

# Session Six– The ISPO Classification Societies Code Implementation and Recent Learnings

Welcome to Darren  
Roberts and Mario  
Fernandes from  
Bureau Veritas Marine

Proudly hosted by

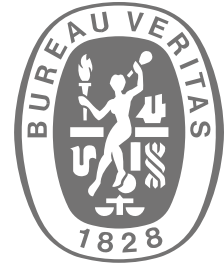
A  
AURIGA  
/



BUREAU  
VERITAS

Shaping a World of Trust





BUREAU  
VERITAS



A  
AURIGA  
/

# CLASS PERSPECTIVES ON ISPO ISSUES

ISPO Conference, Melbourne October 2024

# SUMMARY



**01**

**Introduction**



**02**

**Certification and  
Inspection of Pilot  
Ladders**



**03**

**Certification of  
Strong Points**



01

# Introduction



# INTRODUCTION

## Why are Bureau Veritas here?

- › Asked to present Class perspectives on ISPO
- › From an Audit perspective, potentially dozens of issues.....
- › From Classification (Survey) perspective, what are our issues
- › Where Class fit into the process
- › What powers Class have
- › A possible new one for you all.....



02

# Certification of Pilot Ladders



# CERTIFICATION AND INSPECTION OF PILOT LADDERS

## What are the issues?

- › Class often have questions raised by Pilots and PSC:
  - › How has this equipment been permitted on board?
  - › When was the last time Class ACTUALLY looked at this equipment?
  - › Why hasn't this ladder been condemned?
  - › Who authorised this repair?
  - › How long has this ladder been in service?
  - › When was this ladder placed into service?
  - › When was this ladder last tested?
  - › Do Class verify pilot ladders?

# CERTIFICATION AND INSPECTION OF PILOT LADDERS

## Where are Class involved?

- › Annual safety equipment surveys are conducted by Class
  - › Covers embarkation equipment
  - › Accommodation ladders
  - › Pilot ladders
- › Annual surveys are conducted 3 months either side of the anniversary date
  - › The minimum period between verifications could be as little as 6 months
  - › It is safe to say the average period between verifications is 12 months
  - › However, in extreme cases this could be as much as 18 months
- › Annual surveys also include verification of repairs and equipment replacement





# CERTIFICATION AND INSPECTION OF PILOT LADDERS

## What are the vessel obligations?

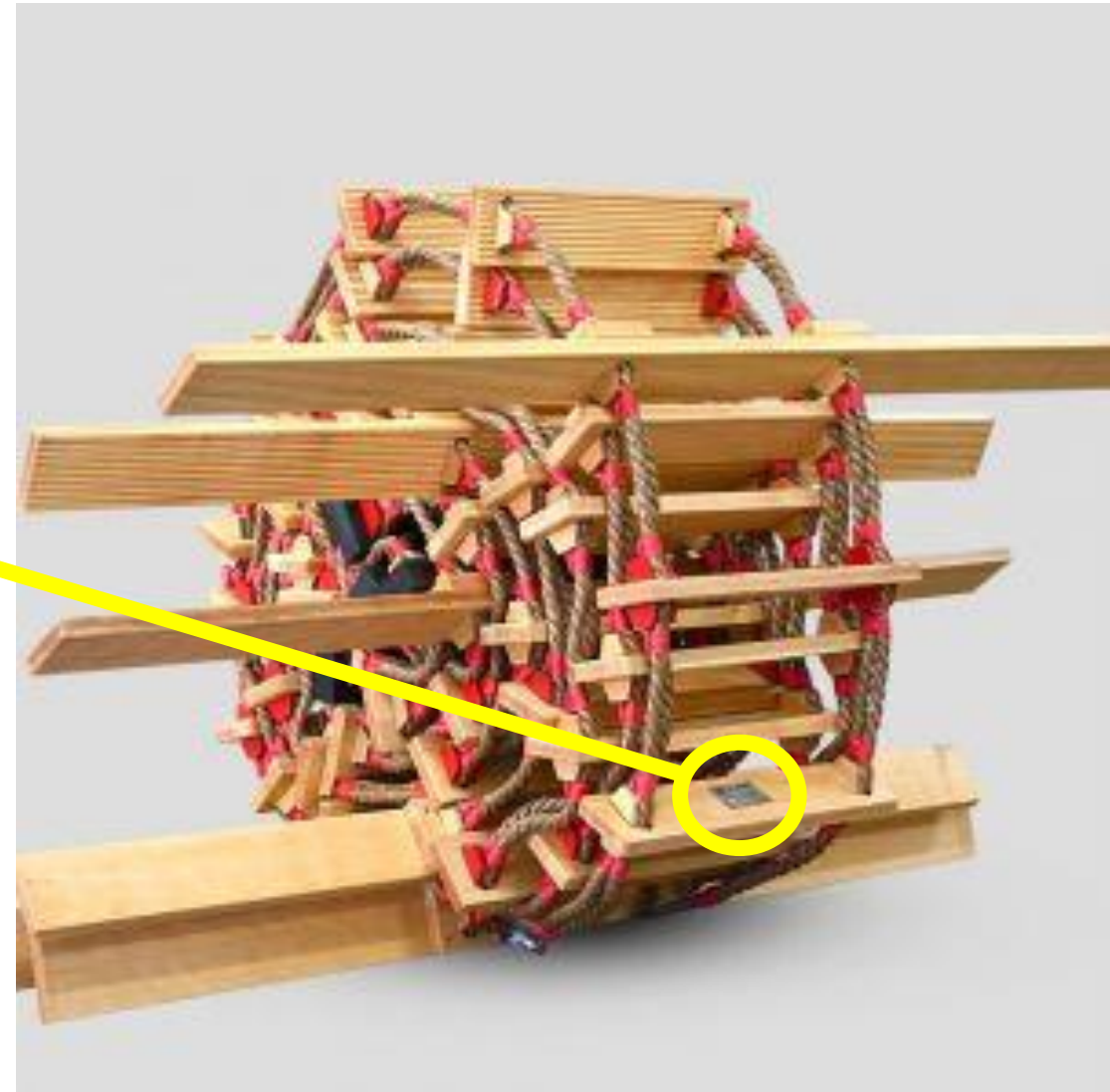
- › According to SOLAS, defects on a ship must be reported to the relevant authorities if they:
  - › Impede fire-fighting
  - › Weaken life-saving preparedness
  - › Jeopardize navigation safety
  - › May cause pollution
  
- › The authorities to be contacted include:
  - › The relevant Flag Administration
  - › The Classification Society who issues Statutory Certificates
  - › The port authority if defects exist when entering port
  
- › In addition, the Master and crew should report defective or inoperable equipment to the Company and ensure that corrective action is taken

# CERTIFICATION AND INSPECTION OF PILOT LADDERS

## When are Class NOT involved?

- › As per previous slide, it is required to inform of SOLAS defects
  - › There are a significant number of cases where this does not happen
- › Frequently equipment is damaged and replaced without any notification
  - › This also results in service life being unknown
- › When equipment is replaced without Class verification
  - › The ladder length may be incorrect
  - › Embarkation ladders are often supplied instead of pilot ladders
  - › There is no “quality” check to confirm that the supplied ladders are compliant
  - › There is no verification that the ladders supplied have the right certification

# CERTIFICATION AND INSPECTION OF PILOT LADDERS



# CERTIFICATION AND INSPECTION OF PILOT LADDERS

- Cert Number
- Equipment Type
- Manufacturer
- Standards
- Validity

**DNV GL**

Certificate No: **MEDB000001G**  
Revision No: **3**

**EC-TYPE EXAMINATION CERTIFICATE (MODULE B)**

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

**This is to certify:**  
That the **Pilot ladder**  
with type designation(s)  
**Pilot Ladder ISO799-1-S7-L3 to ISO799-1-S108-L40**

Issued to  
**DREWIL ENTERSHIP Sp. z o.o.**  
**Pomieczyno, Poland**

is found to comply with the requirements in the following Regulations/Standards:  
Regulation (EU) 2019/1397, item No. MED/4.49, SOLAS 74 as amended, Regulations V/23 & X/3, IMO Res. A.1045(27), IMO MSC/Circ.1428, ISO799-1:2019(E).

