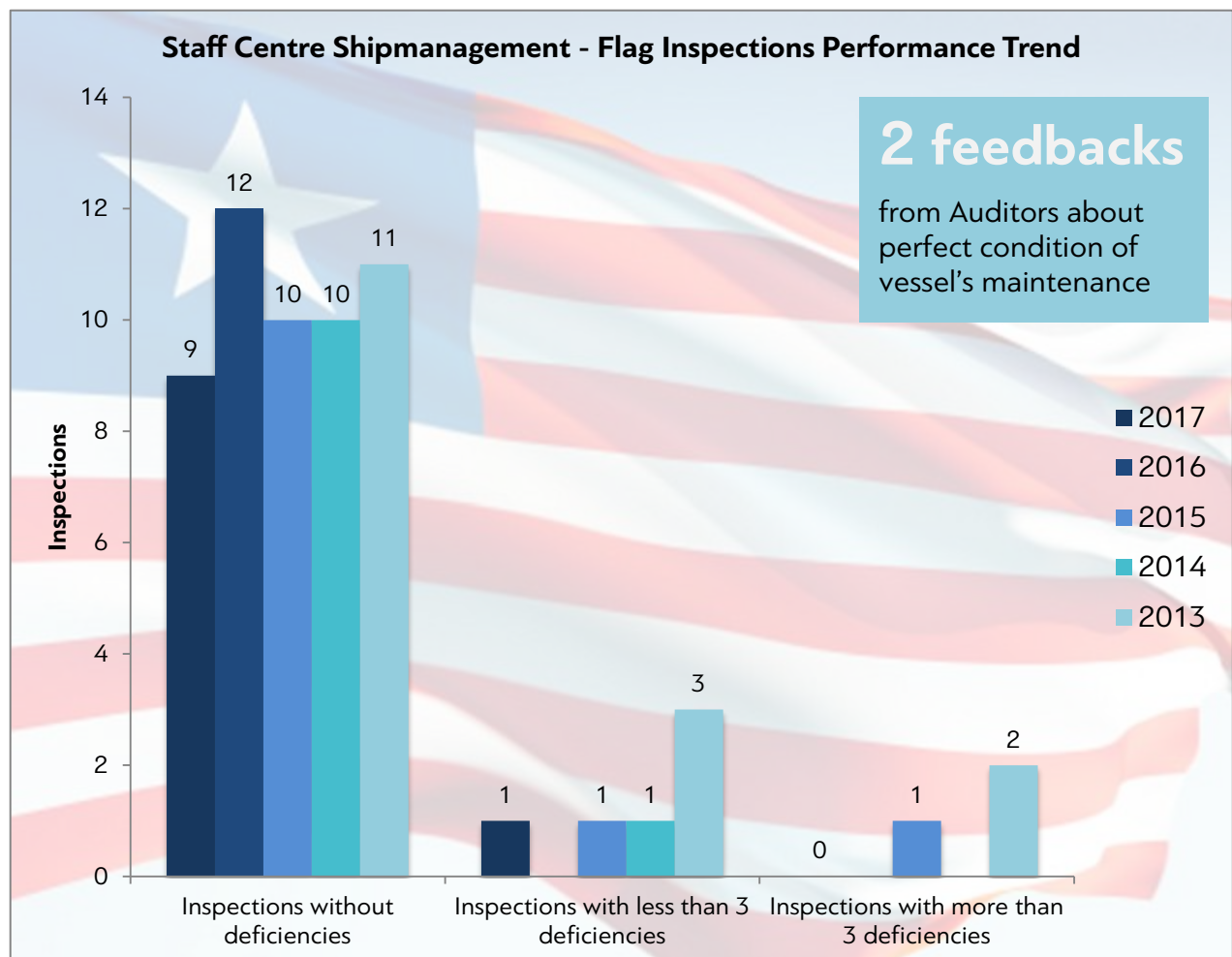
## Flag Inspections Performance 2017

The Liberian Registry is comprised of 4,170+ vessels aggregating more than 150 million gross tons, representing 12 percent of the world's ocean going fleet. Liberia has earned international respect for its dedication to flagging the world's safest and most secure vessels. The Liberian Registry is recognized at the top of every industry "white-list" including the International Maritime Organization and the major Port State Control authorities such as the U.S. Coast Guard as well as the Paris and Tokyo MOU regimes.

