

Port Marine Safety Code

Annual Performance Review

Year ending 31st December 2021









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1 **Executive Summary**

The Port Marine Safety Code requires Harbour Authorities to report publicly on their performance at least every three years. This document considers PMSC compliance of all ABP ports and harbours during 2021, by means of reviewing incident trends, activities, events and achievements.

This annual review confirms that ABP continues to remain compliant with the Port Marine Safety Code, across a wide range of ports having very different levels of shipping movement numbers, and types of visiting vessels.

ABP strives for *consistent* compliance with the code and this report illustrates some examples of how that vision is being achieved.

The Marine Policy also states that ABP will aim for continual improvement in standards of Marine and Navigation Safety, and this report also identifies some areas of focus for such improvements.

Marine Policy

The Marine Policy was reviewed in December 2021 as part of an annual review, with no significant additions being made.

Audit and Verification

October saw Southampton selected by the MCA as part of an audit by the International Maritime Organisation (IMO) which sought to provide assurance that the UK maritime administration were compliant with the IMO's III code. No findings or observations were identified for ABP Southampton.

All ABP regions / ports were audited (externally or internally) during 2021. Some external audits were re-scheduled into the first half of 2022. Audit themes identified during the year include:

- Compliance with Marine Training Matrix / maintenance of centrally held training records
- Review and implementation of Marine Safety Management System, post group additions
- Quality and Review of navigational risk assessments during reviews / after incidents occur
- The need to improve near miss reporting
- Better management of wrecked or abandoned vessels
- Document management / control
- > Stakeholder engagement
- Oversight / regulation of commercially operated craft that use the Harbour on a regular basis
- Guidance to visiting vessels and activities that require permission
- Licensing / training of Mooring and berthing activities
- 3rd party staff not using lifejacket crotch straps

Vessel Movements

ABP handled <u>100,280</u> vessel movements throughout 2021 (see fig 2) which was <u>up 5.5%</u> on the recorded movements for 2020 which numbered <u>95,089</u>. Whilst vessel movements are up from 2020 levels, the recovery to pre-pandemic levels of around 125,000 movements are yet to be observed.





Incident Statistics

Marine teams across ABP submitted a total of <u>590</u> nautical safety incident / potential reports throughout 2021. Reporting levels remain consistent compared to 2020 levels (these include both incident and near miss reports) indicating our reporting culture is mature and well established.

Increases in the following frequently reported incident categories were observed during 2021. Although vessel movements have increased by around 5.5% the following categories form the focus in terms of mitigation during 2022, particularly pilot ladder and weighted heaving line reports:

Impact with structure (2020: 76 2021: 78)
Pilot boarding defects (2020: 65 2021: 83)
Heaving line reports (2020: 44 2021: 52)

Decreases in the following reported categories were observed during 2021:

Equipment Failure (vessel) (2020: 197 2021: 107)
Other (2020: 70 2021: 44)
Collision Ship to Ship (2020: 7 2021: 5)
Grounding (2020: 23 2021: 21)

These trends and the full list of data are discussed further in section 8.

Commentary and Continuous Improvement

This report identifies the areas of focus in terms of mitigating specific incident trends of Impact with structure, Defective Pilot boarding arrangements and dangerously weighted lines.

2021 Reviewed

A review of 2021 is included, with updates on the following topics:

- Pilot boarding arrangements training
- Electronic Master Pilot Exchange
- Pilot Boarding and landing arrangements (Policy and Guidance)
- New Pilot boats and a working group
- Marnis Upgrade
- Wrecked / abandoned vessels update
- Marine Training
- Portable Pilot Units
- Pilot Simulation Training

2 Introduction: ABP as Harbour Authority

ABP is owned by ABP (Jersey) Limited, a limited liability company domiciled and incorporated in Jersey. However, under Part II of The Transport Act 1981, ABP is controlled by Associated British Ports Holdings (ABPH) which has powers over ABP corresponding to the powers of a holding company over a wholly owned subsidiary. The Directors of ABP are appointed by ABPH, but ABPH has no power to give directions to the Directors of ABP in respect of the execution of their powers





and duties as a Harbour Authority.

ABP is the Statutory and Competent Harbour Authority for the following ports and harbours, as well as the Humber Estuary Services. The precise nature of the arrangements varies according to local circumstances:

Ayr	Goole	King's Lynn	Southampton
Barrow	Grimsby	Lowestoft	Swansea
Barry	Hull	Newport	Troon
Cardiff	Humber	Plymouth	Teignmouth
Fleetwood	Immingham	Port Talbot	
Garston	Ipswich	Silloth	

This document reviews performance in relation to the requirements of the Port Marine Safety Code during **2021**, and provides a summary of marine activities at all the locations listed above which are relevant to navigational safety and environmental protection within the diverse Statutory Harbour Areas managed by ABP.





3 ABP's Commitment to the Port Marine Safety Code

3.1 Marine Policy

ABP publishes a Marine Policy, which was last revised during December 2021. The current version can be found on the company web site http://www.abpmarine.co.uk/

The ABP's Marine Policy aims to demonstrate our commitment to the safe and responsible operation of our ports and harbours by detailing areas of primary concern (which are closely based on the requirements of the Port Marine Safety Code). Linked to this policy and forming an integral part of Port Marine Safety Code (PMSC) compliance, ABP has published a group Marine Safety Management System, and each ABP port and harbour has prepared plans and procedures detailing the way this policy is to be locally implemented.

No significant additions were identified but the following was inserted:

The Marine Management Organisation has been added to a list of organisations / authorities that may be consulted during an investigation focussed on preventing a recurrence if it is determined that an offence may have been committed.

The following items were also noted during the review:

- Wrecked and Abandoned Vessels Good progress has been made in this area (Southampton, river Itchen), also recent Legal advice note produced with assistance from the legal team.
- Pilotage and Pilotage Directions Recent reviews of Pilotage Directions include Barrow, and Southampton
- Southampton post consultation. Progress with Harbour Directions for Lowestoft and Humber ports are behind schedule, but progress is being made. A review of existing byelaws for Lowestoft and the Humber ports has been undertaken which has identified some gaps in the harbour directions which need to be included, and which byelaws can be repealed. Next step is to draft new group byelaws, with extra clauses for each port as applicable.

3.2 Audit and Verification

During 2021 the Technical Authority Marine maintained a programme of audit and verification, to satisfy the Harbour Authority that it is fulfilling its Statutory Duties and remains compliant with the PMSC.

In addition, the Harbour Authority commissions a formal process of external audit of PMSC compliance. The external audits are targeted to support the programme of internal audits and ensures that our internal processes are rigorous and efficient; as well as providing independent assurance of PMSC compliance. The external audit is conducted at different ports or regions each year on a three-yearly cyclical basis.

During October and November 2021, external audits were undertaken in our South Wales region and the three North West ports of Ayr, Troon and Silloth. Full reports were produced for consideration by the Audit & Risk Committee. The following summarises the findings:





South Wales: The external marine audit of South Wales was undertaken on the 6th and 7th October 2021. The audit report concluded that 'ABP and the South Wales Regional ports evidenced a high level of commitment to compliance with the PMSC, with many examples of good practice being evident'. The audit identified:

- ➤ 1 non-compliance (that had been resolved), a mooring gang were not wearing crotch straps with their lifejackets,
- > 6 recommendations and
- ➤ 2 areas of best practice.

