Navigation Committee 26 February 2015 Agenda Item 11

# Broads Authority Safety Management System External Audit Report by Head of Safety Management

**Summary:** This report sets out findings from the recent external audit of the Authority's Safety Management System.

The Committee's views are sought on the findings, recommendations and draft Audit Action Plan set out in the Appendices.

### 1 Background

- 1.1 The Broads Authority, as a Competent Harbour Authority under the Pilotage Act 1987, is required to comply with the duties and responsibilities set out in the Port Marine Safety Code (PMSC)<sup>1</sup>.
- 1.2 The Code requires that all harbour authorities base their powers, policies, plans and procedures on a Formal Safety Assessment (FSA) and that they maintain a Safety Management System to ensure that risks are reduced to a level which is as low as reasonably practicable (ALARP).
- 1.3 In 2014, the Authority published a Safety Management System (SMS)<sup>2</sup> to meet the needs of the updated PMSC.
- 1.4 The PMSC requires that the SMS is monitored and audited to ensure that it continues to meet the requirements of the code.
- 1.5 The SMS sets out an audit schedule which culminates in a requirement for a full audit which is to be undertaken by an independent third party to gain an objective opinion of the effectiveness and suitability of the SMS to meet its objectives and to verify continued compliance with the PMSC.

#### 2 Audit

2.1 BMT Isis, a consultancy specialising in marine safety, were selected to carry out the independent audit which took place at the Broads Authority offices on 17 September 2014.

Port Marine Safety Code, dated December 2012

Broads Authority Port Marine Safety Code Safety Management System, Issue 4, dated March 2014

2.2 The Audit reviewed version 4 of the Safety Management System which was issued in March 2014.

#### 3 Audit Report

- 3.1 The BMT Audit report which sets out the audit findings and recommendations is set out in Appendix 1
- 3.2 The executive summary set out in Appendix 1 for member's reference, and the key points identified are:
  - (a) The Broads Authority complies with the PMSC and has adequate systems in place to manage safety. The Safety Management System (SMS) confirms the policies and procedures in place to allow the effective management of safety within the Broads Authority remit.
  - (b) The Broads Authority continues to discharge its statutory functions effectively and efficiently and to high standards. A strong element of professionalism, pride and attention to detail was witnessed during the audit process.
  - (c) A number of areas have been highlighted for further development
    - 1. Competency standards;
    - 2. Training records;
    - 3. Incident data analysis / measuring performance.
- 3.3 Members Views are sought on the draft Audit Action Plan at Appendix 2

#### 4 Next Steps

4.1 The Audit report and the draft Action Plan will be taken to the Broads Authority meeting in March for adoption.

Background papers: None

Author: Steve Birtles
Date of report: 13 January 2015

Appendices: APPENDIX 1- Broads Authority Port Marine Safety Code (PMSC)

Audit 2014 report

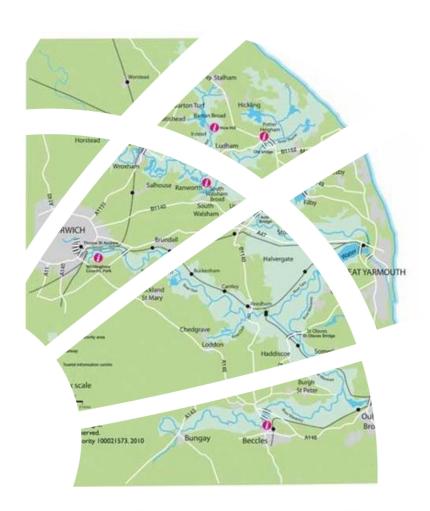
APPENDIX 2- Draft Audit Action Plan



# Broads Authority Port Marine Safety Code Audit September 2014

Reference: 31255/D0902/Issue 2

Date: December 2014 Commercial-In-Confidence







## **Administration Record**

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## **Executive Summary**

A strong
element of
professionalism,
pride and
attention to
detail was
witnessed
during the audit
process

At the request of the Head of Safety Management for the Broads Authority, Steve Birtles, BMT Isis Ltd (BMT Isis) has undertaken an independent audit of the Authority's Safety Management System, in line with the requirement of the Port Marine Safety Code (PMSC).

This report provides members of the Broads Authority (the executive body) with full details of the audit activities undertaken and provides assurance that the activities of the Duty Holder and Designated Person comply with the PMSC and as such, the Broads Authority complies with the Code.