The Liberian Registry is administered by the Liberian International Ship & Corporate Registry (LISCR, LLC), a private U.S. owned and globally operated company. LISCR is internationally recognized for its professionalism and commitment to reduce redundant workflow procedures in order to increase efficiency. The Registry is managed by industry professionals who understand the business of shipping and corporate structures. Its proficient administration is one of the most effective and tax efficient ship and corporate registries in the world.

In addition to its full-service regional offices located in the major maritime centers of the world, the Liberian Registry is the first and so far the only major open registry to have trained a worldwide network of more than 400 professional nautical inspectors and qualified auditors.

The Flag Administration actively participates in prevention of PSC deficiencies. The Administration frequently updates its pre-arrival checklists to identify the most common detainable deficiencies to provide value to the Compliance Assistance Program (CAP). To better assist the vessel operator, the Master and the crew on board Liberian ships, the Administration requires Master's and/or DPA's to provide an Advanced Notice of Arrival (ANOA) at least 4 work days (96 hours) prior their vessel arrives at its first port of call for Australia, China, Europe, or the USA.





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## RightShip Performance 2017

RightShip was formed to improve dry bulk safety and quality standards and draw on the significant ship vetting expertise of global commodity companies, BHP Billiton and Rio Tinto. As major charterers and shippers, the founding businesses had developed vetting systems to manage their own marine risk. RightShip combined their expertise and resources to develop a Ship Vetting Information System (SVIS™) as a comprehensive risk management tool, which was in service until 2016. RightShip is focused on helping industry avoid preventable incidents, while reducing the carbon dioxide emissions emitted by the world marine fleet.

In 2016 RightShip introduced all customers to the next generation vetting tool, RightShip Qi. Pronounced 'key' – and an acronym for Quality Index – RightShip Qi is all about improving maritime safety and efficiency. RightShip have moved from a system that estimates risk to one that is predicting the risk of an incident, and, where the factors in SVIS were independent, in Qi the system is calculating the interrelationship between the factors using an IBM predictive analysis tool.

Essentially, this is because SVIS and RightShip Qi are different risk measurements:

1. **SVIS** was reactive, and so had to wait for something to go wrong before being considered in the model;
2. **RightShip Qi** is predictive, and so learns from other ships in similar circumstances. Given the recent fleet renewal we identified an opportunity to get smarter at predicting risk, as there is much inherent risk waiting for something to go wrong before acting.

**SVIS** has been in use for 15 years, and over this time the general safety standards of vessels has gradually improved. This was reflected in the SVIS star rating, so over time, more and more vessels achieved higher rating scores – which was appropriate for the SVIS platform. As such the 'average' rating for a vessel in 2016 was around 4 stars. The problem with this was that 4 or 5 stars indicate a superior vessel, and whilst this was the case in the earlier days of SVIS, more recently it has not always been so. The **RightShip Qi** platform takes advantage of modern technology and developments in risk rating algorithms, and provides us with a more dynamic star rating. Qi has been designed so that an 'average' vessel has an 'average' star rating – which in a 5-star scale, is a 3 star risk rating.

There are many influences on a vessel's risk rating – each of which is comprised of multiple, inter-related factors. The principal risk factors are summarized into 9 risk groups that are not considered in isolation, but rather interact with each other differently for each individual vessel prediction. These are:

1. Regulator Risk - models the interaction between a vessels Classification Society & Flag State;
2. Casualties Risk - casualty performance of the vessel in recent years;
3. Vessel PSC Risk - performance of the vessel at recent PSC Inspections;
4. Builder Risk - average casualties in the early life of vessels from each yard;
5. Size Risk - model context regarding a vessel's size;
6. Age Risk - age of vessel in years;
7. Type Risk - model context regarding a vessels type (Bulk Carrier, Containerships, General Cargo, Tankers & Others);
8. DOC PSC Risk - average performance at PSC inspections for vessels sharing the same DOC Manager;
9. Continuity Risk - considers the continuity of standards & systems across DOC Holders, Flag States & Classification Societies.

In response to growing trend of global CO<sub>2</sub> emissions and customer demand, in 2011 RightShip developed a systematic and transparent means of comparing the relative efficiency of the world's shipping fleet. Rather than adopting a 'one size fits all' approach, the **GHG Rating** compares a ship's theoretical CO<sub>2</sub> emissions relative to peer vessels of a similar size and type using an easy to interpret A - G scale. The GHG Emissions Rating compares the relative efficiency of a ship using EVDI (or EEDI if applicable). The comparison against a ship's peer group – ship of same type and size e.g. +/- 10% deadweight – enables the relative comparison of efficiency.





