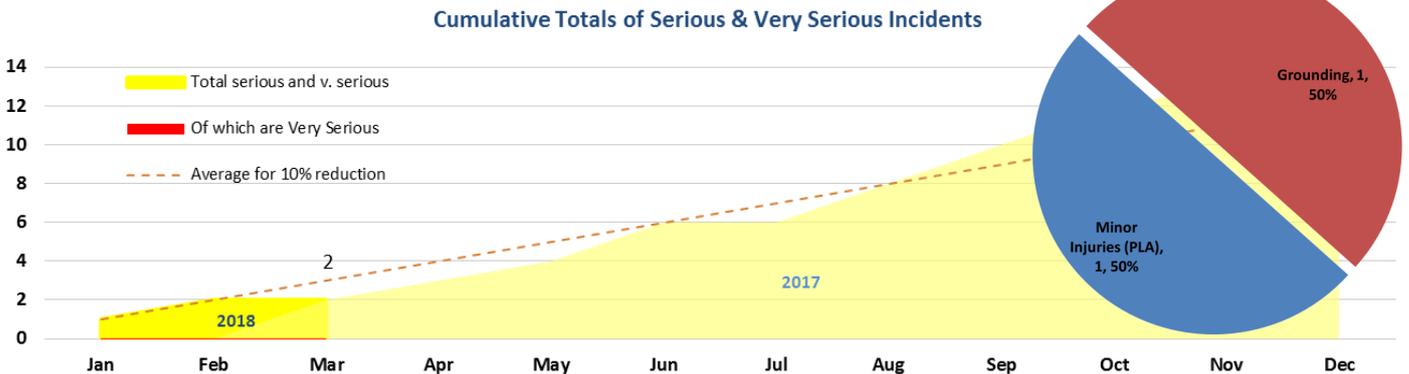




Quarterly report of the marine Safety Management System (SMS) performance and incident statistics Q1 2018

Serious and very serious incidents

There have been 2 serious incidents so far in 2018—which is below the trend line to achieve a 10% reduction on last year



Definitions

Minor : do not affect persons and/or have a negligible cost implication (<£5K)

Serious: may involve slight/significant injury to persons and/or have a moderate cost implication (<£500K)

Very Serious: reported to the Board, which involve serious injury or fatality and/or have a serious/major cost implication (>£500K)

- Our target is **12** or fewer Serious or Very Serious incidents over the course of the year to achieve a 10% reduction on 2017.
- **2** serious incidents occurred in Q1 the same as this period in 2017.
- Overall, there have been 11 fewer occurrences in 2018 compared with this time in 2017—a **reduction of nearly 14%**

Commercial Shipping

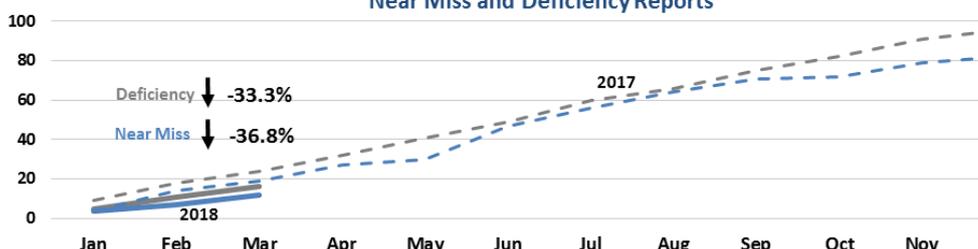
- POLARIS shipping movements are **up 2.2%** compared to this time last year, and the overall number of reports are **down 22%**.

Inland Waterways

- Passengers numbers are **down 15%** compared to this time last year however passenger vessel incidents are **down 25%**
- Non-passenger vessel incidents are **36% higher** than this time last year, which may be indicative of the increase in preject-related traffic in Central London.

- Near Miss reports are unfortunately **37% lower** than this time last year.
- Deficiency reports are 33% lower, which suggests there have been fewer breakdowns and malfunctioning equipment.
- There have been **7** Pilot Ladder non-compliance reports so far in 2018—the same as this time last year.