Ayr, Troon & Silloth: The external marine audit of Ayr, Troon & Silloth was undertaken on the 9 th and 10th November 2021. The audit report concluded that 'ABP and the ports audited evidenced commitment to compliance with the PMSC, with examples of good practice being evident. The PMSC always seeks to improve navigation safety, and many of the recommendations identify such possible improvements. The audit identified:

- ➤ 1 non-compliance (Ensure correct procedures are followed to differentiate between edits and reviews of assessments in MarNIS),
- > 16 recommendations and
- ➤ 1 area of best practice.

The following ports were audited (internal and external) during 2021:

Location	Date	notes	
Kings Lynn	9 th March	Internal Audit	
Lowestoft	10 th March	Internal Audit	
Ipswich	11 th March	Internal Audit	
Humber Estuary Services	21 st – 23 rd June	Internal Audit	
Southampton	13 th & 14 th September	Internal Audit	
Plymouth	17 th August	Internal Audit	
Teignmouth	18 th August	Internal Audit	
Newport	6 th & 7 th October	External Audit	
Cardiff	6 th & 7 th October	External Audit	
Barry	6 th & 7 th October	External Audit	
Swansea	6 th & 7 th October	External Audit	
Port Talbot	6 th & 7 th October	External Audit	
Garston	12 th October	Internal Audit	
Fleetwood	13 th October	Internal Audit	
Barrow	14 th October	Internal Audit	
Silloth	10 th November	External Audit	
Ayr	9 th November	External Audit	
Troon	9 th November	External Audit	
Hull	30 th November	Internal Audit	
Goole	30 th November	Internal Audit	
Grimsby	1st December	Internal Audit	
Immingham	1 st December	Internal Audit	

The Harbour Authority hold their meetings four times a year in combination with the Health and Safety board, known as the "Harbour Authority and Safety Board" - a report was submitted for each of these meetings held during 2021.

The Marine Advisor reports delivered to each meeting continued to highlight current concerns and issues, and provided statistical indicators of navigational and environmental incidents, including trends categorised by incident type as well as by port (region).





Selected Key Performance Indicators (KPIs) were also detailed in each report. The data that supports these reports is extracted directly from the ABP PAVIS and MARNIS software systems.

To maintain continued focus on reports of Dangerously Weighted Heaving Lines and Defective Pilot Ladders, MarNis continues to capture these incidents as two specific incident categories.

In common with all UK Statutory Harbour Authorities, ABP is required to confirm compliance with the PMSC in writing to the MCA at 3 yearly intervals. A compliance exercise was undertaken by the designated person and its results briefed to the Harbour board in October 2020. A letter of compliance was then signed by the Chief Executive and sent to the MCA on the 6th November 2020. The next such request for confirmation is expected at the end of 2023, for reply by March 2024.

4 Key Personnel – ABP Harbour Authority

An organisation chart is shown in Figure 1.

The Chief Executive Officer and Chairman of the ABP Harbour Authority is Henrik Pederson. The ABP Marine Advisor and Group Director of Safety, Engineering & Marine is Mike McCartain. The Group Technical Authority Marine and Designated Person is James Clark.

Plans were agreed in 2021 for a restructure of the marine function in the four North west ports of Garston, Fleetwood, Barrow and Silloth. Plans will see a Divisional HM be appointed to manage the Harbour authority functions for the four ports (similar to the divisional model adopted in East Anglia during 2020). (See below fig 1 organogram):

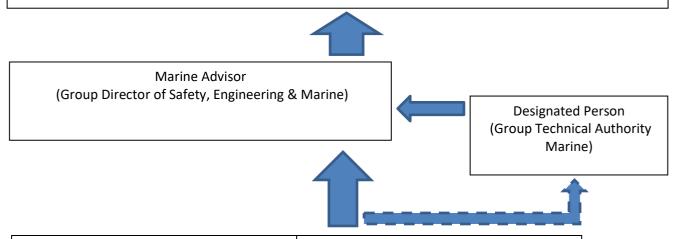
Members of the Harbour Board received PMSC induction / refresher training in early 2020. Members of the harbour board are also required to complete online PMSC learning modules which include completion of a quiz to test PMSC knowledge and understanding. Refresher training will be scheduled again in early 2023 in line with the requirement to refresh every 3 years.



Figure 1: ABP Harbour Authority Organisation Chart

Associated British Ports Harbour Board (Duty Holder)

Chief Executive Officer; Chief Financial Officer; Regional Director Wales and Short Sea Ports; Chief Information Officer, Chief Commercial Officer; Regional Director Humber; Regional Director Southampton; Chief HR Officer; General Counsel and Company Secretary; Group Director of Safety, Engineering & Marine



Harbour Master Ayr and Troon	Harbour Master Humber		
Harbour Master Barrow (currently fulfilled by Marine & Pilotage Manager Barrow)	Dock Master Immingham and Grimsby		
Marine Manager Garston & Fleetwood (with delegated HM powers from SW HM)	Dock Master Hull and Goole		
Harbour Master East Anglia: Kings Lynn, Lowestoft & Ipswich	Harbour Master Southampton		
Harbour Master Silloth	Harbour Master South Wales Newport, Cardiff, Barry, Port Talbot and Swansea		
Head of Marine - Humber	Dock Master Plymouth & Teignmouth (Contracted to work for ABP)		





5 <u>Vessel Movement Statistics</u>

Figure 2: Annual Shipping Movements 2012 to 2021 *approximately 48% of Southampton's numbers include IOW Ferries