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-07-14**.  
Issued at **Hovik** on **2020-07-15**

DNV GL local station:  
**Gdansk CMC**

Approval Engineer:  
**Oystein Holte**

Notified Body  
No.: **0575**

for **DNV GL AS**  
Digitally Signed By: **Troard Sjøvåg**  
Location: **DNV GL, Hovik, Norway**  
on behalf of  
**Roald Vårheim**  
**Head of Notified Body**

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.  
This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.  
Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.  
LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees (DNV GL-7) arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstances be limited to 300,000 USD.  
Form code: MED 201.NOR      Revision: 2020-01      www.dnvgl.com      Page 1 of 2  
© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Job Id: **344.1-002417-6**  
Certificate No: **MEDB000001G**  
Revision No: **3**

**Product description.**

- Pilot ladders with: Seizing system type A, clamping system type A, seizing system type B1, seizing system type B2 and clamping system type B2.
- Pilot ladders with steps made of hardwood (beech) and rubber, with 20 mm diam. side ropes made of mildew resistant manila ropes.
- Securing ropes of 28 mm diam. made of mildew resistant manila ropes.
- Steps : 7 - 108
- Lengths: 1.8 metres to 36 metres

**Application/Limitation**

- The examination has only considered the pilot ladder and not the pilot transfer arrangement which shall be verified on-board.
- Maximum length of pilot ladder shall not exceed 36 metres.
- The design assessment is based on IMO Res.A.1045(27) and ISO799-1:2019(E).

**Type Examination documentation**

- DREWIL ENTERSHIP - Technical drawings, Rev.06.
- DREWIL ENTERSHIP - Tests and results, Rev.0 dated 14.05.2020.

**Tests carried out**

- Tests are documented in accordance with ISO799-1:2019(E), Sec.6/ Table 2.

**Marking of product**

- The product to be marked in accordance with ISO799-1:2019(E), Sec. 8.

Form code: MED 201.NOR      Revision: 2020-01      www.dnvgl.com      Page 2 of 2

- Description
- Limitations
- Test Standards
- Marking

# CERTIFICATION AND INSPECTION OF PILOT LADDERS

## Is a Type Approval Certificate (TAC) acceptable?

- › On its own, no....
  - › The TAC is a declaration by the Notified Body that the design of the equipment meets the standard(s)
  - › By itself, it has no validity or meaning
  - › It is NOT a confirmation that the specific piece of equipment complies
    - › Level 04 text, font: Arial, font size 12 font weight: regular
  
- › So, what is required?
  - › The TAC MUST be accompanied by equipment-specific identification, such as the name plate
  - › The TAC Must be accompanied by the Manufacturers Declaration of Conformity
    - › The DOC declares adherence to the criteria stipulated in the TAC
    - › The DOC is linked DIRECTLY to the specific item of equipment through unique identification – serial number

# CERTIFICATION AND INSPECTION OF PILOT LADDERS

**DECLARATION OF CONFORMITY**  
No.: 0188/23

**MANUFACTURER:** DREWIL Entership Sp. z o.o.  
SZKOŁNO 3  
83-304 Pomieczęno, Polska

We hereby declare under our sole responsibility that the product:

**PRODUCT:** WITH DESCRIPTION: Pilot ladder  
18 steps, 6 meters  
with Securing rope 3 meters

**DESIGNATION:** Pilot ladder  
ISO 799-1:2019-S18-L3

**STANDARD No.:** ISO 799-1:2019 (E)

**PRODUCT No.:** 0188/23

**QUANTITY:** 1 pc

**VESSEL NAME:**

To which this declaration relates is in conformity with the following standard(s) or other normative document(s)

ISO 799-1:2019 (E)  
IMO Res. A. 1045(27)  
Marine Equipment Directive 2014/90/EU - MED

and is conform to type as described in the following certificate:

**EC TYPE**  
Examination Certificate No.: MEDB000001G Revision No.3  
DATE OF ISSUE: 15/07/2020

**QS Certificate**  
of Assessment Certificate No.: MEDD000000N  
DATE OF ISSUE: 15/07/2020

**DATE OF PRODUCTION:** 02/2023

**DATE OF ISSUE:** 21/02/2023

**IDENTIFICATION No.:** 0575/2023  
NOTIFIED BODY: DNV

**MANUFACTURER WEB PAGE:** QR CODE

**DREWIL ENTERSHIP**  
3 Szkołno Street  
83-305 Pomieczęno, POLAND  
+48 58 681 50 21  
info@drewilentership.com  
drewilentership.com

**IMO SOLAS No.0575** **RMRS** **DNVGL**

**DNV·GL**

**EC-TYPE EXAMINATION CERTIFICATE (MODULE B)**

Certificate No.: MEDB000001G  
Revision No.: 3

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

**This is to certify:**  
That the Pilot ladder with type designation(s) Pilot Ladder ISO799-1-S7-L3 to ISO799-1-S108-L40 Issued to **DREWIL ENTERSHIP Sp. z o.o. Pomieczęno, Poland** is found to comply with the requirements in the following Regulations/Standards: Regulation (EU) 2019/1397, item No. MED/4.49. SOLAS 74 as amended, Regulations V/23 & X/3, IMO Res. A.1045(27), IMO MSC/Circ.1428, ISO799-1:2019(E).

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-07-14**.  
Issued at **Høvik** on **2020-07-15**

DNV GL local station:  
**Gdansk CMC**

Approval Engineer:  
**Oystein Hovde**

Notified Body No.: **0575**

for **DNV GL AS**  
Digitally Signed By: **Torodd Sjøvåg**  
Location: **DNV GL Høvik, Norway**  
on behalf of  
**Roadt Vårheim**  
Head of Notified Body

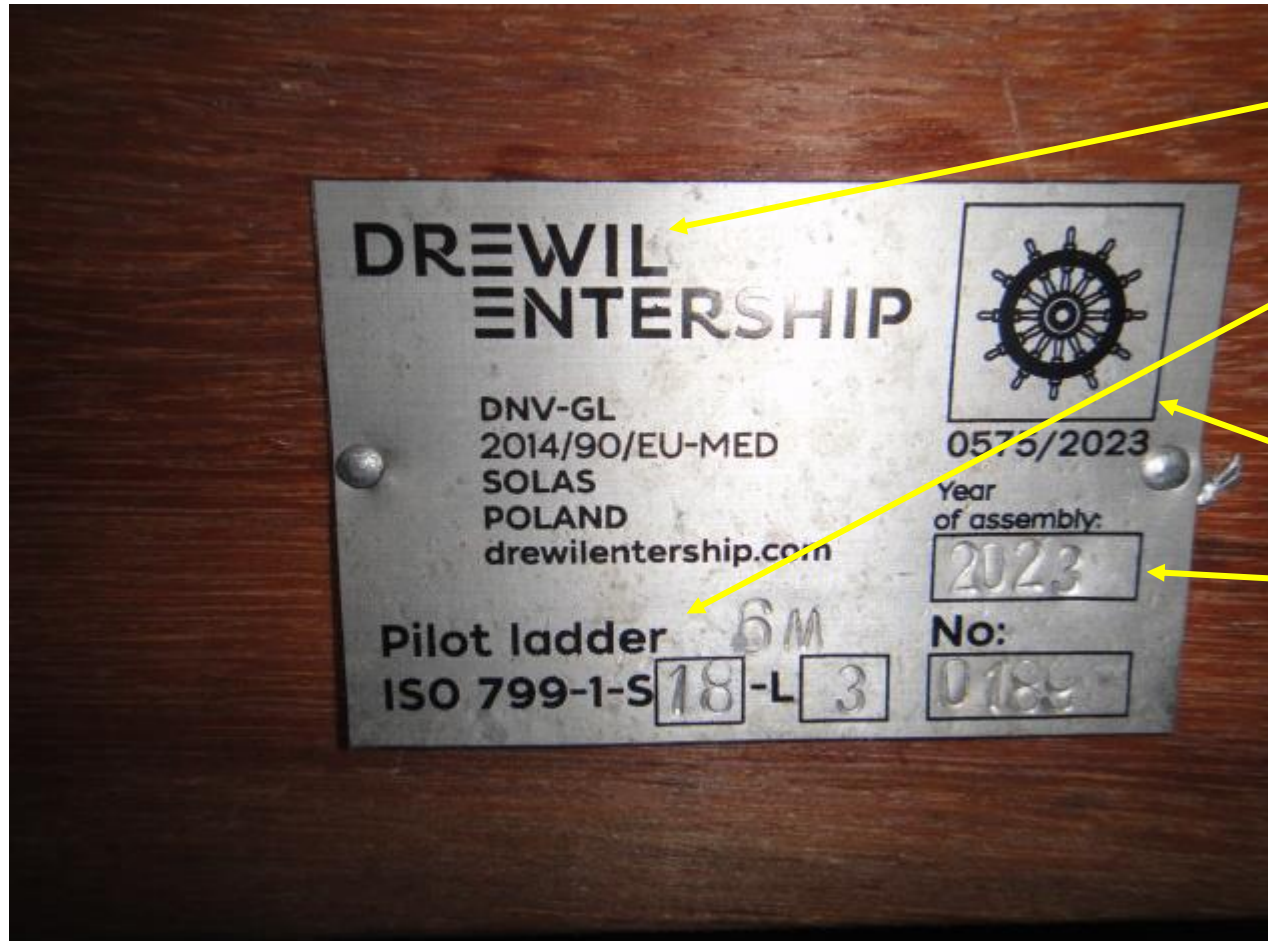
The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully controlled with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.