Overall the Broads Authority complies with the PMSC and has adequate systems in place to manage safety. The Safety Management System (SMS) confirms the policies and procedures in place to allow the effective management of safety within the Broads Authority remit.

A wide range of topics relating to the PMSC and the Broads Authority SMS were discussed during the audit process, providing the auditor with background information on activities, processes and operation of the Broads Authority.

We are able to report that the Broads Authority continues to discharge its statutory functions effectively and efficiently and to high standards. A strong element of professionalism, pride and attention to detail was witnessed during the audit process.

A number of areas have been highlighted for further development and are included in the 'Recommendations' section of this report. They refer to:

- 1. Competency standards;
- 2. Training records;
- 3. Incident data analysis / measuring performance.

## **Contents**

Introduction	4
The Broads Authority	4
Port Marine Safety Code	5
Audit Methodology	6
Audit Findings	
Accountability of the Duty Holder	9
Consultation	10
Risk Assessment	11
<b>Emergency Response</b>	13
Management of Navigation	14
Safety Management	15
<b>Performance Monitoring and System Audit</b>	16
Personnel	17
Conclusions	19
Recommendations	21
References	22

#### 1. Introduction

The Port Marine Safety Code (PMSC) and Guide to Good Practice on Port Marine Operations were updated in December 2012 and July 2013 respectively.

The PMSC establishes the principle of a national standard for every aspect of port marine safety and aims to enhance safety for those who use or work in ports, their ships, passengers and the environment.

This report has been produced by BMT Isis Ltd for the Broads Authority following a request for an independent audit of their Safety Management System (SMS) and as described in BMT Isis's letter proposal 31255/Isis-F-O-300, dated 21<sup>st</sup> May 2014 (Reference 1).

The Port Marine Safety Code (PMSC) (Reference 2) requires that Harbour Authorities should include provision for systematic review of performance based on information from monitoring and from independent audits of the whole system. In addition, the PMSC also guides ports to publish a safety plan for marine operations at least once every three years. The plan should commit the authority to undertake and regulate marine operations in a way that safeguards the harbour, its users, the public and the environment.

A significant element of any SMS is the adequacy and effectiveness of its auditing and review functions. Based on best practice within the industry, the PMSC and associated Guide to Good Practice on Port Marine Operations (Reference 3) guide Duty Holders to conduct 'independent audits of the whole system'.

The Broads Authority is a Harbour Authority under the Pilotage Act 1987 and is designated a "Special Statutory Authority", affording the same level of protection as National Park status, but with tailor-made legislation relating to navigation.

An external audit and review of the marine SMS should take place every three years, informing the three-yearly publication of the marine safety plan and the Authority's performance against the previous plan, as required by the PMSC. In order for The Broads Authority to comply with this requirement, they have sought total independence from any commercial or operational interest as part of their SMS audit activity.

## 2. The Broads Authority

The Norfolk and Suffolk Broads are Britain's largest nationally protected wetlands, comprising rivers, broads, marshes, fens and carr woodland. There are over 200 km of navigable waterways linking many National and Local Nature Reserves and Sites of Special Scientific Interest. The Broads are listed under the Ramsar Convention on Wetlands of International Importance, and are home to a diverse variety of rare birds, animals and plants.

The Broads Authority was established as a non-statutory body in 1978 following a report by the Nature Conservancy Council regarding degradation of the Broads.

The Broads Authority was formalised as a statutory authority by the Norfolk and Suffolk Broads Act 1988 (Reference 4), ("The Broads Act"), and began operating as such in 1989, for the purpose of conserving and enhancing the natural beauty of the Broads, promoting the enjoyment of the Broads by the public, and protecting the interests of navigation.

In 2006 the Broads Authority promoted a second Act (the Broads Authority Act 2009), the primary purpose of which was to introduce greater safety controls on the broads and rivers. This Act received Royal Assent on 2<sup>nd</sup> July 2009 and is now an Act of Parliament. The Act gives the Authority various new powers and combines the Navigation and General Accounts into one fund.

The Broads covers 303 square kilometres in the eastern most part of England and is the UK's largest protected wetland.