Near Miss and Deficiency Reports



Definitions

Incident: All incidents, including breakdowns which result in an incident or near miss occurring.

Deficiency: Breakdowns which did not lead to an incident or near miss. For Commercial Shipping, these are reported to the Maritime & Coastguard Agency (MCA) if they fail to comply with the requirements of international conventions (i.e. SOLAS, MARPOL, STCW)

Near Miss: An instance of a vessel or vessels narrowly avoiding an Incident.

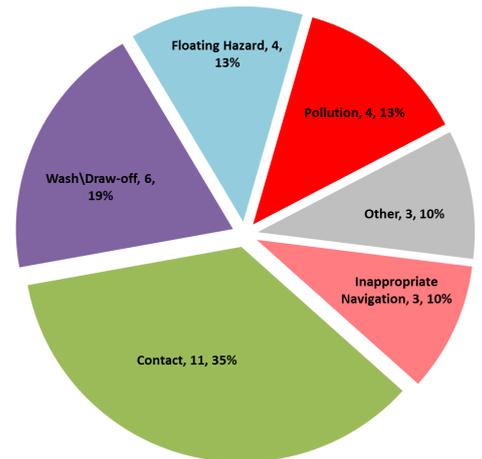
A closer look at the reports so far in 2018



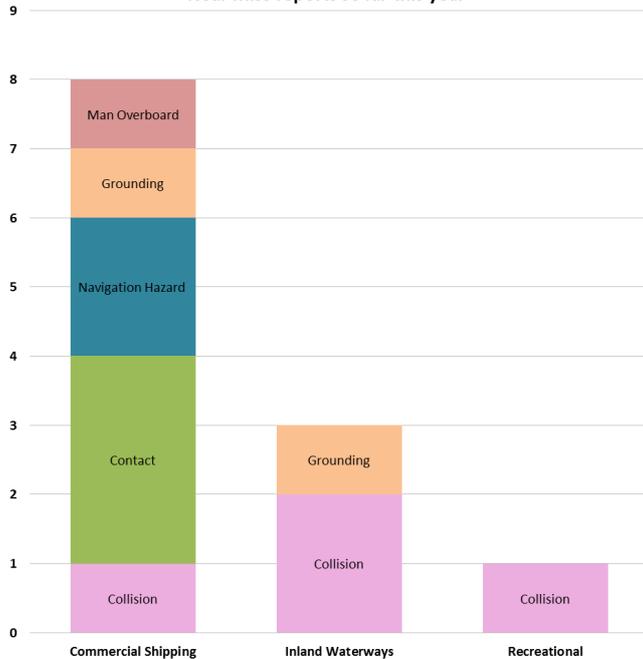
There have been 41 incidents, 12 near misses and 16 deficiencies so far in 2018, and 1 H&S Occurrence (afloat) involving PLA staff, giving a total of **70** — **11 less** than this time last year

- ‘Contact’ remains the most common type of incident and near miss. Whilst there are a number of ‘Near Miss’ collisions, there are no incidents in this category.
- There are twice as many pollution incidents (2 to 4), all of which have been in the Lower District involving a small hydraulic leak, iridescence around discharging tankers and a lorry pumping out into the river.
- There are 3 times as many inappropriate navigation incidents (1 to 3) so far in 2018, which include erratic navigation, leaving a lock close to a passing vessel and lack of a PEC Ship Towage Tug Endorsement.

Top 6 incident categories so far this year



Near Miss reports so far this year



How can you report a Near Miss or Incident?

- Reporting a near miss today may avoid an incident tomorrow. Report anything that is considered dangerous.
- Inform London VTS on the appropriate Port Working Frequency.
- On the [PLA Website](#). Click ‘Contact Us’ and complete a report form.
- Via the PLA App



Be aware that Thames Byelaws require the master of a vessel to report any incident or accident.