Down	2012	2014	2015	2016	2017	2010	2010	2020	2024
Port	2013			2016	2017	2018	2019	2020	2021
Goole	1,363	1,265	1,292	1,522	1,552	1,545	1,347	1,177	1,266
Grimsby	2,451	2,473	3,324	2,671	2,092	1,851	1,789	1,553	1,645
Hull	5,861	5,743	6,694	5,681	5,915	6,275	6,392	5,516	5,638
Humber Estuary Services	28,754	29,029	30,601	30,004	29,833	29,779	28,479	25,217	26,653
Immingham	10,519	10,881	10,570	11,312	11,531	10,997	10,431	9,347	9,706
Southampton*	64,848	67,203	64,377	66,393	63,062	65,066	67,351	43,555	45,809
Ayr	353	298	276	336	203	259	285	230	293
Barrow	417	199	119	157	335	157	151	154	158
Fleetwood	0	0	0	0	0	0	0	0	0
Garston	462	332	325	415	518	381	401	389	535
Ipswich	1,259	1,455	1,622	1,720	1,444	1,296	1,399	1,324	1,315
Kings Lynn	488	464	516	485	369	360	376	379	449
Lowestoft	1,346	1,011	1,073	1,384	1,317	1,106	1,410	1,189	1,173
Plymouth	780	754	722	747	698	685	797	319	244
Silloth	179	136	92	106	93	118	125	82	85
Teignmouth	364	359	326	304	349	351	294	298	299
Troon	931	895	604	195	197	213	309	386	426
Barry	298	312	336	271	310	375	310	308	524
Cardiff	1,929	1,689	1,734	1,482	1,554	1,323	944	1,011	1,087
Newport	1,039	1,450	1,269	1,423	1,524	1,532	1,577	1,652	1,922
Port Talbot	457	573	353	337	334	328	362	350	397
Swansea	1,198	1,009	811	815	721	760	696	653	656
TOTAL	125,296	127,530	127,036	127,760	123,951	124,757	125,225	95,089	100,280
	2013	2014	2015	2016	2017	2018	2019	2020	2021
Southampton	64,848	67,203	64,377	66,393	63,062	65,066	67,351	43,555	45,809
Humber	48,948	49,391	52,481	51,190	49,371	50,447	48,438	42,810	44,908
South Wales	4,921	5,033	4,503	4,328	4,443	4,318	3,889	3,974	4,586
Short Sea Ports	6,579	5,903	5,675	5,849	5,523	4,926	5,547	4,750	4,977
TOTAL	125,296	127,530	127,036	127,760	123,951	124,757	125,225	95,089	100,280
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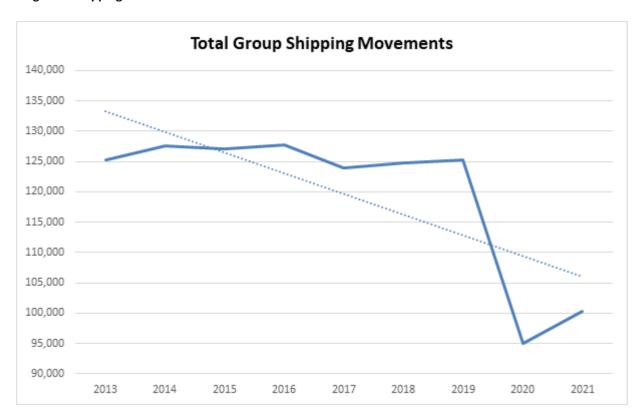




Figure 3: Annual Shipping Movements by Region 2012 to 2021



Figure 4: Shipping Movement Trend 2012 to 2021







Numbers of shipping movements have been collated from the ABP PAVIS system to ensure consistency between all the ports.

The statistics include only commercial movements and include both inbound and outbound passages, as well as transits through ABP Harbour authority areas to and from non ABP ports (mainly applies to Humber and Southampton).

Where a vessel moves from one ABP Harbour Authority into another (for example from HES into one of the Humber ports, the same vessel will generate a movement count for both ports on the same voyage.

Some ports may have significant numbers of other vessel movements which are not recorded, especially small craft (including windfarm vessels and some categories of tug and tows). At present only the Humber region records these moves, so for consistency they have not been included for any region in this report.

Furthermore, many ports have significant numbers of leisure vessel movements which cannot be feasibly recorded. This is particularly true in Southampton where leisure movements are so numerous that it is not possible to even estimate the total number with any degree of accuracy. However, incidents involving leisure craft may be recorded, especially if the incident is significant (threat to life etc.) or involves a commercial vessel. Most minor incidents involving leisure craft only, in any of our HA areas, are not notified to the Harbour Authority, and not therefore recorded.

ABP handled 100,280 vessel movements throughout 2021 (see fig 2) which was up 5.5% on the recorded movements for 2020 which numbered 95,089. Whilst vessel movements are up from 2020 levels, the recovery to pre-pandemic levels of around 125,000 movements are yet to be observed. Further details of shipping movements per port are illustrated above in Figure 2.

It should be noted that Southampton's numbers include high frequency movements of Red funnel ferries to and from the Isle of Wight which account for approximately 48 % of Southampton's vessel movements.





6 Incident Statistics

ABP assesses all marine risks at each port to ensure that suitable controls are in place to reduce the risk of any hazard to as low a level as is reasonably practicable – the key principle of the PMSC.

Incidents which occur are recorded and reviewed. The more significant or serious incidents require in depth investigation and will lead to reviews of the associated risk assessments, and recommendations being made to improve control measures and help prevent similar incidents occurring in the future. This process is clearly documented in the ABP Group Marine Safety Management System and implemented at each port and harbour. All ABP ports use the group "MarNIS" incident and risk assessment database (software package) to ensure consistent reporting, investigation and follow up of all incidents. Emphasis is placed on reporting and recording potential incidents, which are investigated in the same way as actual events. In addition, a standardised Marine Incident Investigation template document is used to standardise the way we investigate and report marine incidents.

Incident numbers and trends are key indicators to the success of the Harbour Authority's Safety Management System, and therefore incident numbers were reported in detail to the Harbour Authority at its Board meetings during 2021.

The following figures have been extracted from the MarNIS incident database and illustrate some of the key statistics from across the ABP group of ports for 2021, as well as trends over the last 3 years.





Figure 5: Nautical Safety Incident Trends (by incident type)