The Broads Authority is a statutory body and its general duty is to manage the Broads for the purposes of:

- Conserving and enhancing the natural beauty, wildlife and cultural heritage of the Broads;
- Promoting opportunities for the understanding and enjoyment of the special qualities of the Broads by the public; and
- Protecting the interests of navigation.

It must also consider the needs of agriculture and forestry, and the economic and social interests of those who live or work in the Broads.

The Authority is funded by central government as well as by tolls paid by users of the Broads.

In May 2011, the Broads Authority undertook organisational restructuring, which included combining the Navigation and Countryside Ranger Services into an Integrated Ranger Service.

As a result of this re-structure, there has been a requirement to 'up-skill', via training, members of the existing team. A comprehensive training plan was presented during the audit, highlighting the requirement for both water and land based training i.e. boat handling, tree surveying.

The effects of this merger and restructuring have been investigated, from a Port Safety perspective, as part of this audit.

In 2013 the Broads Authority launched a brand new patrol vessel, 'The Spirit of Breydon'. This vessel has been introduced following the transfer of responsibility for navigation of Breydon Water from Great Yarmouth Port Company to the Broads Authority.

## 3. Port Marine Safety Code

The PMSC comprises a Policy document, together with a Guide to Good Practice. The Code allows some degree of interpretation in application, in order to allow Port Authorities a degree of latitude in ensuring that the systems that are implemented are those that suit their particular operational challenges and environment.

A fundamental aspect of the Code is the requirement for harbour authorities to develop and maintain an effective marine safety management system. This system should be in place to ensure that all risks are controlled, with the more severe ones either being eliminated or kept "As Low As Reasonably Practicable".

THE PMSC states that "Each harbour authority must appoint an individual as the **Designated Person** to provide independent assurance directly to the Duty Holder" and "A 'Designated Person' is required to provide independent assurance directly to the 'duty holder' that the safety management system is working effectively."

Ultimate responsibility for appointing the Designated Person rests with the Duty Holder. The Duty Holder is to be satisfied that the Designated Person provides the level assurance necessary to comply with the Code.

## 4. Audit Methodology

The Audit comprised the following activities:

- A desktop review of the existing Broads Authority SMS;
- A one-day audit visit to the Broads Authority offices;
- Sampling of documents, records and publications in order to gauge compliance of the Broads Authority SMS;
- A prepared question bank, structured to give sample coverage to areas of the PMSC applicable to the Broads Authority.

Using a combination of the four techniques, the auditor undertook a review of the following:

- The scope of operations within the Broads Authority jurisdiction and the ways in which safety-related decisions are made and implemented:
- The documented SMS and records produced in support of the SMS;
- Emergency planning, resources and responsibilities;
- Current and future compliance with the PMSC.

The audit visit was undertaken on Wednesday 18<sup>th</sup> September with Lee Rhodes (BMT Isis Ltd) meeting with the Broads Authority's Director of Operations, Trudi Wakelin and Head of Safety Management, Steve Birtles.

The auditor considered the following documentation:

- Safety Management System Documentation;
  - Report Number 31006/E0018, Issue 4.0, March 2014 (Reference 5)
- Hazard Management documentation;
  - o SMS Annex 1
- Navigation Committee Minutes, including;
  - Meeting 12th December 2013;
  - Meeting 27<sup>th</sup> February 2014; Meeting 5<sup>th</sup> June 2014.
- Risk assessments (supporting method statements for work);
  - Use of General Purpose Small Workboats
  - o Remote / Lone Working
  - Work Related Safety Risk Assessment
  - o Boat Transport of Goods and Materials
  - Stokesby Mooring Risk Assessment
  - St Benets Abbey Risk Assessment
  - Construction and Use of Jet Float Structures
- Generic Guidance;
  - Navigational Safety Policy

Observations and recommendations made at the previous audit (2011) have been addressed.

- The Broads Authority website;
  - o <a href="http://www.broads-authority.gov.uk/boating/navigating-the-broads/safety">http://www.broads-authority.gov.uk/boating/navigating-the-broads/safety</a>
- Marine Accident Investigation Branch (MAIB) reports:
  - o Grab 10 24/09/13

Observations and recommendations made at the previous audit (2011) have been addressed.