**LEGAL DISCLAIMER:** Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Form code: MED 201.MCR      Revision: 2020-01      www.dnvgl.com      Page 1 of 2

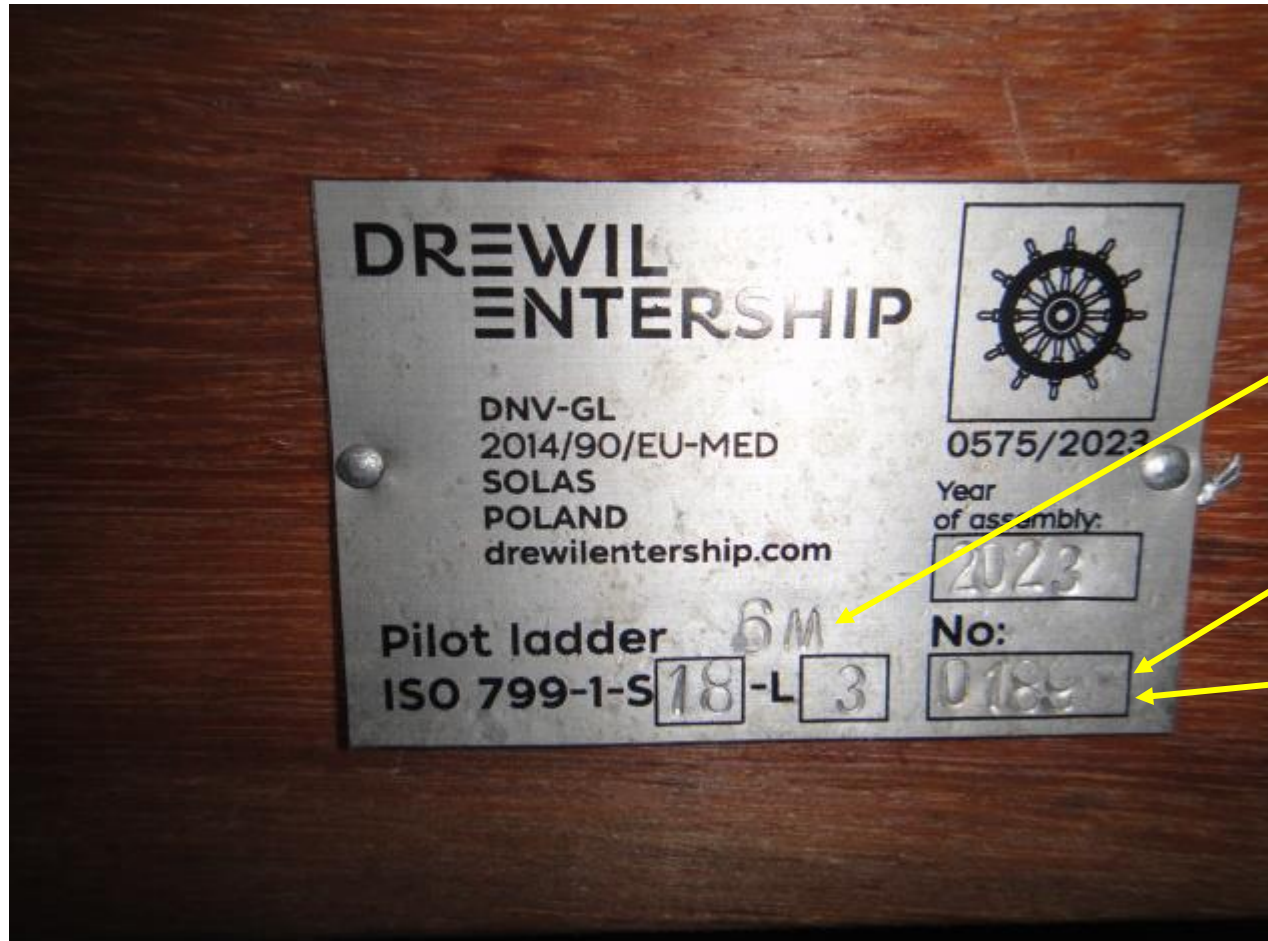
© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

# CERTIFICATION AND INSPECTION OF PILOT LADDERS



DECLARATION OF CONFORMITY No.: 0188/23	
<b>MANUFACTURER:</b>	Drewil Entership Sp. z o.o. Szkołna 3 83-304 Pomieczyño, Polska
We hereby declare under our sole responsibility that the product:	
<b>PRODUCT: WITH DESCRIPTION:</b>	<b>Pilot ladder</b> 18 steps, 6 meters with Securing rope 3 meters
<b>DESIGNATION:</b>	<b>Pilot ladder</b> <b>ISO 799-1:2019-S18-L3</b>
<b>STANDARD No.:</b>	<b>ISO 799-1:2019 (E)</b>
<b>PRODUCT No.:</b>	<b>0188/23</b>
<b>QUANTITY:</b>	<b>1 pc</b>
<b>VESSEL NAME:</b>	
To which this declaration relates Is in conformity with the following standard(s) or other normative document(s)	
	<b>ISO 799-1:2019 (E)</b> <b>IMO Res. A. 1045(27)</b> <b>Marine Equipment Directive 2014/90/EU - MED</b>
and is conform to type as described in the following certificate:	
<b>EC TYPE Examination Certificate No.:</b>	<b>MEDB000001G Revision No.:3</b> DATE OF ISSUE: 15/07/2020
<b>QS Certificate of Assessment. Certificate No.:</b>	<b>MEDD000000N</b> DATE OF ISSUE: 15/07/2020
<b>DATE OF PRODUCTION:</b>	<b>02/2023</b>
<b>DATE OF ISSUE:</b>	<b>21/02/2023</b>
<b>IDENTIFICATION No.:</b>	<b>0575/2023</b>
<b>NOTIFIED BODY</b>	<b>DNV</b>
<b>MANUFACTURER WEB PAGE: QR CODE</b>	  <b>DREWIL ENTERSHIP</b> DREWIL ENTERSHIP Sp. z o.o. Szkołna 3 83-304 Pomieczyño, POLAND t: +48 58 681 50 21 info@drewilentership.com drewilentership.com
Signature and stamp	
     	

# CERTIFICATION AND INSPECTION OF PILOT LADDERS



CERTIFICATE OF MANUFACTURER No.: 0188/23	
<b>MANUFACTURER:</b>	<b>Drewil Entership Sp. z o.o.</b> Szkołna 3 83-304 Pomieczyño, Polska
<b>CUSTOMER:</b>	<b>NEPTUN SHIP SERVICE LTD. Sp. z o.o.</b> Polska 43 81-334 Gdynia, Polska
<b>PRODUCT: WITH DESCRIPTION</b>	<b>Pilot ladder</b> 18 Steps, 6 meters with Securing rope 3 meters
<b>DESIGNATION:</b>	<b>Pilot ladder</b> <b>ISO 799-1:2019-S18-L3</b>
<b>STANDARD No.:</b>	<b>ISO 799-1:2019 (E)</b>
<b>PRODUCT No.:</b>	<b>0188/23</b>
<b>QUANTITY:</b>	<b>1 pc</b>
<b>VESSEL NAME:</b>	
<b>DATE OF PRODUCTION:</b>	<b>02/2023</b>
<b>DATE OF ISSUE:</b>	<b>21/02/2023</b>
<b>DECLARATION OF CONFORMITY No.:</b>	<b>0188/23</b>
<p>The product is made in accordance with the Quality Management System DREWIL ENTERSHIP Sp. z o.o. Produkt wykonany zgodnie z Systemem Zarządzania Jakością DREWIL ENTERSHIP Sp. z o.o.</p>	
<b>MANUFACTURER WEB PAGE: QR CODE</b>	<p><b>DREWIL ENTERSHIP</b> DREWIL ENTERSHIP Sp. z o.o. Pomieczyño ul. Szkołna 3 83-304 POLSKA</p> <p>Signature and stamp</p>
<b>DREWIL ENTERSHIP</b> 3 Szkołna Street 83-305 Pomieczyño, POLAND +48 58 661 50 21 info@drewilentership.com drewilentership.com	