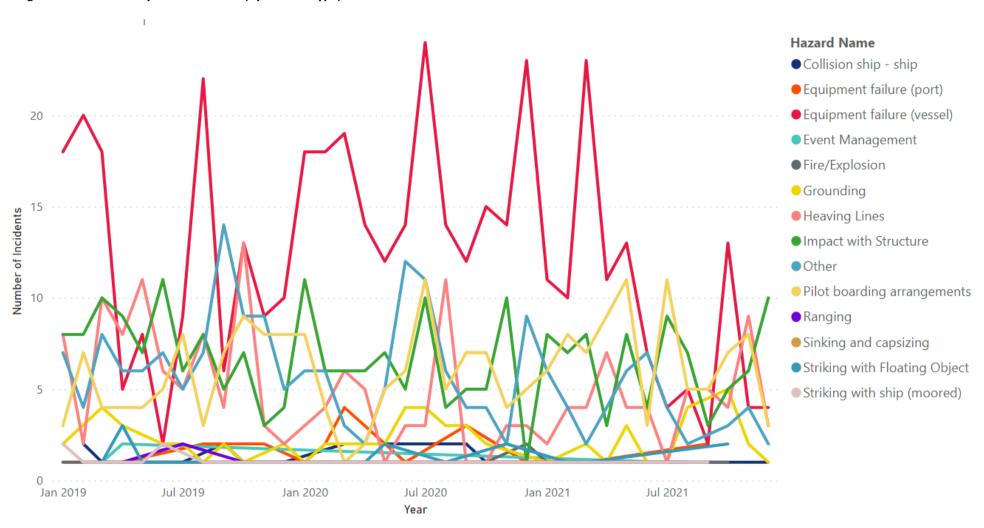






Figure 5a: Impact with Structure trend

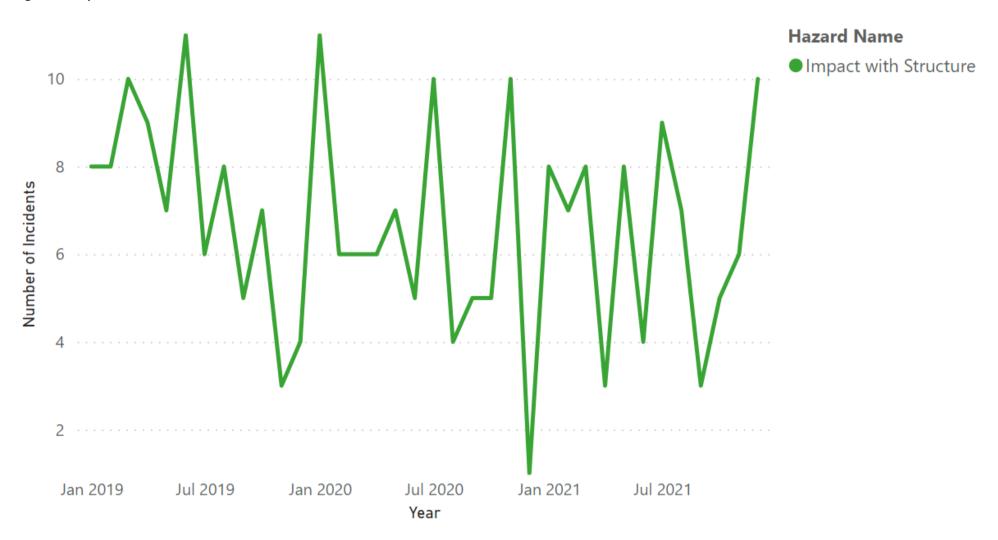






Figure 5b: Pilot Ladder reports trend

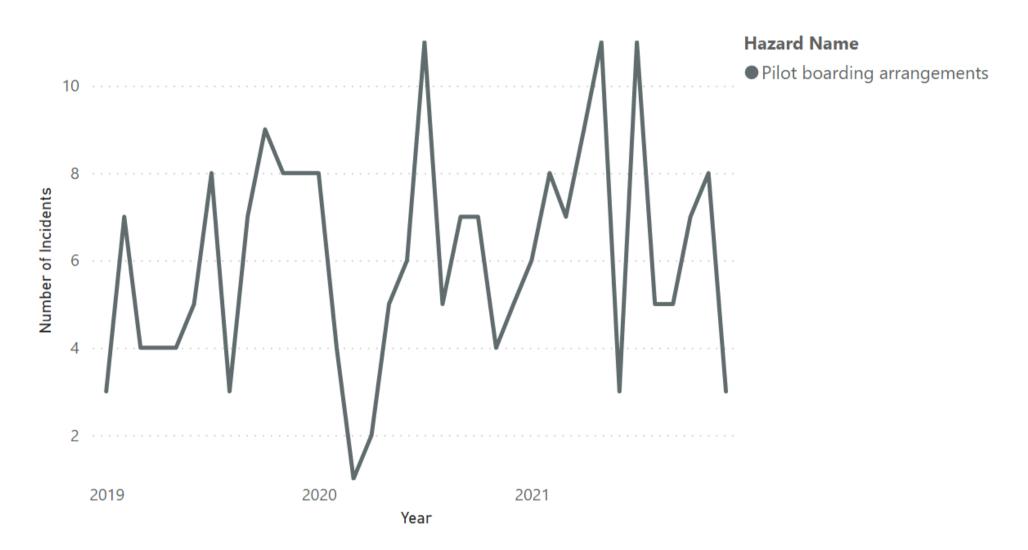






Figure 5c: Heaving line reports

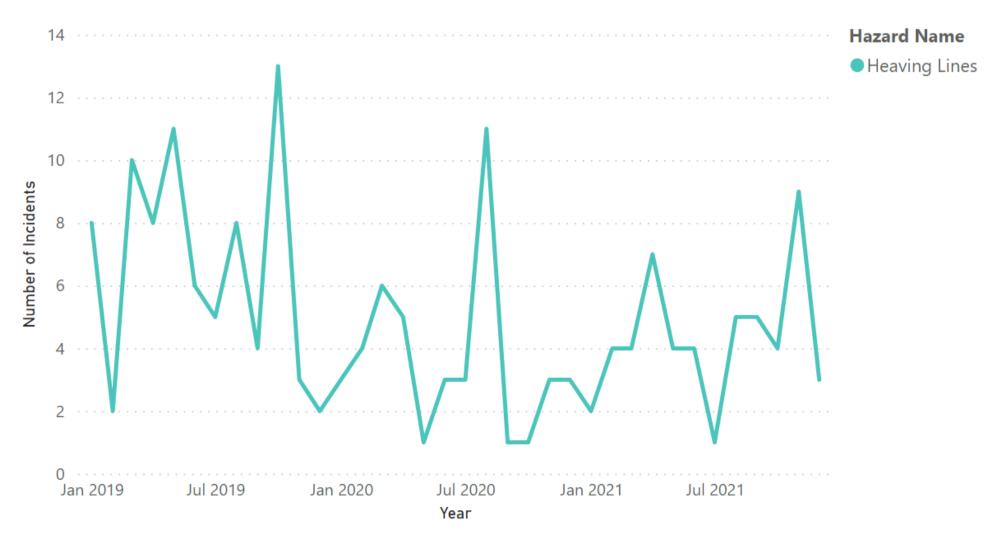






Figure 6: Total Incidents and Potential Incidents Trend

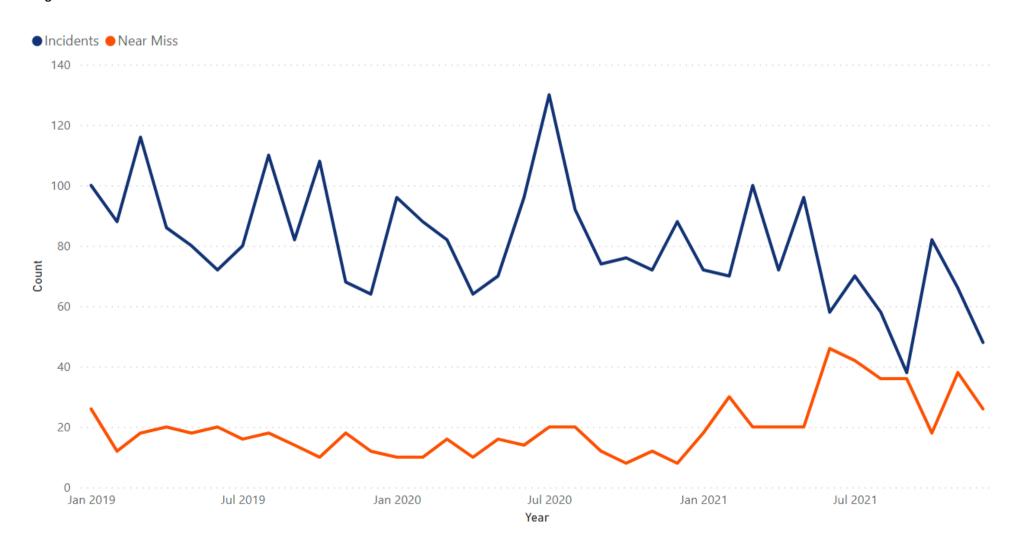






Figure 7: Incidents per 1000 Movements - Southampton and Group Trend