	Observation / Recommendation	Current Status
1	References to sections of the PMSC within the existing Broads Authority SMS are outdated with respect to the PMSC and the 2009 Act, and require review and update. It is recommended that the Broads Authority SMS be updated.	SMS Updated March 2014
2	It is recommended that the Introduction chapter of the SMS is updated to include reference to the commitment of the Broads Authority to comply with the standards laid down within the Code.	Chapter 1.7 (Navigation Safety Policy) gives reference to the Broads Authority's Navigation Safety Policy.
3	It is recommended that the Authority considers including a statement regarding the Authority's performance with respect to the PMSC within the Annual Report, supported by metrics as appropriate.	A statement has now been included in the 2012/13 annual report, however it is considered to be a very broad statement and is not supported by any kind of metric for measuring performance.
4	It is recommended that the Broads Authority delegated 'Designated Person' identify ways in which to remain informed of all changes to the PMSC and Guide to Good Practice.	The Head of Safety Management has joined the UK Harbour Masters' Association (UKHMA) and the Operations Director has successfully completed an International Diploma for Harbour Masters (via the IBC Academy).
		The Head of Safety Management attended the most recent UKHMA conference.  Regular meeting with the Maritime and Coastguard Agency (at local level) occur.
5	It is recommended that a strategy be considered and implemented for dealing with a potential short notice requirement for a Mud Pilot.	A replacement 'Mud Pilot' has been appointed. The previous pilot has assisted with training and assessment of the new pilot. Due to the nature of the Broads, the types of commercial vessel likely to require a pilot and reporting procedures in place there is not likely to be a short notice requirement for these services.

#### Broads Authority Port Marine Safety Code Audit 2014

6	It is recommended that the Broads Authority develops a schedule for planned updates of the SMS, including a timeline of updates related to major organisational or other changes.	A timetable for SMS updates has now been produced. The SMS will be submitted to the Authority following the Hazard Log process (early part of each year).
7	It is recommended that the Broads Authority introduces a document control procedure to ensure that all safety related documentation is maintained up to date at the correct issue status.	Software has been purchased however its introduction has stalled and therefore further wok on this is required.
8	It is recommended that the Broads Authority SMS and Website are updated to reflect the change in the number of Byelaws currently in force.	4 Byelaws are listed on the website:  Navigation Byelaws 1995 Speed Limit Byelaws 1992 Vessel Dimension Byelaws 1995 Vessel Registration Byelaws 1997
9	It is recommended that the Broads Authority investigate and consider how the provisions within the Act might be implemented in the event that Breydon Water is not transferred Broads Authority control.	No longer applicable as the transfer of Breydon Water was successfully completed.

# **5. Audit Findings - Accountability of the Duty Holder**

Audit Question	PMSC / GtGP Ref	Findings	Recommendations
Has a Duty Holder been formally appointed and is this appointment formally identified?		Yes - The Safety Management System clearly states that the Board has responsibility as Duty Holder.	
Have executive and operational responsibility for marine safety been clearly	2.1 and 2.1.1 D	The Broads Authority is composed of 21 appointed Members. One Member is appointed as the Chair and is supported by a Vice-Chair. The Board, has responsibility, both individually and collectively, as 'Duty Holder'.	
assigned? Has this been documented?		Section 2 of the Broads SMS contains a comprehensive description of the Roles and Responsibilities of those accountable, under the PMSC, for marine safety.	
Designated Person - independent, with direct access to the board?  Does the DP formally present his/her findings with respect to the PMSC to the Duty Holder?	2.8 2.2.36	The Head of Safety Management has been appointed to act as the 'Designated Person' (Section 2.3.2).  The Designated Person has a standing agenda item on the Broads Authority committee meeting, giving a direct reporting mechanism. In addition, he has direct access to the lead member for safety (the chairman of the Boating Safety Management Group BSMG), the agenda for which is agreed in advance.  A report (Reference 6) on the suitability and adequacy of the Designated Person to fulfil the independence requirement stated within the PMSC was produced in March 2013.	This audit concurs with the findings presented to the Board in March 2013 relating to the level of independent assurance the Designated Person provides.  Due to the current Designated Person's involvement with the SMS consideration could be given to the use of a reciprocal arrangement with another harbour authority (2.2.43) for