# CERTIFICATION AND INSPECTION OF PILOT LADDERS

## What can Class do about defects?

- › SOLAS - Part 1 - Chapter V - Safety of Navigation - Regulation 23 - Pilot Transfer Arrangements
  - › This makes it a Statutory matter and affects the Safety Equipment Certification
  - › Defects pose a risk to life
  
- › SOLAS - Part 1 - Chapter I - General Provisions - Part B - Surveys and Certificates - Regulation 6 - Inspection and Survey
  - › An Administration nominating surveyors or recognizing organizations to conduct inspections and surveys as set forth in paragraph (a) shall as a minimum empower any nominated surveyor or recognized organization to:
    - › Require repairs to a ship
    - › When a nominated surveyor or recognized organization determines that the condition of the ship or its equipment does not correspond substantially with the particulars of the certificate or is such that the ship is not fit to proceed to sea without danger to the ship, or persons on board, such surveyor or organization
  
- › Class Surveyors take safety seriously
  - › As a minimum, they will ensure there is at least one functional pilot ladder that can be transferred
  - › Under normal circumstances however, due to availability of this equipment, they will require rectification before departure



03

# Certification of Strong Points



# CERTIFICATION OF STRONG POINTS

## What is he talking about?

- › There are already defects raised relating to securing of ladders.....
  - › Shackles defective
  - › Shackles used on side ropes
  - › Ladders secured to insecure handrails
  - › Winches not secured
  - › The list goes on.....
  
- › These are daily, and unacceptable hazards encountered by pilots
  
- › This one may potentially be a new one

# CERTIFICATION OF STRONG POINTS

## What are the issues?

- There have been a number of cases where PSC inspectors have raised defects relating to the securing points for pilot ladders:

99101	Other safety in general	Other	MLC A.4 3.3.2	17- To be rectified before departure	Pilot ladder fixings are not certified or tested
10101	Pilot ladders and transfer arrangements	Unsafe	SOLAS Ch V Regulation III	17- To be rectified before departure	Pilot ladder not rigged correctly – shackles and securing points, no ID SWL or test certificate
10101	Other safety in general	Other	SOLAS Ch V Regulation III	17- To be rectified before departure	Pilot ladder fixings (shackles and strong points) are not certified and have no declared SWL

# CERTIFICATION OF STRONG POINTS

## What are the issues?

- › This has also been raised recently by Phillips 66 Mooring Masters
  - › What should the SWL be?
  - › Should the SWL be marked (as per lifting gear and mooring eqpt)?
  - › Should this be load tested periodically?
  - › Should it be certified?
  - › Should it be verified by Class?

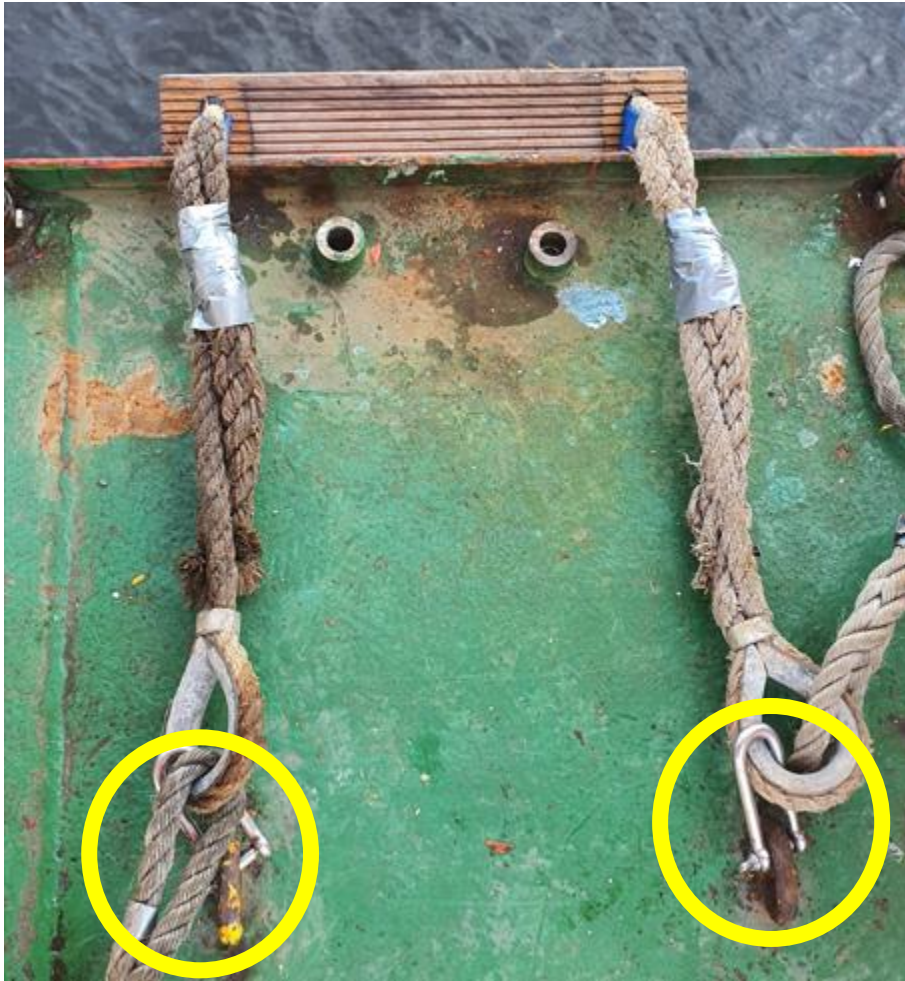
# CERTIFICATION OF STRONG POINTS

## What are the regulations?

- › The securing strong points, shackles and securing ropes should be at least as strong as the side ropes specified in section 2.2 (not less than 18 mm in diameter and have a breaking strength of at least 24 Kilo Newtons per side)
  - › IMO Resolution A.1045(IMO Resolution A.1045(27))
- › Bulwark and pilot ladder secured to deck strong points
  - › IMO MSC.1/Circ.1428
- › Other than verification at new construction there is no defined requirement to periodically test deck strong points, and no requirement for SWL to be marked