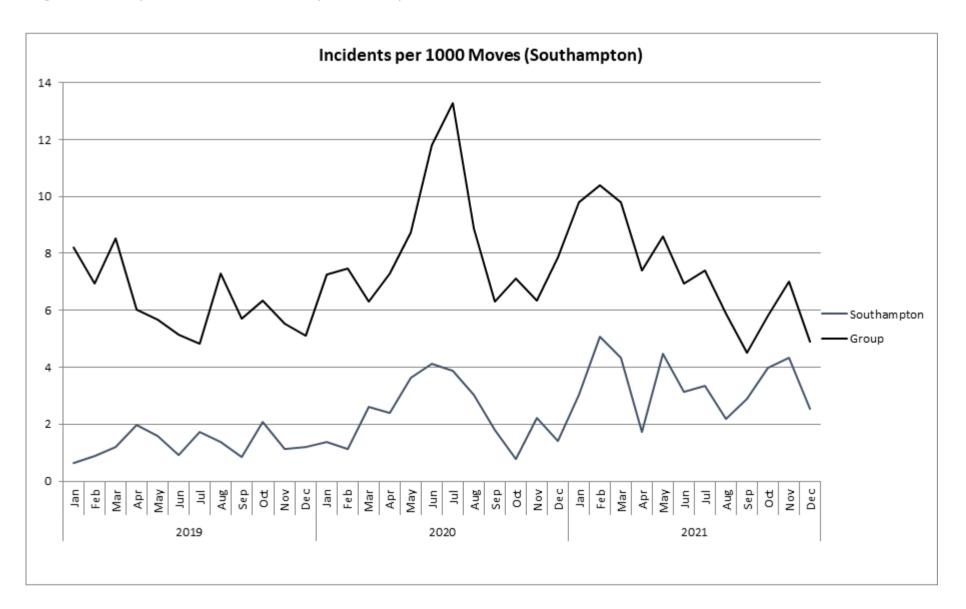






Figure 8: Incidents per 1000 Movements - Humber and Group Trend

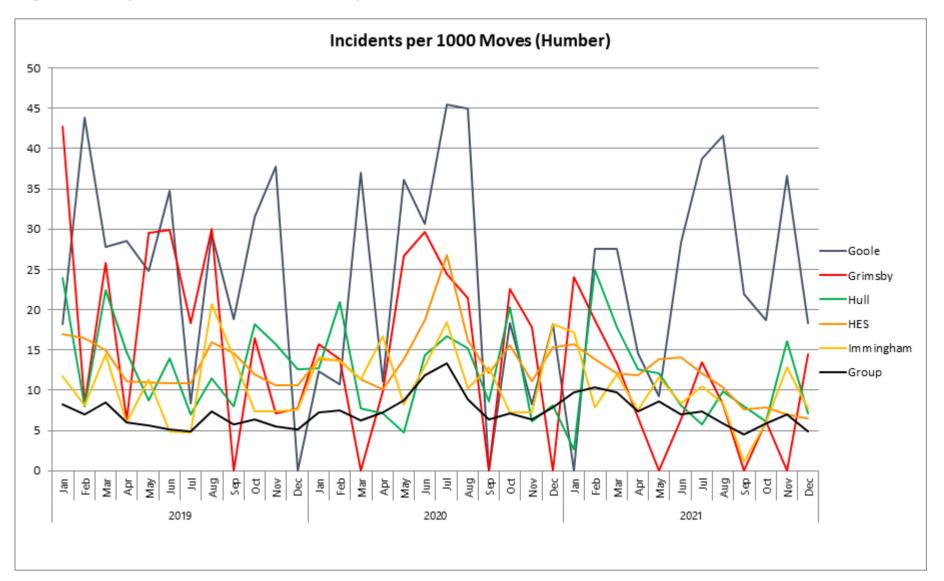






Figure 9: Incidents per 1000 Movements - South Wales and Group Trend

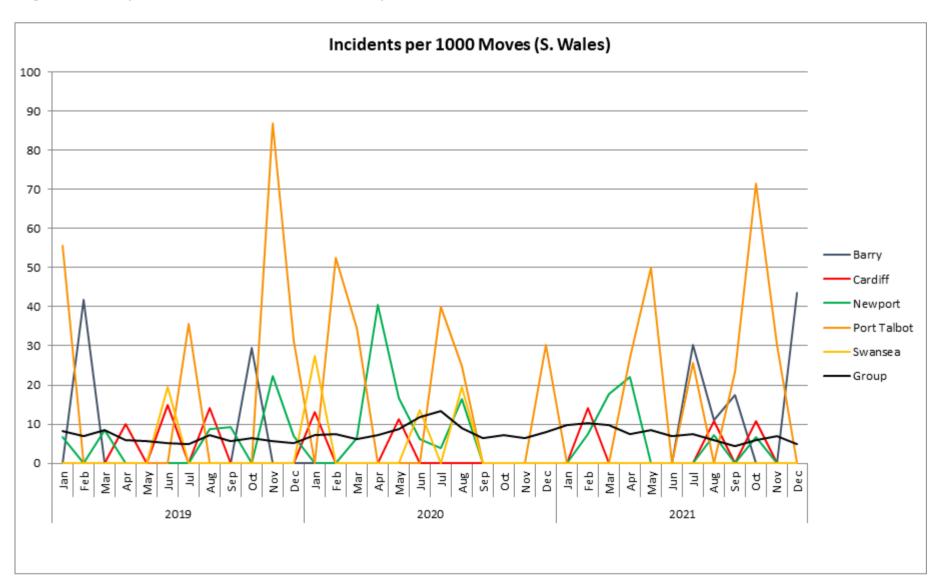






Figure 10: Incidents per 1000 Movements - Short Sea Ports and Group Trend

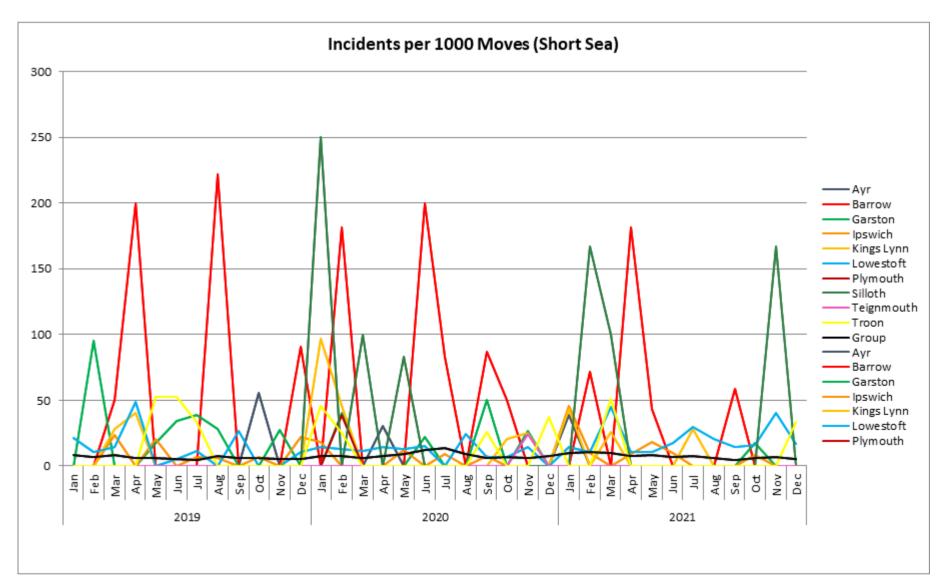
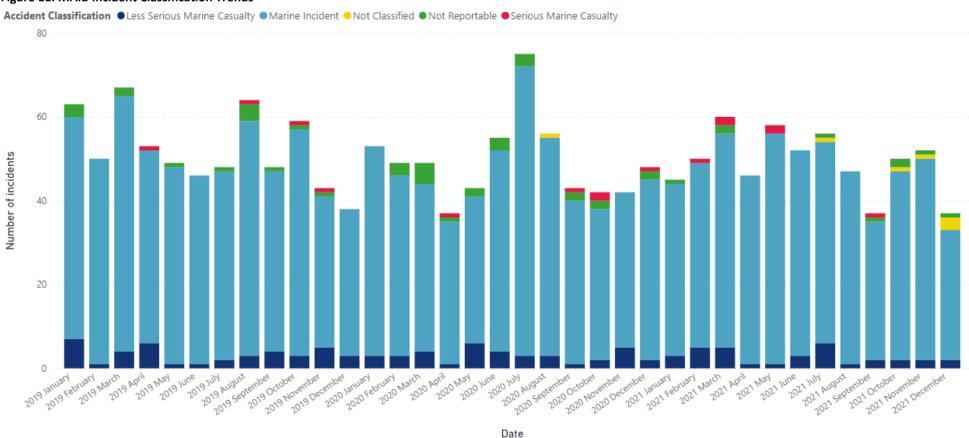