## RightShip Star Rating of SCM Fleet

No	Vessel's name	Class	Flag	Appertaining Risk Factors		Star Rating	
				Negative (-)	Positive (+)	2016	2017
1.	ALMERIA	BV	Liberia	1. Casualty Risk: vessel run aground on October 12, 2013; 2. Builder Risk: vessel was built at China shipyard;	1. Vessel PSC Risk: 7 inspections / 0 deficiencies during 2017; 2. DOC PSC Risk: 35 inspections / 17 deficiencies;	2	3
2.	ANARITA	BV	Liberia	1. Builder Risk: vessel was built at China shipyard;	1. Vessel PSC Risk: 1 inspection / 0 deficiencies during 2017; 2. DOC PSC Risk: 35 inspections / 17 deficiencies;	4	5
3.	ARCADIA	BV	Liberia	1. Builder Risk: vessel was built at China shipyard;	1. Vessel PSC Risk: 0 inspections / 0 deficiencies during 2017; 2. DOC PSC Risk: 35 inspections / 17 deficiencies;	4	5
4.	ARALIA	NKK	Liberia	1. Age Risk: 14 years; 2. Vessel PSC Risk: Previous Owners PSC performance	1. Vessel PSC Risk: 5 inspections / 6 deficiencies during 2017; 2. DOC PSC Risk: 35 inspections / 17 deficiencies;	3	
5.	ARIZONA	BV	Liberia	1. Builder Risk: vessel was built at China shipyard; 2. Casualty Risk: vessel was stranded in Russia on February, 2012; 3. Vessel PSC Risk: vessel was detained in USA on March 03, 2015;	1. Vessel PSC Risk: 7 inspections / 0 deficiencies during 2017; 2. DOC PSC Risk: 35 inspections / 17 deficiencies;	2	3
6.	ARNICA	NKK	Liberia	1. Additional factors;	1. Vessel PSC Risk: 4 inspections / 1 deficiency during 2017; 2. DOC PSC Risk: 35 inspections / 17 deficiencies;	4	4
7.	ARVIKA	NKK	Liberia	1. Additional factors;	1. Vessel PSC Risk: 7 inspections / 1 deficiency during 2017; 2. DOC PSC Risk: 35 inspections / 17 deficiencies;	4	4
8.	AVIONA	BV	Liberia	1. Builder Risk: vessel was built at China shipyard; 2. Additional factors;	1. Vessel PSC Risk: 3 inspections / 9 deficiencies during 2017; 2. DOC PSC Risk: 35 inspections / 17 deficiencies;	3	4
9.	IRON KOVDOR	NKK	Liberia	1. Age Risk: 18 years;	1. DOC PSC Risk: 35 inspections / 17 deficiencies;	4	5
10.	USOLIE	NKK	Liberia	1. Age Risk: 26 years; 2. Vessel PSC Risk: vessel was detained in China on October 10, 2012; 3. Casualty Risk: vessel was involved in collision on 20 October, 2017	1. Vessel PSC Risk: 2 inspections / 0 deficiencies during 2017; 2. DOC PSC Risk: 35 inspections / 17 deficiencies;	3	2