# CERTIFICATION OF STRONG POINTS



# CERTIFICATION OF STRONG POINTS

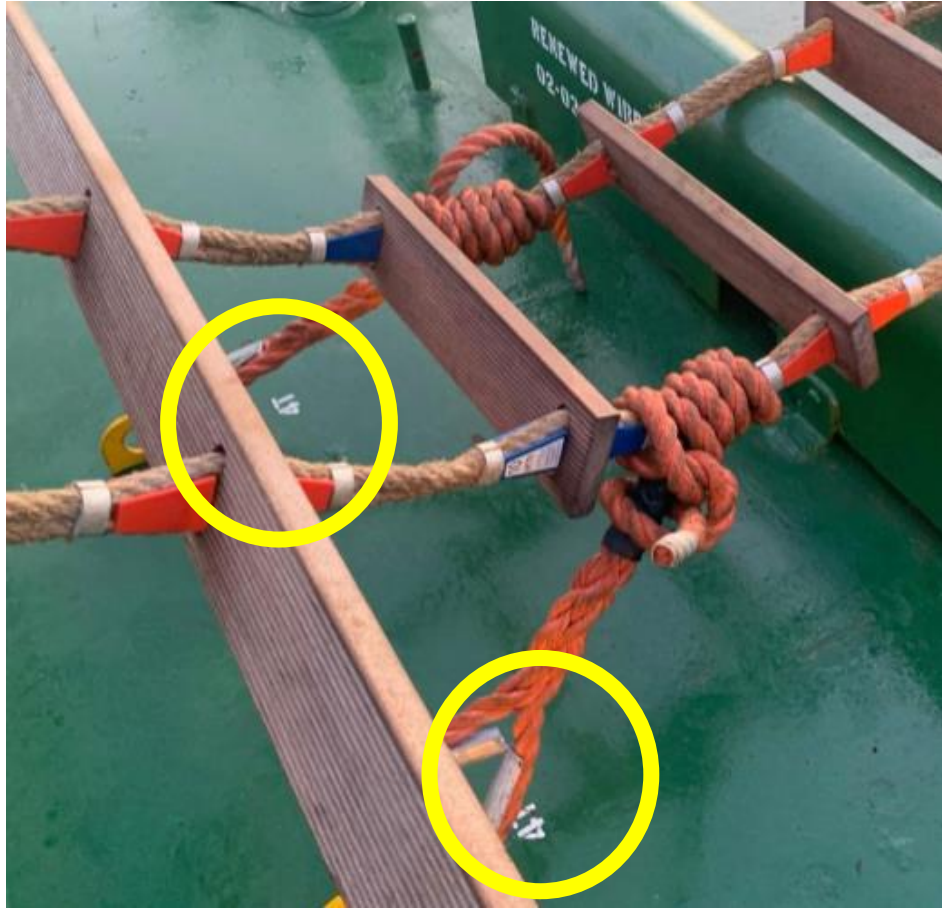




# CERTIFICATION OF STRONG POINTS



# CERTIFICATION OF STRONG POINTS



# CERTIFICATION OF STRONG POINTS

## What does the room think?

- › Do you frequently see certified strong points?
- › Do you question the shackles connected to them?
- › Have you reported this connection?
- › Have you questioned the strength of the strong points?





**BUREAU  
VERITAS**

**Shaping a World of Trust**

[WWW.BUREAUVERITAS.COM](http://WWW.BUREAUVERITAS.COM)



# Session Six– The ISPO Classification Societies Code Implementation and Recent Learnings

Welcome to Mark  
Rodwell-Ball from  
Lloyd's Register

Proudly hosted by

A  
AURIGA  
/





# ISPO Certification: Five years in Australia: key learnings

ISPO Conference 2024   Melbourne   Mark Rodwell-Ball   10 Oct 2024



LR

The logo consists of the letters 'L' and 'R' in a bold, blue, sans-serif font. The 'L' is positioned to the left of the 'R', and they are both contained within a white rectangular box.

# Introduction and about LR

---

## Who is LR?

- We are the world's first marine classification society, founded over 260 years ago.
- Specialise in engineering, technology and certification services for maritime sector.
- We serve clients globally, across 182 countries.
- We are an independent organisation, wholly owned by the LR Foundation.
- LR is not listed on any stock exchange.

## ISPO Certification:

- LR has provided ISPO certification globally for 10+ years and in Australia for 5 years.
- Our global manager is in Greece, with ISPO Auditors in Europe, Middle East, central America and Australia.

## Presenter disclaimer

# In Memoriam

---

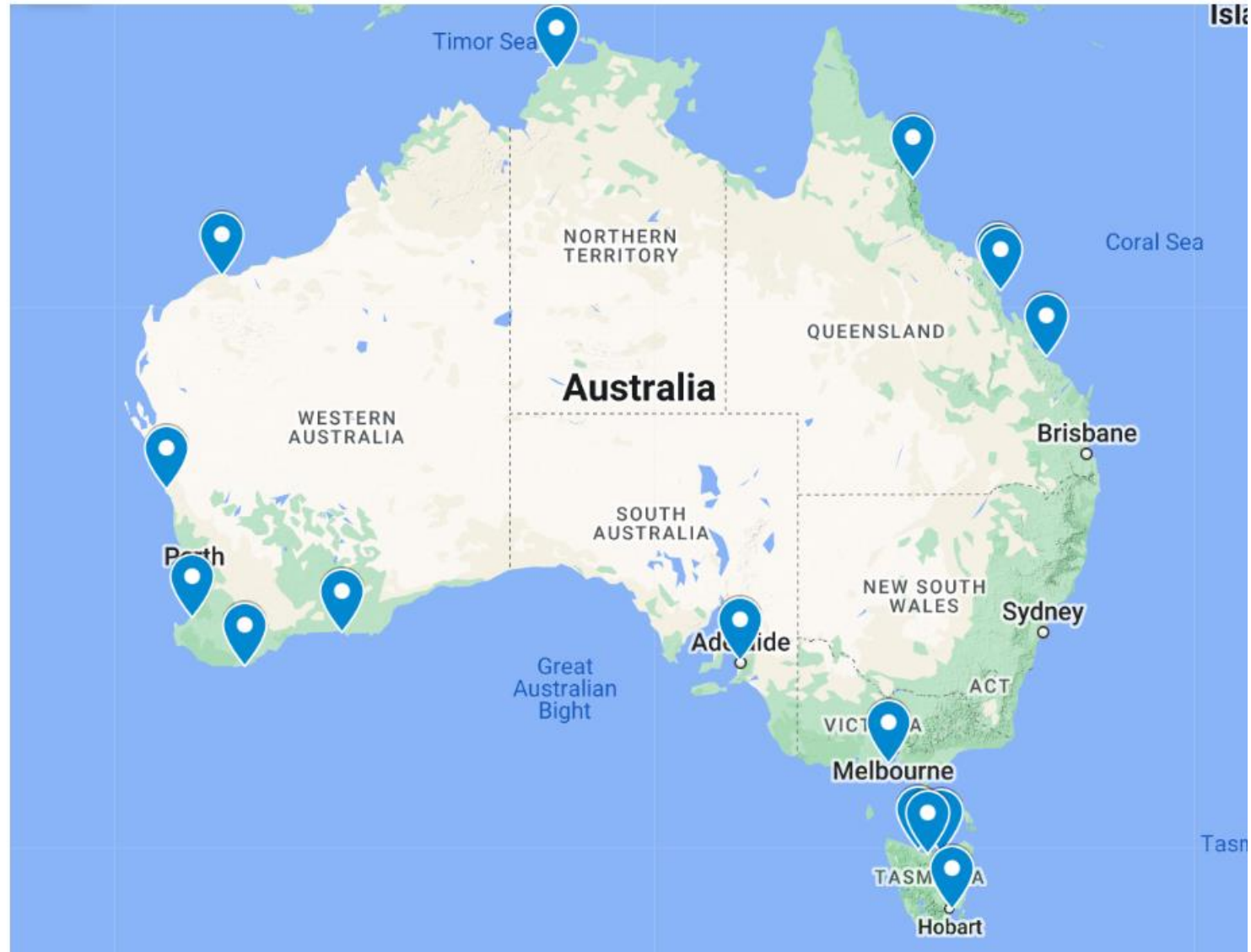




# LR - Global ISPO Auditors



# Australia - Port locations holding ISPO certification with LR



## ISPO data from 5 years: Questions to be explored

---

- When in the certification process do findings arise?
- What are the most frequent categories of findings?
- Are there any obvious trends? (pareto analysis, histogram, etc)?
- Are the findings relating to the *design* of the ISPO management system, or its *implementation*?
- What are the *typical* findings in the most frequent categories?
- Evidence of ‘continual improvement’ across certified organisations over time?
- So what?

# About the ISPO audit data

---



Sanitised and anonymised data obtained from:

- ~50 ISPO Audits (Doc Review, Initial Audit, Annual Audits)
- 15 client organisations
- Five years of ISPO certification services locally
- Involving four LR ISPO Auditors
- Across Australia and commencing in PNG
- 284 findings (Observations, Non-Conformances or Major NCs)
  - Split of gradings: ~ 70% Observations, 29% NCs and 1% MNC

# Categories of findings: Linked to the ISPO Code



**International Standard  
for  
maritime Pilot Organizations**

**The Code**

- Functional Requirements
- Documentation Requirements
- Management Responsibility
  - Designated Person
- Recruitment, Training & Qualification
- Pilot Operations
- Logistic Operations
- Emergency Preparedness
- Customer Related Processes
- Risk, Incident and Accident Management
- Measurement, Analyses and Improvement