# **6. Audit Findings - Consultation**

Audit Question	PMSC / GtGP Ref	Findings	Recommendations
Is there evidence of consultation with port users (both commercial and leisure) and local interests and communities?	Section 3	Yes - There are a number of forums, committees and mechanisms which allow for consultation with a variety of stakeholder communities.  Meeting dates, agendas, reports, minutes from previous meetings, background papers and committee membership lists are readily available via the Broads Authority website.	
Are stakeholders having a continued input to the Safety Management process through a regular or ad-hoc forum?	3.1.3	Yes - The main mechanism for this is via the Navigation Committee. Members of this committee are drawn from relevant stakeholder communities i.e. hire boat owners, passenger boat owners and private owners. This committee meets every 2 months.	
Have users been consulted on existing or new risk assessments?	3.2.8	A number of new activities were identified that required consultation and risk assessment.  The increase in the popularity of 'paddle boarding' and an operator wishing to provide guided paddle boat tours resulted in the Boat Safety Management Group meeting to discuss and assess the risk of this activity.	

# 7. Audit Findings - Risk Assessment

Audit Question	PMSC / GtGP Ref	Findings	Recommendations
Has formal risk assessment been used to eliminate risk or reduce it to As Low As Reasonably Practicable (ALARP)?	3.5 4.1.1 D 4.2.29	Section 9 (Hazards) and Section 10 (Risk Assessment) of the Broads SMS contain details of the Formal Risk Assessment process and the Authority's approach to the identification, assessment, control and management of risk. The Broads Authority uses a structured approach to the identification and analysis of hazards, following the IMO's Formal Safety Assessment (FSA) methodology.  In 2012, two new, Cat A hazards, were identified and included in the Hazard Log. In the latest version (Pre Review Hazard Log, September 2013) these two hazards were declared as being non-ALARP and therefore those particular activities are not supported by the Broads Authority. There remains a recommendation within the Hazard Log that these two hazards require urgent mitigation.	
Was the risk assessment undertaken by people who are qualified or appropriately skilled to do so?	3.6	The Navigation Committee, supported by the Boating Safety Management Group (BSMG) and Broads Forum provide safety advice and input into the risk assessment process. It is considered that this representation of members satisfies the Code's requirement for qualified and appropriately skilled personnel.	
Has the entire risk register been reviewed at least annually?	4.1.1 F	Yes - the Hazard Log is reviewed annually, alternated between the Boating Safety Management Group and full stakeholder group. The Hazard Log is then re-issued at the start of each year.	
Has the Authority considered publication of its risk assessments, where appropriate?	4.1.1 G	Risk assessments are stored electronically on the corporate server and on the Broads Authority Intranet, a system that is available to all Broads Authority employees. Additionally the SMS including the hazard log are published on the Authority's website after issue each year.	
		Prior to the audit, BMT Isis was provided with example Risk Assessment forms, these focused predominantly on occupational health and safety (manual handling, use of non-powered hand tools etc.) however a number included navigational/maritime related activities.	

Audit Question	PMSC / GtGP Ref	Findings	Recommendations
Does the SMS contain a procedure for measuring performance?	4.4.12	The Broads Authority's Navigational Safety Policy states "We will: Evaluate the safety performance of the Broads Authority through reporting systems contained within the Safety Management System"	It is recommended that the status of each indicator is to be clearly
		Section 12 (Monitoring and Auditing) provides procedures for proactive and reactionary monitoring. Performance indicators have been detailed and are to be monitored on a monthly basis.	presented on a designated page on the Authority's website, detailing the target, current performance against the target and the historic trend.
		"The status of each indicator, in relation to its defined target, will be recorded on the Authority's website" - This is not intuitive to find on the website and appears to be not readily available.	
Does the SMS include processes for effective (annual) internal audit, review of procedures and external audit?	4.4.13	Yes - Section 12.4 (System Auditing) details the auditing plan, responsibility for conducting the audit and requirements for an Action Plan in the event that areas for improvement or non-compliances are identified.	