Note: Star rating status is based on December, 2017



## RightShip GHG Rating of SCM Fleet

Vessel's name	Status before actions	Rating before	Actions	grams CO <sub>2</sub> per tonne nautical mile / In (EVDI)	Rating after
ALMERIA	Verified	<b>D+</b>	1. Sea trials and shop test reports; 2. Operations - Voyage Planning/Weather routing; 3. Operations - Hull Surface - Hull Coating (Anti-fouling paint 2015); 4. Operations - Hull Cleaning (Las Palmas 14.09.2017); 5. Operations - Propeller Surface Finish/Polishing (Las Palmas 14.09.2017);	<b>5.344</b> <b>1.676</b>	<b>D+</b>
ANARITA	Unverified	<b>D+</b>	1. Sea trials and shop test reports; 2. Operations - Voyage Planning/Weather routing; 3. Operations - Hull Surface - Hull Coating (Anti-fouling paint 2017);	<b>4.585</b> <b>1.581</b>	<b>D+</b>
ARALIA	Unverified	<b>E</b>	1. Sea trials and shop test reports; 2. Operations - Voyage Planning/Weather routing; 3. Operations - Hull Surface - Hull Coating (Anti-fouling paint 2015);	<b>5.649</b> <b>1.732</b>	<b>D+</b>
ARCADIA	Unverified	<b>D+</b>	1. Sea trials and shop test reports; 2. Operations - Voyage Planning/Weather routing; 3. Operations - Hull Surface - Hull Coating (Anti-fouling paint 2017);	<b>4.804</b> <b>1.569</b>	<b>D+</b>
ARIZONA	Verified	<b>D+</b>	1. Sea trials and shop test reports; 2. Operations - Voyage Planning/Weather routing; 3. Operations - Propeller Surface Finish/Polishing (Vancouver 01.09.2014); 4. Machinery - Energy Saving Lighting; 5. Operations - Hull Surface - Hull Coating (Anti-fouling paint 2016);	<b>5.074</b> <b>1.624</b>	<b>D+</b>
ARNICA	Verified	<b>D+</b>	1. Sea trials and shop test reports; 2. Operations - Voyage Planning/Weather routing; 3. Operations - Hull Surface - Hull Coating (Anti-fouling paint 2015);	<b>5.347</b> <b>1.677</b>	<b>D+</b>
ARVIKA	Unverified	<b>E</b>	1. Sea trials and shop test reports; 2. Operations - Voyage Planning/Weather routing; 3. Operations - Hull Surface - Hull Coating (Anti-fouling paint 2017);	<b>4.324</b> <b>1.464</b>	<b>B+</b>
AVIONA	Verified	<b>D+</b>	1. Sea trials and shop test reports; 2. Operations - Voyage Planning/Weather routing; 3. Operations - Hull Surface - Hull Coating (Anti-fouling paint 2016);	<b>5.105</b> <b>1.630</b>	<b>D+</b>
IRON KOVDOR	Unverified	<b>E+</b>	1. Sea trials and shop test reports; 2. Operations - Voyage Planning/Weather routing;	<b>3.789</b> <b>1.332</b>	<b>C+</b>
USOLIE	Verified	<b>C+</b>	1. Sea trials and shop test reports; 2. Operations - Voyage Planning/Weather routing; 3. Operations - Hull Surface - Hull Coating (Anti-fouling paint 2015).	<b>3.942</b> <b>1.372</b>	<b>C+</b>

Note: GHG rating status is based on December, 2017



## Principal Risk and Uncertainties 2018

We have performed a comprehensive and systematic review of those risks that we believe could seriously affect our Company's performance, future prospects and reputation.

### Principal Risk and Uncertainties 2018

Nº	Description of risk	Summary of implications	Control/mitigating actions	Risk level pre- and post-mitigation	
1.	Key Staff Retention	Business value and earnings could be lost if key people leave.	1. Succession and individual career path planning carefully managed at business unit and divisional level.	Pre Medium Risk	Post Low Risk
2.	Staff Retention	If the best staffs leave, they could take "their" business with them resulting in a loss to the Company.	1. Continue development of a culture of loyalty/growth as well as maintaining competitive remuneration packages.	Pre Medium Risk	Post Low Risk
3.	Principal Knowledge Maintenance	New trends/regulations/requirements in shipping business may possess a risk on efficient Company operation.	1. Permanent monitoring and implementation of new trends/regulations/requirements in shipping industry; 2. Arrangement of trainings, educations process and career development in case of need.	Pre Medium Risk	Post Very Low Risk
4.	Reputational risk	The Company reputation may be affected by incorrect professional error/mistake; bribery matters, any type of unverified rumors and etc.	1. Increased emphasis upon Company compliance and risk; 2. No part of the Company is so significant or remote that senior management is unaware of actions of their staff; 3. Regular Safety and Quality meetings are arranged to manage different matters.	Pre High Risk	Post Low Risk
5.	Downturn in market conditions	Downturn in the world economy may affect the Company's activities.	1. The technical and safety management services are carried out until termination of "Shipman" agreement.	Pre Low Risk	Post Low Risk
6.	Non-compliance with local authorities and government requirements	Possible fines and suspension of services providing.	1. The Company acts in full compliance with all local requirements.	Pre Low Risk	Post Low Risk
7.	Non-compliance with Flag/Class/PSC/Insurers requirements	Possible notations/deficiencies/detentions/termination of services providing.	1. It's Company's primary obligation to meet Flag/Class/PSC/Insurers requirements.	Pre Low Risk	Post Low Risk
8.	Customer satisfaction	Poor service can lead to loss of customers.	1. B2B approach; 2. A close discussion of different matters; 3. 24/7/365 budget performance; 4. Customer surveys; 5. Client evaluation reports.	Pre High Risk	Post Low Risk