Figure 11: MAIB Incident Classification Trends







7 Key Performance Indicators

In addition to monitoring incidents as an indicator of historic safety performance, ABP have identified several other indicators which help identify trends or potential problems before they occur, allowing procedures to be improved before any issues arise.

The KPIs reviewed for the 2021 calendar year therefore included data to give the Board an insight into the following aspects of port marine safety:

- Navigational Safety incident and potential incident trends
- Marine Training records (specifically coxswain training)
- Overdue Navigational Assessments
- Reports of Dangerously Weighted Heaving Lines
- Reports of Defective Pilot Ladders
- Shipping movement numbers (Shipping Movements by Region)
- Incidents and unplanned events

The Port Marine Safety Code seeks to ensure safety by means of thoroughly assessing marine risks and implementing effective control measures before any incidents arise. However, the Code is clear that should incidents occur despite these control measures, they should be thoroughly investigated, and the lessons learned applied through review of assessments and the introduction of new or revised controls.

The additional indictors shown below (fig 12 & 13) seek to give re-assurance that risk assessment and incident reporting / investigation is effective.

The Marine Advisor and designated person carried out a KPI review in June 2021. Mindful of the challenges experienced in 2020 with pilot boat coxswain qualifications, it was agreed that the addition of a KPI should be identified that provides visibility on how well marine functions are complying with the marine training matrix.

Key performance indicators do not confirm compliance with either the MSMS or the PMSC; rather they give timely and measurable indications of changes in trends, allowing more thorough investigation to be initiated should the indicator suggest negative impacts on navigational safety.





Figure 12: Risk Assessments - Average Nautical Safety Assessment Score by Port

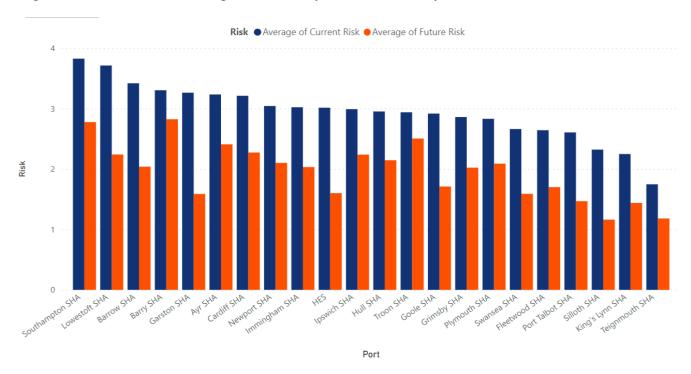
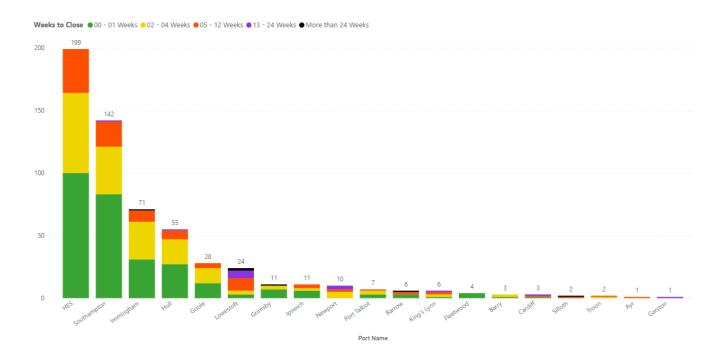


Figure 13: Incidents - Time to Resolve During 2021







8 Commentary and Continuous Improvement

This report reviews the performance of the Associated British Ports Statutory Harbour Authority across 22 diverse Harbour authority functions. The report does not seek to replace more detailed reports produced at port level.

This report has drawn on the reports and data that were routinely collected to produce reports to the Harbour Authority meetings, as well as other data collected through ABP's MarNIS and PAVIS software systems.

Increases in the following three frequently reported incident categories were observed during 2021. Although vessel movements have increased by around 5.5%, the following categories form the focus in terms of mitigation during 2022, particularly defective or non – compliant pilot boarding arrangements and dangerously weighted heaving lines (see fig 5 graphs):

Impact with structure (2020: 76 2021: 78)
Pilot boarding defects (2020: 65 2021: 83)
Heaving line reports (2020: 44 2021: 52)

Decreases in the following reported categories were observed during 2021:

Equipment Failure (vessel) (2020: 197 2021: 107)
Other (2020: 70 2021: 44)
Collision Ship to Ship (2020: 7 2021: 5)
Grounding (2020: 23 2021: 21)

These trends and the full list of data are displayed in fig 5)

In terms of continuous improvement in the categories that have seen increases (pilot ladder, heaving line and Impact with Structure category), the following areas of mitigation are highlighted as follows:

Impact with structure:

Mitigations

- > Increased focus and investment in simulation training for pilots
- ➤ 2021 rollout of ABPs pilot resource management course
- Early 2021 saw the completion of Portable Pilot Unit rollout to our Short Sea Ports

Non-compliant / defective Pilot boarding defects: Mitigations

- Pilots are empowered to refuse to board vessels with unsatisfactory or unsafe boarding arrangements
- Use of 'Spot It' system to report defective or unsafe arrangements
- Some vessel movements were delayed or cancelled during 2021 if non-compliant or defective pilot boarding arrangements were observed
- Reports of defective pilot ladders are passed onto local MCA marine offices for port state control action





- ➤ ABP developed a pilot boarding safety poster and distributed 3000 copies across the UK
- ➤ ABP share all defective pilot ladder reports with MCA headquarters and UK Marine Pilots Association which contributes to data gathering at a national / international level and aids campaigning
- Requirements to use compliant boarding arrangements highlighted during pre-arrival notifications
- Pilot boat crew (whilst hooked on) test ladders before use
- ➤ ABP highlighted challenges via attendance at the MCA pilot transfer working group
- ABP trialled 3 pilot boarding and landing courses during 2021, these are now a requirement in the marine training matrix
- From October 2021, the Marine advisor has been writing letters to ship owners / operators highlighting incidents and sharing our best practice
- ABP participated in the July 2021 review of the pilot boarding and landing code