Incident Investigation Performance

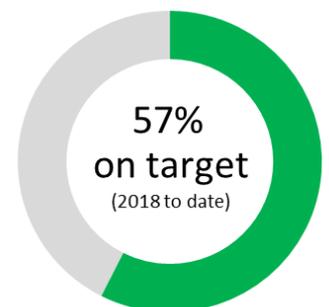
Minor Incidents

- Our target for completing minor incident investigations is 4 weeks.
 - ◊ We have achieved our target for **57%** of investigations so far in 2018, which compares to 55% which we achieved in 2017.

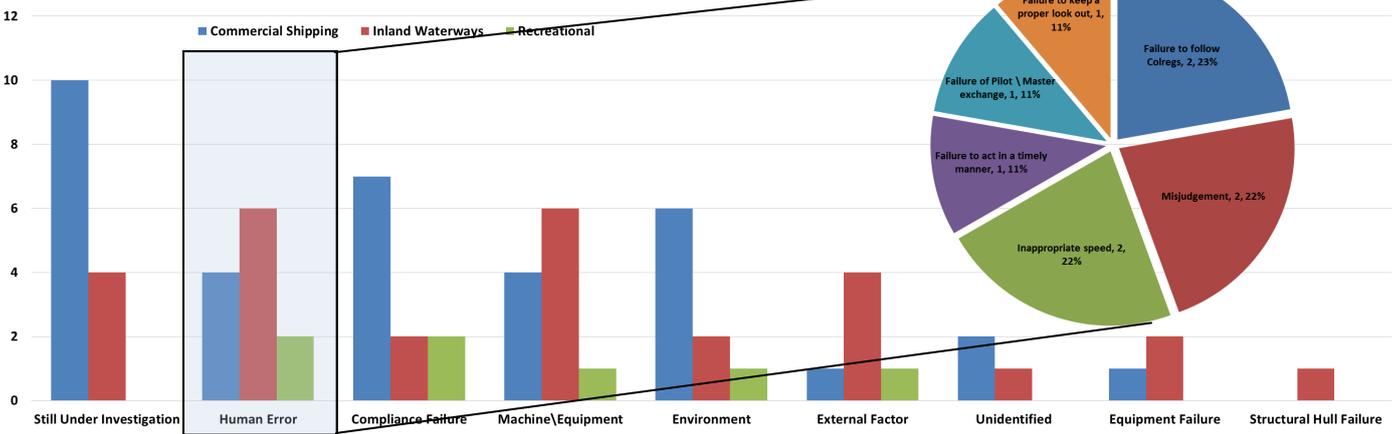
Serious / Very Serious Incidents and Prosecutions

- We aim to complete the initial Harbour Master’s Investigation Report for serious or very serious incidents within 6 weeks and complete the actions from the investigation and close out the incident after 10 weeks. Where prosecutions are involved, we also aim to pass the appropriate documentation to our legal team within 10 weeks of the incident.
- 1 out of 2 serious incidents in 2018 has missed the 10-week closeout target, and the other remains under investigation.
- We are considering prosecution for 1 incident, which remains under investigation.

Incident Closeout KPI



Causal analysis — All occurrences in 2018



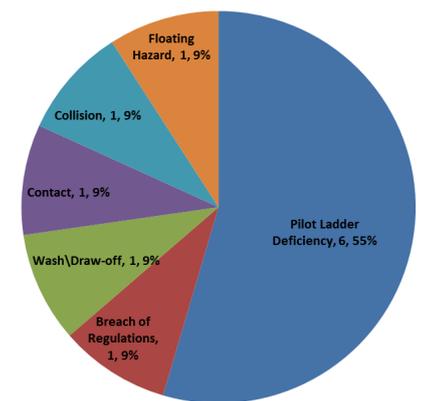
Human Error

- The cause of over **17%** of all occurrences so far this year are labelled as Human Error, however this proportion is **down by 8%** compared to this time in 2017.
- Inland Waterways vessels account for **50%** of all Human Error occurrences. The top Causal Factors within Human Error are Failure to Follow Colregs and Inappropriate Speed.