# Example of sanitised, anonymised data captured



	A	C	D	E	F
1	Scope	ISPO Code ref	ISPO Code section	Summary Finding	Design or Implementation
2	Initial Audit	6	Recruitment, Training & Qualification	Personnel piloting competence matrix needed	Design
3	Initial Audit	10	Customer Related Processes	Arrangements for review of customer feedback not effective	Implementation
4	Initial Audit	11	Risk, Incident and Accident Management	Incidents not fully reported to completion	Implementation
5	Initial Audit	11	Risk, Incident and Accident Management	Risk assessments to include wind effect calculations on vessel profiles	Implementation
6	Initial Audit	5	Management Responsibility	Roles responsible for internal audit not effectively documented	Design
7	Initial Audit	9	Emergency preparedness	Drill matrix not aligned with relevant procedure	Implementation
8	Annual Audit	4	Documentation Requirements	Obsolete document in recruitment process	Implementation
9	Initial Audit	5.3	Designated Person	Designated Person not clearly identified in management system	Design
10	Annual Audit	12	Measurement, Analyses and Improvement	KPI records not effectively completed	Implementation
11	Annual Audit	6	Recruitment, Training & Qualification	Key personnel training not complete prior to commencing role	Implementation
12	Annual Audit	4	Documentation Requirements	Links between referenced documentation ineffective	Design
13	Annual Audit	6	Recruitment, Training & Qualification	Recent changes to licencing requirements not implemented	Design
14	Doc review	3	Functional Requirements	Environmental objectives not stated in management manual	Design
15	Doc review	5.3	Designated Person	Designated Person not clearly identified in management system	Implementation
16	Doc review	4	Documentation Requirements	Links between referenced documentation ineffective	Design
17	Doc review	1.2.3	Mandatory rules and regulations	Applicable licencing requirements not referenced in management manual	Design
18	Doc review	4	Documentation Requirements	Links between referenced documentation ineffective	Design



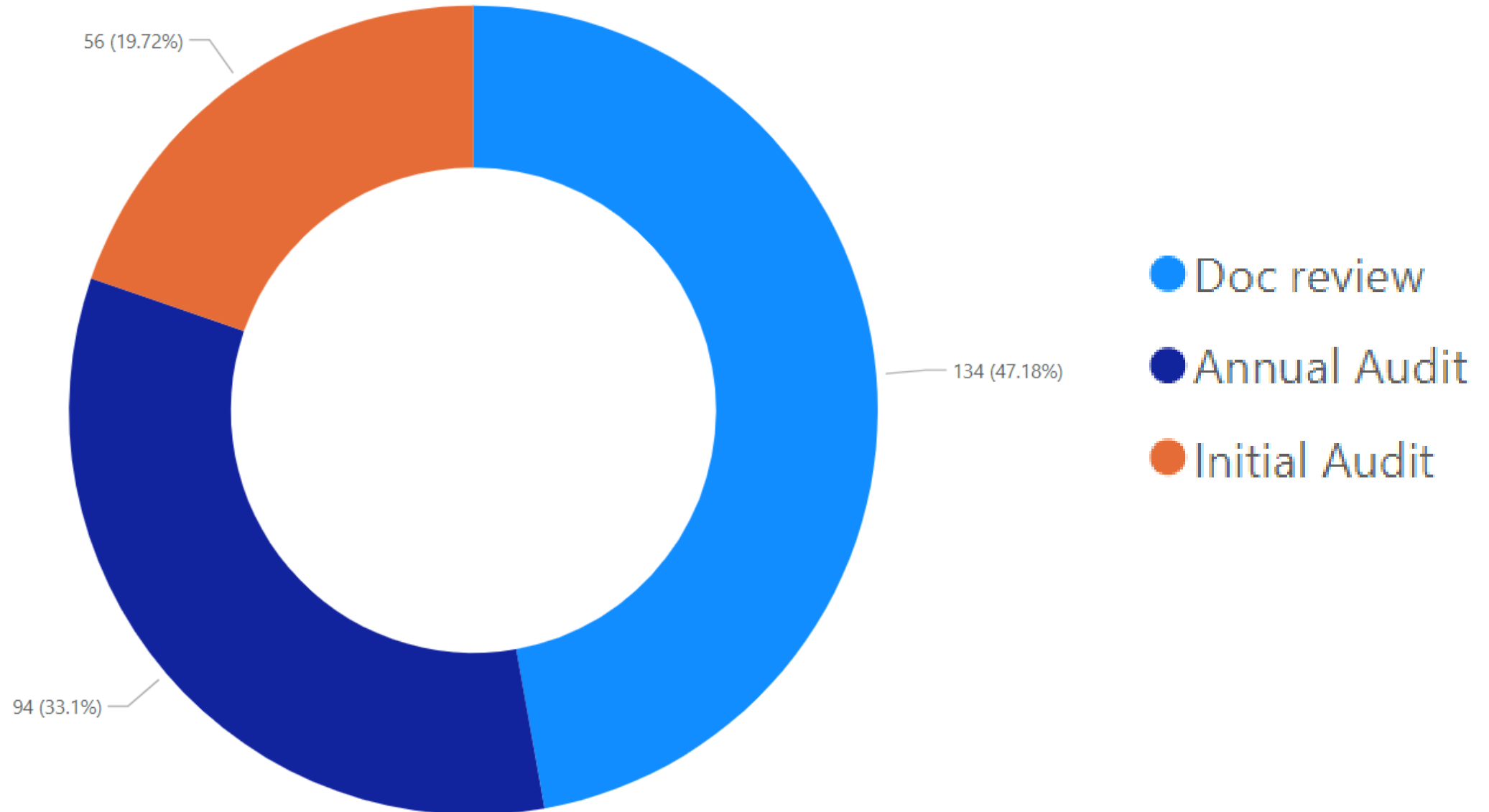
## Word cloud of categories



functional\_requirements management\_responsibility  
documentation\_requirements  
recruitment\_training\_qualification  
pilot\_operations accident designated\_person  
emergency\_preparedness  
rules\_regulations measurement\_analysis\_improvement  
customer\_processes  
risk\_incident\_  
logistic\_operations