## Principal Risk and Uncertainties 2018

Nº	Description of risk	Summary of implications	Control/mitigating actions	Risk level pre- and post-mitigation	
9.	Corporate governance risk	Inadequate corporate governance measures may adversely impact the diligence, integrity and transparency of our risk assessment, decision-making and reporting processes and undermine stakeholder confidence.	1. Our Company is aiming to good corporate governance to meet the requirements of our business and stakeholders; 2. Internal procedures are in place to ensure compliance with all local and international laws and regulations; 3. The relevant employees receive regular governance training to ensure a high standard of corporate governance.	<b>Pre</b> <b>Medium Risk</b>	<b>Post</b> <b>Low Risk</b>
10.	Supplying services	Low-quality service/Substandard service/ Non-time delivery/incompetence /unauthorized services.	1. All relationships with suppliers and service providers are based on the requirements of ISO 9001:2015 paragraphs 8.4 and therefore evaluated, selected and monitored; 2. The Company maintains a database of numerous suppliers and service providers with own rating/comments/evaluation performance; 3. The Company clearly described and defined all applicable requirements to products and services to be provided.	<b>Pre</b> <b>Medium Risk</b>	<b>Post</b> <b>Low Risk</b>
11.	Major maritime accidents	Inadequate safety and operational standards, piracy and other causes of accidents may lead to loss of life, severe damage to property and our vessels, and impact the Company's reputation among seafarers, customers and other stakeholders.	1. Our commitment to the safe operation of our ships is manifested through a proactive system ashore and at sea – E-SCMS; 2. The high quality of our attention to safety is evidenced by zero major maritime accidents in previous year and a High Standard Company status in accordance with Paris MoU.	<b>Pre</b> <b>Low Risk</b>	<b>Post</b> <b>Low Risk</b>
12.	Environment Risk	Non-compliance with emissions and other environmental legislation and standards may result in financial loss and significant damage to our Company.	1. We are making comprehensive efforts in to mitigate emissions through initiatives to improve engine performance and hull and propulsion hydrodynamics, and to adopt fuel-efficient operational measures such as ErgoProfin; 2. All assigned SECA/DECA requirements are strictly followed by the managed fleet; 3. BWM matters are followed in the way of specific BWMP, USA extension letters; 4. Annual zero oil spill policy is maintained and achieved.	<b>Pre</b> <b>Low Risk</b>	<b>Post</b> <b>Low Risk</b>
13.	Cyber Security	Failure of key IT systems, targeted attacks on Company system, or a breach of security could result in communications breakdown and business disruption.	1. Company IT department works closely with all departments to tailor effective IT systems, support, preventive and contingency measures; 2. Anti-virus programs on Google server/Company internal server/PCs are maintained on the latest versions status; 3. LISCR – Cyber & Ship Security Training Module DVD was circulated on all managed vessels.	<b>Pre</b> <b>High Risk</b>	<b>Post</b> <b>Low Risk</b>



## Principal Risk and Uncertainties 2018

Nº	Description of risk	Summary of implications	Control/mitigating actions	Risk level pre- and post-mitigation	
14.	IT and communications	Loss of critical services and/or data resulting in the business being unable to operate for an extended period of time. Possible attacks that affect the organisation due to poor security or employee awareness, malware or virus attacks.	1. Security data protection; 2. Relevant data backups; 3. Security Awareness Training.	<b>Pre</b> <b>Medium Risk</b>	<b>Post</b> <b>Low Risk</b>
15.	Stowaways	Detection of stowaways may result in financial losses /detention/off hire periods.	1. ISPS/guidance's on good practice are strictly followed; 2. Additional crew watches are maintained to control vessel accesses; 3. Specific ship search modules were developed for each ship; 4. Extra shore watchmen are strictly required but financial expenses may be involved.	<b>Pre</b> <b>High Risk</b>	<b>Post</b> <b>Low Risk</b>
16.	Piracy	Damage/loss of vessel Injury/death of crew in result of pirate attack.	1. ISPS/guidance's on good practice are strictly followed; 2. Additional crew watches are maintained to control vessel accesses; 3. Specific ship preparation before each HRA should be arranged by crew staff; 4. The registration of vessels at MSCHOA website; 5. The arrangement of Private Contracted Armed Security Personnel by Shipowners in line with the Flag requirements.	<b>Pre</b> <b>High Risk</b>	<b>Post</b> <b>Low Risk</b>



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