Compliance Failure

- **16%** of all occurrences are identified as Compliance Failure, which are failures of a Company's, Ship's or Club's procedures or Safety Management System which has lead to an incident occurring. This proportion is **down 16%** and almost half the number compared to this time last year.
- Commercial Shipping accounts for the biggest proportion of Compliance Failures—**64%** of them. This is due to Port State Deficiencies, Pilot Ladder Deficiencies, etc. being categorised under this Causal Factor.
- The number of reported Pilot Ladder Deficiencies is similar to this time last year.

Compliance Failure



Machine / Equipment

- The cause of around **21%** of reports (15) this year are labelled as Machine, Equipment or Hull Failures. This is almost 50% lower than this time last year.
- These are mainly main engine failures (54%) and an additional 15% are mooring line failures.
- Of the 13 reports caused by the above breakdowns, 33% (24%) resulted in Incidents, 20% (16%) resulted in Near Misses and the other 47% were only labelled as Deficiencies—and therefore had little impact. Compared to last year, there is a change to more deficiencies but fewer incidents and near misses.

Marine Debris

- **40%** of all breakdowns of Inland Waterways vessels since 2015 have been caused by floating river debris—and the number of incidents have increased recently.
- The most common type of debris is rope—accounting for over half of the debris we've recorded. However, in some cases the debris is unidentified and so the origins cannot be traced.
- Marine debris not only creates a safety risk, but is also detrimental to the environment and we will shortly be involving river users in a workshop to look at ways to:
 - ◊ **Eliminate** marine litter by stopping it entering the river—can we improve housekeeping? Can we recycle ropes?
 - ◊ **Minimise** the likelihood of litter causing a problem—how can we better identify litter, and capture and retrieve it before it damages vessels? What protection can be used so that propellers and jets are less likely to be damaged?



The port-wide risk assessment and hazard reviews



The top 5 hazards in the Port-wide Risk Database

1. Contact - Standard Vessel During Transit (Middle District)
2. Swamping—Below Gravesend (Lower District)
3. Collision - Vessel at High Speed (Middle District)
4. Collision—Warp / Oaze Area (Estuary)
5. Collision—Passenger Vessel (Middle District)

An overview of our Hazard Reviews in Q1 2018

Lower Register:

'Ship Towing Operations' and 'Vessel Manoeuvring off Tilburyness' have been the focus of the reviews so far this year and were given detailed reviews following recent incidents and trends through 2017.

Throughout the reviews, a number of hazards have been merged with others to reduce duplication.

Upper Register:

'Contact – Richmond Lock and Weirs' was developed via the use of a new interactive 'Risk Bowtie' method following a number of near misses with the weir gates in recent months. This hazard then made 'Contact - Vessels manoeuvring in Lock' redundant and therefore it was archived.

Wash/Draw off - Passing Traffic has undergone a detailed review, due to a number of new high speed vessels operating. There are also additional construction sites on the river which are sensitive to wash. As a result, the frequency of this hazards was increased.

Pollution - Oil / Noxious Substance has also undergone a detailed review. There is additional traffic (both passenger and freight which may make a pollution incident more likely. More worksites along the river may also increase the likelihood of pollution from cranes and other hydraulic equipment. There is also an increased focus on environmental issues such as Air Quality, which may influence the significance of this hazard.

Navigation Hazard - Driftwood / Floating Hazard / Vessel Adrift has undergone a detailed review, due to a number of incidents over the last 12 months and a trend analysis on breakdowns – biggest cause being river debris. (see 'Marine Debris' on page 3)

The increased amount of works on the river has the potential to create more river debris.

Our port-wide risk assessment

The Port Marine Safety Code requires that all ports must base their management of marine operations (i.e. their powers, policies, plans and procedures) on a formal assessment of the hazards and risks to navigation within the port. Furthermore, port authorities must maintain a formal Safety Management System (SMS) developed from that risk assessment.

Our risk assessment is split into 4 'registers':

- Upper (Tedding ton to Putney)
- Middle (Putney to Dagenham)
- Lower (Dagenham to Sea Reach 1)
- Estuary (Sea Reach 1 to Outer Limits)

so that river topography, traffic and local conditions can be taken into account when assessing risks.