# **8. Audit Findings - Emergency Response**

Audit Question	PMSC / GtGP Ref	Findings	Recommendations
Are emergency response procedures in place?	3.9	Section 11 of the Broads Authority SMS clearly defines the responsibility of the Broads Authority to deal with and respond to emergency situations.	
		The Authority is not a designated Emergency Service and is not declared a Search and Rescue resource by H.M Coastguard.	
Is the emergency response plan readily available?	5.1.1	An Emergency Communication Plan is contained at Appendix 2 of the Broads Authority SMS. This plan outlines the likely roles and responsibilities of the Communications Team in the event of an emergency or major incident.	
Has the Authority been involved in or carried out its own exercises?	5.7.11	The Oil Spill Contingency Plan is exercised every 3 years, with the next exercise scheduled in 2015. The exercise scenario is reviewed on an annual basis.	It is recommended that closer ties with Maritime and Coastguard Agency
		Lessons learned from these exercises are gathered and post-exercise de- briefings conducted. The general consensus from these exercises is that communications is the biggest challenge the Authority faces.	staff at Humber Coastguard is established and that a programme for team meetings and local knowledge briefings be implemented.
		In the past the Authority has conducted joint exercises with Great Yarmouth Port Authority, however these have now stopped and there appears little interest from the Port to reinstate this requirement.	
		With the closure, in May 2013, of Great Yarmouth's Coastguard centre and full operational responsibility transferring to Humber Coastguard there is a concern that valuable local knowledge of the Broads will be lost.	

# 9. Audit Findings - Management of Navigation

Audit Question	PMSC / GtGP Ref	Findings	Recommendations
Are surveys conducted and aids to navigation	Section 6	The SMS contains the Broads Authority Hydrographic Policy with additional information contained on the Broads Authority website.	
maintained?	6.1.2 a - e	Hydrographic surveys of the lower river reaches are conducted every two years and other areas no less than every five years.	
		As part of their role, the Broads Authority Rangers inspect and monitor navigation marks and signage, reporting (by exception) any defects found. An ongoing signage replacement program is currently in place.	
		The Authority has introduced an Asset Management Plan, detailing: what, where, owned/leased, countryside / navigation, cost, life span, number of units etc. to allow continued management of the Authority's assets.	
Are navigation marks maintained in positions to be of best advantage, with	Section 6 6.2.15	Trinity House is updated on the current status of the Authority's aids to navigation on an annual basis however currently there is no requirement for this notification to continue.	
appropriate markings? Wher was this last reviewed?		It was stated that it is an 'aspiration' of the Authority to implement a GIS based system to log location and type of every navigation mark within the boundary of the Authorities jurisdiction. The SMS gives reference (5.5.2) to this and states that the electronic GIS system should replace the paper based "Navigation Works Reports" system currently in use. It is understood that this system is yet to be implemented.	

# **10.** Audit Findings - Safety Management

Audit Question	PMSC / GtGP Ref	Findings	Recommendations
Does there appear to be an effective Safety culture in place?		Yes - The Head of Safety Management and the Director of Operations provided a strong element of professionalism, pride and attention to detail during the audit process. Safety information, both for Broads Authority staff and those using the Broads, was clearly evident.	
		A number of safety initiatives have been introduced and implemented over the last three years. The Head of Safety appears to be proactive in his duties and in his attempts to raise the level of safety for users of the Broads. The introduction of the 'Wear it' campaign is one such example, providing posters for display at boat yards and keyrings displaying the message to wear life jackets.	
Do incidents prompt immediate safety review via a risk-based approach?	4.2.6	A mechanism for safety review is in place with the Navigation Committee and the Boating Safety Management Group responsible for maintaining high levels of safety within the Navigation Area and to reduce the risk to ALARP.	It is recommended that all new appointees to the Navigation Committee and the Boating Safety Management Group receive training on the risk assessment process, hazard identification and assessment and the ALARP principle.

## 11. Audit Findings - Performance Monitoring and System Audit

Audit Question	PMSC / GtGP Ref	Findings	Recommendations
Is there evidence that plans and actions are being monitored and implemented effectively?	4.4.12	At the start of the audit meeting with the Head of Safety and the Operations Director, actions and recommendations from previous audits were reviewed, with good progress made against all the actions presented.	
Is there an effective accident and incident reporting system?	12.5	The Broads Authority actively encourages incident reporting, requesting incident, accident and near miss information. The website provides an online form for users to complete details along with contact telephone numbers and a postal address.	
		Incident data is recorded, with figures for fatalities and injuries recorded. Initial analysis of this data (1993 - 2013) indicates that there is a downward trend for fatalities on or from boats (avg. 2 per year 93-02 compared to 1.6 per year 03 - 12). Collecting and recording usage data for this period (number of leisure users, private owners etc.) would allow for a more comprehensive historical trending analysis to be conducted. This analysis could be linked to the introduction of new safety initiatives and be used to measure the effectiveness of such. It is acknowledged that a large number of these fatalities are beyond the control of the Broads Authority, with Broads users choosing to ignore the safety advice and guidance provided.	