# When do findings arise?

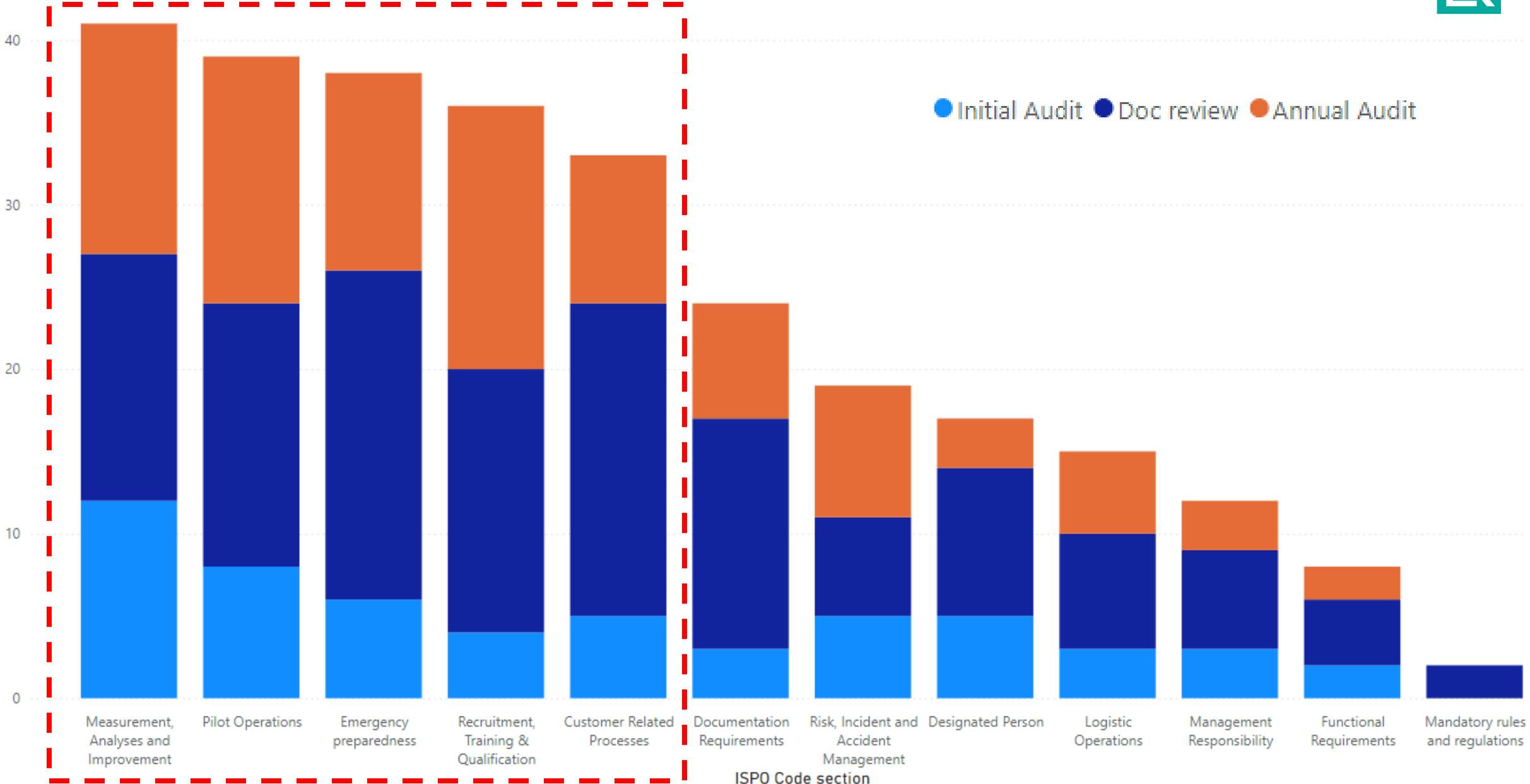


# Categories, frequency and audit types

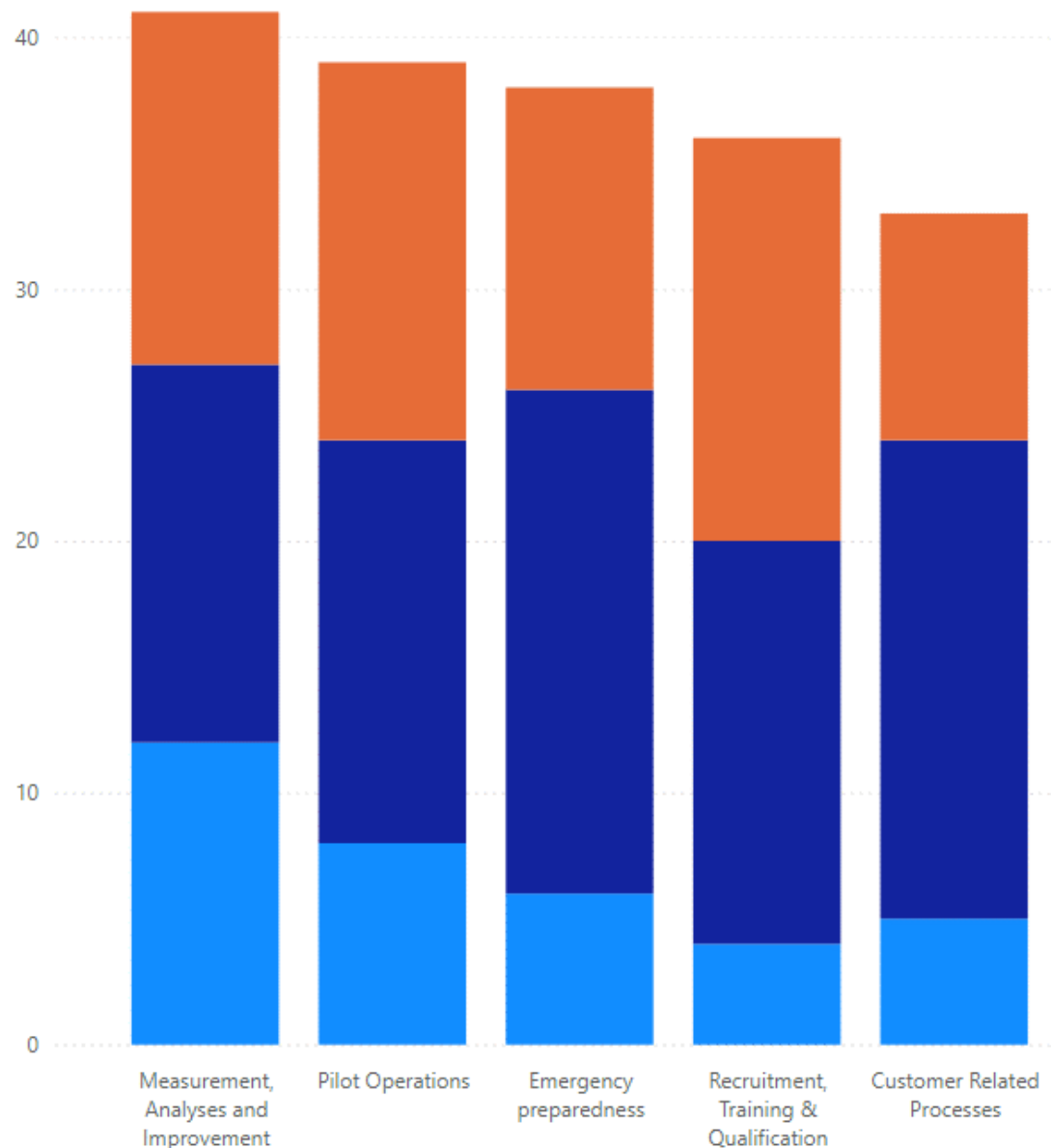


ISPO Code section	Initial Audit	Doc review	Annual Audit
Measurement, Analyses and Improvement	12	15	14
Pilot Operations	8	16	15
Emergency preparedness	6	20	12
Recruitment, Training & Qualification	4	16	16
Customer Related Processes	5	19	9
Documentation Requirements	3	14	7
Risk, Incident and Accident Management	5	6	8
Designated Person	5	9	3
Logistic Operations	3	7	5
Management Responsibility	3	6	3
Functional Requirements	2	4	2
Mandatory rules and regulations		2	

# Histogram of results



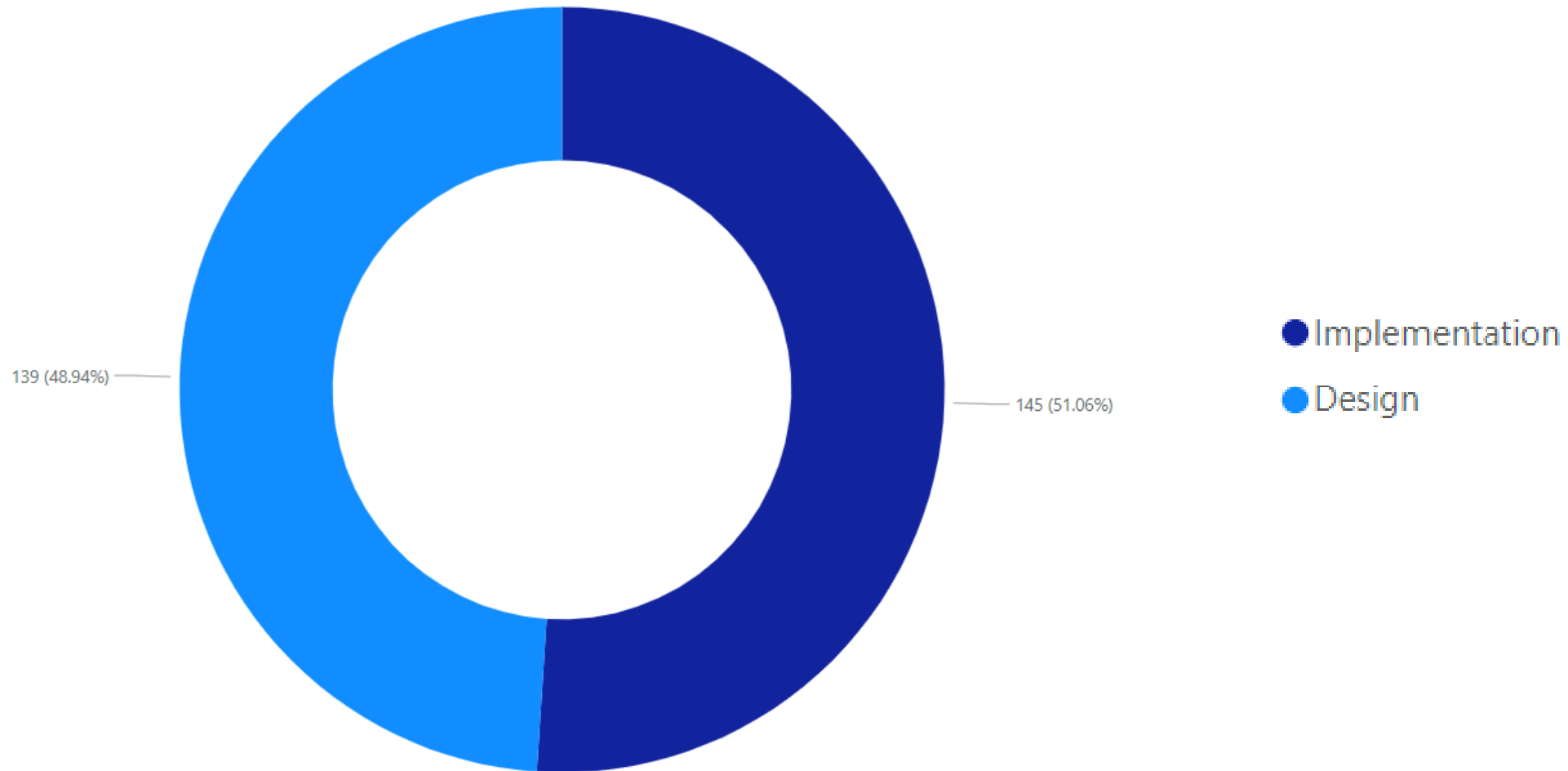
# Pareto analysis of a kind...