Heaving line reports:

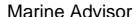
Mitigations

- ➤ ABP continue to levy a £1000 charge on vessels found to be using dangerously weighted heaving lines
- Dangerous heaving lines are removed by Marine teams and replaced with compliant 'bean bags'
- Marine Advisor Notice issued with a poster highlighting risks
- Industry Associations have highlighted issues in nautical media and a letter to MCA
- Letters sent to management of ship owners by Marine Advisor
- Reports sent to MCA as part of national reporting regime for review of enforcement action

8.1 KPIs

Most data was extracted from the vessel information system "PAVIS" (shipping movements) and the specialist PMSC support software "MarNIS" (Incident data, risk assessment records). This data is critical to helping the harbour authority monitor its performance and effectiveness of port marine operations and the Marine SMS.

The Average Nautical Safety Assessment Score (fig 12) shows that most ports are assessing their level of navigational risk as medium, which is broadly where you would expect the scoring to sit. The data in fig 12 does however show that some, mainly short seaports, are recording low risk scores which would normally be expected to be slightly higher. Analysis shows that these scores, in some cases, were counter to actual or experienced levels of risk or recorded incidents. Some of the ports recording low risk scores have experienced increasing trends in incidents which does not appear to have been captured in their risk assessment scoring. This is a topic which will continue to be highlighted during audits. Hazard ID workshops are also planned for 2022 to help address risk assessment review in some of the short seaports. Southampton undertook a complete review of their navigational risk assessment database in 2020 which included a hazard ID workshop, their score demonstrates where you would expect to be in terms of risk score, with room and scope to increase or reduce risk scoring as either incidents occur, or new procedures are implemented. The below shows the score descriptors:







9 to 10 - High Risk;
6 to 8.99 - Significant Risk;
3 to 5.99 - Medium Risk;
1 to 2.99 - Low Risk; and
0 to 0.99 - Negligible Risk.

The data in figure 13: Incidents – 'Time to Resolve' shows the average amount of weeks it took our ports to report, investigate and close off reports in our MarNIS database. In general reports are investigated and closed within a week, with a small number of more complex reports taking from 2 to 12 weeks to close.

The data in fig 6: Total Incidents and Potential Incidents Trend - shows that whilst there is room for improvement, near miss reporting in relation to incident reporting is improving. The target ratio for near miss reporting against incident reporting remains 2 near miss reports for every incident report.

8.2 **Incidents**

The PMSC requires all nautical safety incidents to be reported and investigated. The findings of the investigation should inform a review of all associated Risk Assessments and lead to improved or new control measures to help prevent re-occurrence of similar incidents in the future. ABP uses a group wide system (MarNIS) to manage this process and through shared access to the system and regular meetings of marine managers from all ports, lessons learned are implemented. ABP has also adopted an investigation matrix which helps to identify incidents which require a thorough and detailed investigation, a separate Marine Investigation template is used in these cases.

MarNIS also includes a tool for assessing whether incidents should be reported to the MAIB, by reference to the Incident reporting regulations. These regulations if applied correctly in fact assess almost all incidents as MAIB reportable, and therefore ABP makes a very significant number of reports to MAIB (2021: 574). However, Figure 11: MAIB Incident Classification Trends clearly illustrates that the vast majority of these reports are in the marine incident category. To reduce the workload on both ABP and MAIB staff, an automated email facility is in place to notify MAIB of all such incidents, at the end of each day after they are entered into MarNIS. Ports may still however make immediate verbal or email notifications for any of the marine casualty levels of incident, in addition to the automated email.



BEYOND ZERO-

8.3 2021 Reviewed

2021 saw our marine teams continue to face significant operational challenges related to the pandemic. Social distancing (particularly onboard pilot launches), regular testing and use of PPE continued throughout the year with staff absences related to the pandemic fluctuating in line with regional / national spikes in transmission. The following summarises some of the work activities reported to the Harbour board during 2021:

Pilot boarding arrangements training:

Post pilot forum feedback, the designated person and five ABP pilots attended the first of three trial Pilot transfer safety courses scheduled throughout 2021. ABP were able to liaise with Peel Ports who have developed the course which is delivered via Fleetwood nautical college. Positive feedback was received from our pilots. The course is delivered over a day and includes the following elements delivered in a classroom, swimming pool, and climbing tower environment. The course is now

included in ABPs marine training matrix and is a requirement for all ABP pilots:

- Regulations and company guidance
- Non-compliance
- > Pilot Boat familiarisation
- Life Saving Appliances & Survival Techniques
- Boarding arrangements
- Hadrian's Rail usage
- Communications
- Accidents and Lessons learned
- PPE
- Emergency procedures including MOB recovery
- Practical transfers over water 3m climb and Bulwark ladder
- > 9m Vertical climb





Electronic Master Pilot Exchange:

In the early summer of 2021, a small project commenced to explore how pilots could conduct Master / Pilot exchange onboard ships without relying on manual paper-based processes.

Liaison took place with our pilots who were engaged to properly understand what the list of requirements should be. In August 2021 it was decided to conduct a trial of the software with pilots from the Humber and Southampton.

The trial concluded with positive feedback from pilots that indicated that with further development the software could be greatly improved to support not just the Master / pilot exchange process but pilot passage planning as well.



Plans in late 2021 were made to proceed with the rollout of electronic pilot master exchange across ABP in early 2022.





Pilot Boarding and landing arrangements (Policy & Guidance):

The designated person represented ABP as part of the review of the Boarding & Landing Code which highlights best practice concerning the whole evolution of pilot boat and pilot boarding operations. The code is sign-posted in the PMSC, with the recent review picking up additional and refreshed guidance, particularly concerning defective or non-compliant boarding arrangements. The final version of the code was published in July 2021 and referenced in ABPs Marine Safety Management System.

ABP were represented at the MCA chaired 'Pilot Transfer Arrangements

Working Group'. Data on reports was shared concerning defective or non-compliant pilot boarding arrangements from across the UK. Whilst numbers of reports remain high,

it was encouraging to hear that few examples of repeat offenders are being reported, suggesting that actions by UK port authorities to highlight issues are having an effect. ABP continue to lobby MCA for action locally (via local MCA marine offices). In May 2021, three thousand copies of ABPs 'Pilot Boarding Arrangement Requirements – Best Practice' poster were printed and distributed. Two thousand copies were delivered to ABP pilots across the group for delivery onboard vessels to help compliment education and training as well as facilitating a 'safety discussion'. A further thousand copies were distributed to the wider

industry including Peel Ports, Port of London, Forth Ports, Bristol Port Company, Milford Haven, Sullom Voe and Liverpool Pilots.