# **12. Audit Findings - Personnel**

Audit Question	PMSC / GtGP Ref	Findings	Recommendations
Are training objectives and requirements being implemented and applied?	g   11 1	A comprehensive training plan for 2014-15 was presented at the audit. The Head of Ranger Services is responsible for delivering the in house training to the rangers. Operational staff obtain their training from a variety of in house and external training providers as necessary  The Authority does have a Training and Development Policy and actively encourages Professional Development (SMS Annex B).  The Head of Ranger Services is responsible for 'signing off' completed Rangers Procedural Manual - a form that details the areas of training (i.e. Byelaws & Legislation, Land based knowledge and skills, Operation of the vessel / launch and Seamanship) that Rangers are required to complete.	Evidence of a comprehensive training requirement was presented at the audit, however records of completed training were not as easy to locate. It is recommended that a process is introduced to ensure the capture and recording of training undertaken by all employees engaged in marine operations, this should also include the requirement to 'sign off' training on the day that it occurred. A central location, accessible by line managers, should be identified to store this information with a periodic review (3 monthly) process to ensure compliance.
			A mechanism for reviewing the relevance and effectiveness of training received could be considered. For example, a follow up questionnaire, sent 6 months after the training has been completed, requesting feedback (applicability, usefulness etc.).

Audit Question	PMSC / GtGP Ref	Findings	Recommendations
Are competency standards for key personnel clearly defined and rigorously applied?	3.13	Job descriptions and reference to training is included within the SMS however direct reference to competency standards is not.  It is recognised (by the auditor) that harbours vary widely in size, purpose, type and level of traffic, making it a challenge to identify the necessary competencies required of the Broads Authority.  National Occupational Standards (NOS) for Harbour Masters were published in early 2012, setting a benchmark to which national Harbour Master qualifications could be aligned. The ports sector currently has five completed sets of NOS. Two are concerned with port operations and three with harbour management.  The Government has no current plans to make occupational standards mandatory, unless Harbour Authorities continue to fail to implement existing voluntary standards.	It is recommended that consideration of competency standards is given in order meet this particular aspect of the PMSC.  Consideration should be given to specific marine safety competencies.  Liaison with Port Skills and Safety (PSS), the port industry's organisation for health, safety, skills and standards, to identify potential competencies and training, is recommended.

#### 13. Conclusions

#### General

The results of the Audit reveal that safety is being managed effectively within the Broads Authority areas of responsibility. The results of the Audit reveal that safety is being managed effectively within the Broads Authority areas of responsibility. The Head of Safety Management is proactive in his attempts to foster a positive safety culture and, through a regular series of forums, identified risks are being addressed and managed.

The SMS has recently (March 2014) been updated to bring it in line with the latest update of the PMSC (as recommended in the last external audit report).

Annual reviews of the Hazard Log are conducted by a committee considered to be Suitably Qualified and Experienced. In the event of new hazards being identified the Boat Safety Management Group is able to convene and assess such hazards, outside of the annual review period.

#### Compliance with the Requirements of the PMSC

The PMSC comprises a Policy document, together with a Guide to Good Practice. The Code allows some degree of interpretation in application, in order to allow Port Authorities a degree of latitude in ensuring that the systems that are implemented are those that suit their particular operational challenges and environment.

A fundamental aspect of the Code is the requirement for harbour authorities to develop and maintain an effective marine safety management system. This system should be in place to ensure that all risks are controlled, with the more severe ones either being eliminated or kept "As Low As Reasonably Practicable".

An element of interpretation, due to the nature of the Broads Authority's activities, when compared with more 'traditional' ports and harbours, has been accounted for.

The Broads Authority SMS, as updated in 2014, meets the current requirements of the Code and provides an effective mechanism for the management of safety with the Authority's jurisdiction.

### **Designated Person**

"Each harbour authority must appoint an individual as the **Designated Person** to provide independent assurance directly to the Duty Holder" and "A **'Designated Person'** is required to provide independent assurance directly to the 'duty holder' that the safety management system is working effectively." - this is an area that the Director of Operations and Head of Safety have asked for clarification on.