Categories comprising ~66% of all findings:

- Measurement, Analyses and Improvement
- Pilot Operations
- Emergency Preparedness
- Recruitment, Training & Qualification
- Customer Related Processes

# Do findings relate to design of system or implementation ?





# Top five categories of findings

# Top five categories of findings – typical narrative

---

## 1. Measurement, Analyses and Improvement - Typical narrative:

### Internal audits:

- *Not adequately specified in management system*
- *Not conducted, or not conducted at required interval*
- *Audits not recorded*
- *Audits insufficient in scope or depth*
- *Findings not actioned by Management*

### Management Review:

- *Not conducted, or not conducted at required interval*
- *Interval for management review not defined in management system*

# Top five categories of findings – typical narrative cont...

---



## 2. Pilot Operations - Typical narrative:

- *Portable Pilot unit (PPU) procedures not stated in management system*
- *PPU system and procedures out of date*
- *Vessel Traffic Services (VTS) communication protocol not formalised*
- *Communication arrangements with VTS not effectively documented*
- *Communication / consultation with key stakeholders not effective*



# Top five categories of findings – typical narrative cont...

---



## 3. Emergency Preparedness - Typical narrative:

- *Emergency preparedness requirements not adequately defined*
- *Emergency requirements not implemented*
- *Emergency procedures not available at site location*
- *Drill requirements not effectively defined*
- *Required drills not completed, overdue or not recorded*
- *Outcomes and learnings from emergency drills not captured*

# Top five categories of findings – typical narrative cont...

---



## 4. Recruitment, Training & Qualification – Typical narrative:

- *Maintenance of Pilot competencies ineffective*
- *Medical requirements not defined with reference to National requirements*
- *Requirements for ongoing medicals and fitness requirements not clearly stated*
- *Recruitment policy and requirements not defined / not effective*
- *Revalidation of required Pilot competencies overdue*

# Top five categories of findings – typical narrative cont...

---



## 5. Customer Related Processes – Typical narrative:

- *Interfacing with customers/stakeholders not effective*
- *Analysis of customer feedback not performed*
- *Process for implementing new services not sufficiently defined*

## 6. Bonus category: Designated Person – Typical narrative:

- *Designated Person not clearly identified in management system*
- *Designated Person responsibilities not sufficiently defined*

**So What...?**  
**(Is this even relevant?)**

““

*“ That which is measured improves.*

*That which is measured and reported  
improves exponentially’*

- Karl Pearson, Mathematician, 1857 - 1936

## Relevance of top five categories

Looking back at 2023 ISPO conference showcase of accidents and incidents:

- V DUE – Liverpool UK, November/December 2016
- FREMANTLE HIGHWAY – Eemshaven, Holland, July/August 2023
- BOW JUBAIL, Netherlands, 2018
- SEA EMPRESS, Wales – 1996
- etc

Common themes emerging from the resulting investigations include:

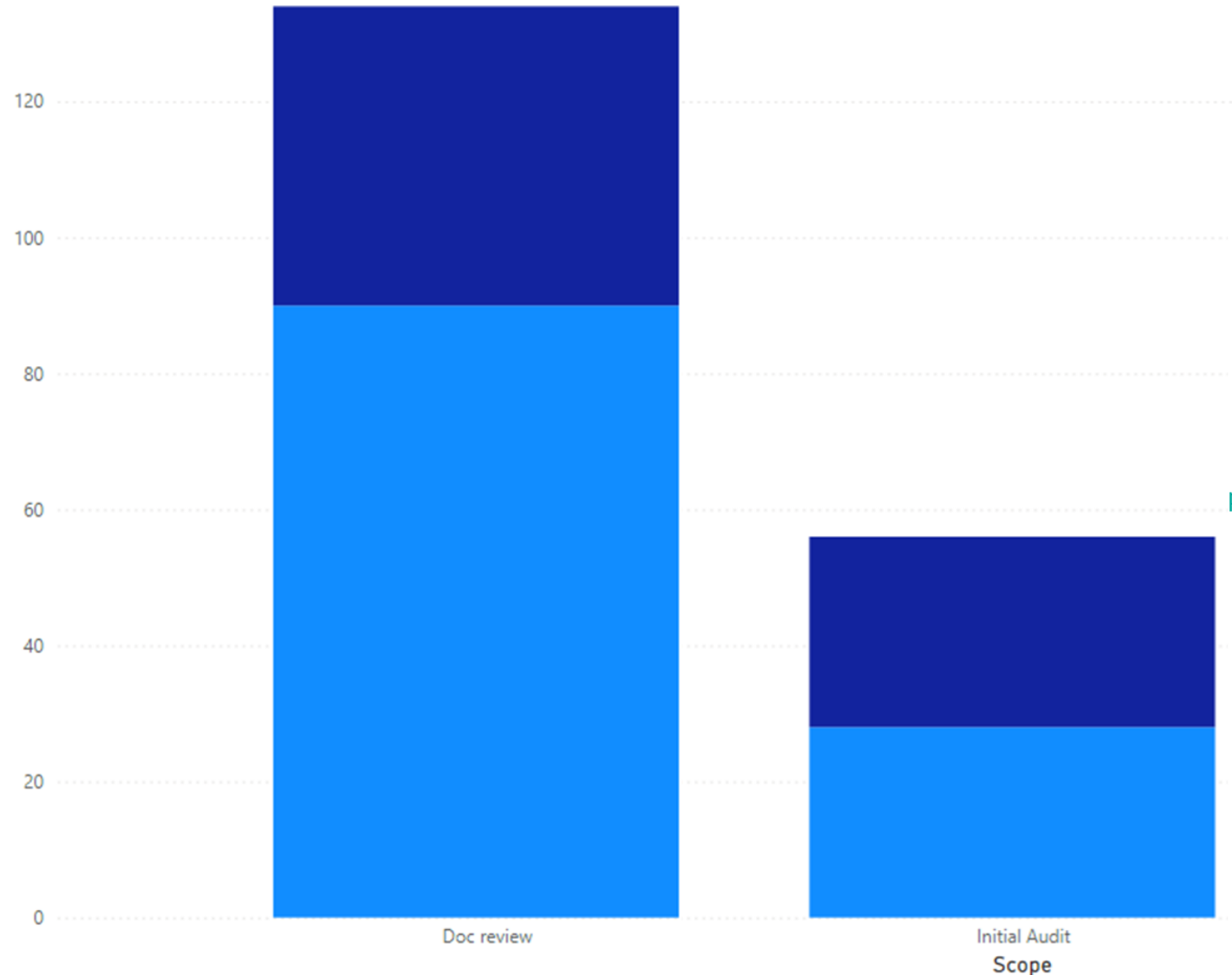
- ***Emergency Preparedness, Pilot Training, Management involvement, Pilot Operations (communication)***

Therefore: it can safely be concluded that common ISPO findings are directly relevant to real world experience!



**Evidence of  
continual improvement?**

# Evidence of continual improvement?



Scope	Design	Implementation
Doc review	90	44
Annual Audit	21	73
Initial Audit	28	28

- Design
- Implementation





***“Continuous improvement is better than delayed perfection.”***

**- Mark Twain, Writer, 1835 - 1910**



Questions  
and  
Thank you

RR



**Mark Rodwell-Ball, Lloyd's Register**

Project Manager, Marine and Offshore Australia

Manager, Marine Management Systems, Australia NZ, PNG

T +61 (0)7 3088 3606 M +61 (0)412 533 326

E [mark.rodwell-ball@lr.org](mailto:mark.rodwell-ball@lr.org)

Proudly hosted by

^  
AURIGA  
/

# Questions & Answers