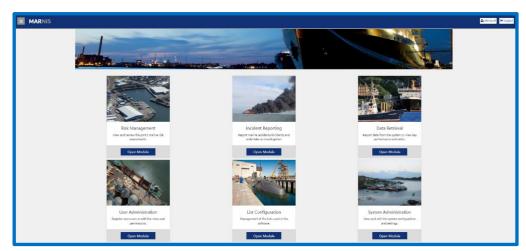
New Pilot boats and a working group:

2021 saw the delivery to the Humber of the first of a number of new British built more efficient pilot boats. A significant investment will see ABP rollout the same vessel type to all 3 of ABPs regions over the coming years, leveraging efficiency in spares, training and service / support. The introduction of the new vessels has also facilitated better engagement with our pilot launch managers and crew who now meet regularly to discuss common practices, lessons learnt, training and PPE.



Marnis Upgrade:

An upgrade and development of Marnis was completed by ABPmer during 2021. The MarNIS software is used to manage ABP's marine risk assessments and marine incident reporting. This facilitates ABP's conformity with national legislation and the Port Marine safety Code (PMSC) as well as supporting



statistical analysis used to inform the Harbour board.

Marine teams from across ABP participated in a two-week testing phase before final deployment at the end of 2021 / early 2022. The proposed updates to MarNIS consolidated the software to use one



database and allow access via a web browser. The upgrade also allowed for more efficient maintenance of users and improved usability. The updated web platform will allow for additional future functionality and improved interactions with other systems e.g. PAVIS / future port information System. A power BI dashboard was also developed which will assist in more efficient reporting to the harbour Board and allow Harbour Masters to have better visibility of incident data.

Wrecked and abandoned vessels:

Several wrecked and abandoned vessels across some of our ports have continued to be a topic of focus throughout 2021. ABPs guidance has been shared with the wider industry via the British Ports Association. Southampton have made





good progress during 2021 with removing wrecked and abandoned vessels on the river Itchen. Significant funds are in place to remove further vessels in 2022 with the Crown estate also contributing funds to support the project.

Marine Training:

Challenges with complying with some elements of the marine training matrix continued to be experienced during 2021. Some challenges related to the back log in and availability of training during the pandemic. The business has also found it challenging to release some staff from operational duties for training. The development of a KPI to measure ports compliance with the marine training matrix was identified by the marine advisor and designated person as part of a review of KPI's in 2021.

Portable Pilot Units:

The roll out of Portable Pilot Units across ABP was concluded in early 2021 with some of our short seaports being the last to receive these units. Portable pilot units (PPU), whilst an aid, have been seen to improve pilot's situational awareness. They also have a functionality that allows the track recording of a vessels passage to be captured which has proved very beneficial during incident investigation as well as training and assessment. All ABP pilots now have access to a PPU.



Pilot Simulation Training:

2021 saw a continued focus on supplementing pilot training with simulation facilities. This has proved very beneficial and has complimented traditional ship-based pilot training methods. In addition, it has allowed pilots to train on larger class ship types that rarely trade at their port, thus keeping them current in skills required to maintain the upper classes of authorisation. In addition, 2021 saw the roll out commence of ABPs Pilot Resource Management training. The syllabus for this training had been developed in collaboration with pilots from across ABP.









9 Progress against Objectives Set in Previous Report

The Marine Safety Plan was last reviewed in 2020 where an additional target that focused on mitigating defective pilot boarding arrangements and dangerously weighted heaving lines was introduced. The Marine Safety Plan 2020 – 2023 is available on ABPs website.

The table below describes those targets that form the plan and indicates progress against completion at the end of December 2021.

Target #	Description	Target	Time Scale	Progress at close of 2021
1	Keep KPIs under review and introduce new / relevant KPIs as appropriate	Monitor KPIs and review as required.	Annually	Review due in June 2022 to be carried out by Marine Advisor and Designated person. In 2021 Agreed to the addition of a KPI that captures level of compliance around the Marine training matrix. This has been delayed until April 2022 due to IT resourcing.
2	To ensure consistent application / implementation of the MSMS across all ports	Successful annual internal audit at each location	Annually	Audit plan for 2022 complete and published.
3	Review Marine Policy	Annual or as required by external factors	Annually	Review due Dec 2022
4	Review Marine Operations Manuals	Annual or as required by external factors	Ongoing (via audit)	Progress to be monitored via annual audit regime
5	Improve level of Potential Incident Reporting	To achieve a group wide ratio of two potential reports for every actual incident report submitted	End 2023	Improvement still required, continued emphasis to be raised at audit and heads of Marine, Southampton are routinely meeting target
6	Harbour Directions	One port to have made and issued Harbour Directions	End of Q2 2021	Not complete, progress on Humber ports and Lowestoft prioritised by Legal team for 2022
7	Consolidated Port Operational Procedures Manuals	All ports to evidence a working synergy between Group updates / local update of SMS	Ongoing (via audit)	Progress to be monitored via annual audit regime
8	To volunteer for at least one MCA Health check per year	Formally contact MCA Ports Liaison Lead annually	Annually	Offer made to MCA
9	Continue to maintain a focus on mitigations around the use of Dangerously Weighted heaving Lines and defective pilot ladders	Ensure data around these incident categories are captured and reported through to MCA, engage with ship's crew, support enforcement / penalty actions	Ongoing (reported via HASB)	Marine Advisor has written to ship owners who have been delayed due to unsafe boarding arrangements. Pilot ladder safety courses scheduled for 2022 in line with Marine Training matrix





10 Continuous Improvement Plan

In addition to publishing a Marine Safety Plan identifying specific marine safety improvement targets, ABP has also identified the following continuous improvements (as part of the "Marine Safety Plan") which are followed in conjunction with Group initiatives to constantly improve the safety of all activities taking place within ABP Ports and Harbours.

Constantial Timetable audit and support visits other Gro			
none are	Detail Constantly review audit dates (in co-operation with other Group Compliance functions) and ensure none are missed, or unduly delayed		
timetable 2 Undertake visits themes in	s / Harbour Masters according to e. Follow up previous action points, dentified at other ports, or by external MCA / MAIB). Provide support and training ed.		
3 Establish action points areas for	t of visits, establish action points and improvement. Also identify areas of best or sharing with all other ABP Ports		
4 Report and clear	visit findings within a reasonable time, ly summarise any actions that the port is ended / required to take to ensure nent.		
Keep "Work Plan" and "Marine / areas of	a constantly updated database of actions best practice with due action dates and who is responsible for completing		
6 Promulgate outcomes improven	at all ports are made aware of key nent points and areas of best practice by ate means (For example, MA Notices, ce presentations, updates to Group		
Regularly follow up action progress and prom has been date. Pro	review due dates of identified actions opt those responsible to feedback what achieved, closing out actions before due actively follow up any outstanding ot complete by due date.		
8 Repeat Cycle Annually			





11 Public Compliance Statement

Sections 2.26 to 2.28 of the Port Marine Safety Code (and section 2.2 of the Guide to Good Practice) require the Duty Holder to publicly state continued compliance with the Code.

The ABP Harbour Authority were able to positively confirm their compliance with the requirements of the PMSC in a letter of compliance to the MCA in November 2020. The Marine Policy revised in December 2021 also describes how this compliance is achieved.

On behalf of ABP Harbour Board

Mike McCartain OBE Group Director Safety, Engineering and Marine (Marine Advisor)

Date: April 27th 2022