NRAWG—Navigational Risk Assessment Working Group

In meeting its obligations under the Port Marine Safety Code, the Port of London Authority (PLA) maintains a navigational Safety Management System (SMS) based on formal risk assessment. The Navigational Risk Assessment Working Group (NRAWG) is the vehicle for that involvement.

In addition to PLA staff, this process involves using the knowledge and experience of practising River users, stakeholders and other interested parties when relevant.



- Make sure your intentions are made very clear to other vessels and people
- Never assume – always remain alert and speak-up if you suspect a problem
- Ensure the *whole* crew know what the correct procedures should be

Find out more at www.pla.co.uk/humanfactors/

Our new Marine Safety Plan

The previous Marine Safety Plan ended in 2017 after its 3 year period. A new 3 year plan has been developed for 2018 through to the end of 2020.

As required by the Port Marine Safety Code (PMSC), the PLA publishes its Marine Safety Plan for the conduct of marine operations in the Port of London every three years.

What is our Marine Safety Plan about?

The Plan commits the PLA to undertaking the proper management and regulation of marine operations within the scope of its powers and authority. It includes targets and objectives we have set ourselves which represent the PLA's commitment to reducing incident numbers, to continuously improve the management of marine safety and toward achieving zero harm.

What objectives have we set ourselves in respect of marine safety?

Our incident reduction targets include

- Reduce the number of serious marine incidents by 10% every year, based on the number at the start of the plan.
- Reduce the number of inland waterway, non-passenger vessel incidents by 10% every year, based on the number at the start of the plan.
- Increase the number of near miss reports by 10% year-on-year.

We also intend to initiate a safety campaign aimed at improving the Port's safety culture, focussing on reducing the number of incidents caused by breakdowns.

The Marine Safety Plan also shows how we intend to fulfil the PLA's [Navigational Safety Policy](#).

Visit the Safety Management Systems webpage to find:

- Our Policies, Marine Safety Plan and SMS Manual
- Incident Investigations, Data and other SMS Reports
- Guidance on Risk Assessments
- Our ongoing and previous public consultations

www.pla.co.uk/Safety/Safety-Management-Systems

Recent PLA Safety Bulletins

[No.1 of 2017 Navigating in Close Proximity to Piers, Jetties and Other River Structures](#)

Following recent incidents involving passenger vessels and small craft, the PLA has identified some safety issues, which are of relevance to Masters and Operators of vessels on the tidal Thames and especially those operating smaller vessels within central London.

[No.2 of 2017 Compliance with Closed Arch Signs](#)

There has been an increasing number of incidents involving recreational vessels navigating through Richmond Lock, Weir and Footbridge while the weirs are being lowered or raised. The most recent incident occurred in May this year, where a Rowing Eight ignored the Closed Arch Signs at the behest of an accompanying coaching launch while the weir gates were in the process of being lowered.

[No.3 of 2017 Lifejacket Crotch Straps](#)

The PLA's ongoing review of lifejacket safety has bought about a change in policy regarding the use of crotch straps for PLA employees.

Enforcement¹

A summary of the enforcement carried out this quarter, which can be from education and advice, to informal verbal warnings and formal written warnings, through to action in the Courts.

- Various educational meetings have been had between harbourmasters and river users on a variety of subjects, including keeping a proper lookout (Rule 5 of the Colregs), the responsibilities of crossing vessels (Rule 9 of the Colregs and Thames Byelaw 24) and on our incident reporting requirements.
- A number of educational letters have been sent regarding the importance to maintaining secure moorings, regarding close quarter situations which involved inappropriate navigation or not navigating on the starboard side of the channel, and the importance abiding by local Byelaws.
- **2** harbourmaster warnings have been issued to recreational users after a breach of Section 108 of the Port of London Act 1968 (As amended) and navigating dangerously.
- **1** Harbourmaster's Reprimand has been issued for a breach of Section 108 of the Port of London Act 1968 (As amended) and failure to adhere to Rule 6 (Safe Speed) and Rule 5 (Look Out) of the Colregs. The persons involved are undergoing additional training.

1 To view our previous prosecutions, visit: <https://www.pla.co.uk/Safety/Regulations-and-Guidance/Enforcement-Action>