Ultimate responsibility for appointing the Designated Person rests with the Duty Holder. The Duty Holder is to be satisfied that the Designated Person provides the level of assurance necessary to comply with the Code.

The Designated Person must:

- 1. Demonstrate independence of the operation of the marine safety management systems;
- 2. Have thorough knowledge and understanding of the requirements of the Code (and supporting Guide to Good Practice);
- 3. Determine, through assessment and audit, the effectiveness of the

Ultimate responsibility for appointing the Designated Person rests with the Duty Holder SMS in ensuring compliance with the Code;

The Authority has appointed the Head of Safety Management to this role.

The appointment of the Head of Safety Management to the role of 'Designated Person', although not directly satisfying all of the above criteria (Item 1), does provide sufficient independence and assurance to the Duty Holder so as to comply with the requirements of the Code.

Consideration will need to be given by the Authority for succession planning as this current arrangement works with the experience provided by the individual appointed to the role of Head of Safety Management.

It is important that the Designated Person has independent access to the Duty Holder. To fulfil this requirement, the Designated Person, in this instance, the Head of Safety Management has:

- Direct access to the lead member for safety (chairman of the BSMG);
- 2. A standing agenda item, agreed in advance, for BSMG committee meetings;
- 3. A standing agenda item on the Broads Authority committee meetings, giving direct reporting access to the full executive.

#### **Broads Authority and Navigation Committee Members**

New appointees to the Broads Authority and the Navigation Committee are scheduled for next year (2015). At the same time as these appointments will be a requirement to identify a new lead member of safety. This appointment will be made by the Broads Authority and will take on the role of Chairman of the Boat Safety Management Group (BSMG).

The identification and appointment of a new **lead member of safety** by the Broads Authority is considered an essential appointment. This role takes on the responsibility of Chair of the Boat Safety Management Group. Early identification of this role will allow for training to be scheduled and for successful succession planning to be implemented.

#### **Breydon Water**

Transfer of Breydon Water into the Broad Authorities jurisdiction was successfully completed.

The physical and asset management of Breydon Water is likely to have a significant impact on the resources (financial and physical) of the Authority. Activities include:

- 1. Upgrading of channel markings;
- Provision of lay by moorings understood to have been warmly received by users;
- 3. Feasibility study looking at upgrading the Turn Tide jetty upstream of Breydon Water;
  - a. Study conducted 18 months ago by external consultants;
  - b. Impact of removing the jetty;
  - c. Design of a replacement structure;
  - d. Work to commence in Feb/Mar 2015.

A designated water ski zone on Breydon Water was established in 2013, initially as a trial for one year, to allow for information to be gathered on the impact of such activities on the environment and other Broads users. This trial was extended in March 2014 as there had been no formal use of the zone for water skiing and therefore it had been impossible to collect data. Safety of Broads users was considered when designating the zone, with the Water Ski Review Panel, BSMG, Navigation Committee and Broads Forum all consulted.

#### **Mud Pilot**

A new 'Mud Pilot' has been appointed and trained

During the audit process in 2011 it was identified that greater clarification on the requirement for a Mud Pilot (and associated training) was needed. This issue has now been rectified. A new Mud Pilot has been appointed with the previous Pilot providing assessment and training where required.

#### 14. Recommendations

- 1. Designated Person: the PMSC and Guide to Good Practice implicitly detail the requirement for a Designated Person and that a 'Designated Person' is required to provide independent assurance directly to the 'Duty Holder' that the safety management system is working effectively. The 'Duty Holder' (The Broads Authority Executive) has officially appointed the Head of Safety Management to the position of 'Designated Person'. Clarification on the independence and suitability of this appointment has been requested. As stated within the body of this report and during the audit process, the appointment of the Head of Safety Management to the 'Designated Person', although not meeting all of the stated requirements detailed in the PMSC, does provide sufficient independence to the 'Duty Holder'. It is recommended that succession planning is considered for the position of 'Designated Person'. The current Head of Safety Management appears competent in all aspects of Safety Management and provides suitable advice and guidance to the 'Duty Holder'.
- 2. **Measuring Performance:** "The status of each indicator, in relation to its defined target, will be recorded on the Authority's website" This is not intuitive to find on the website and appears to be not readily available. It is recommended that the status of each indicator is clearly presented on a designated page on the Authority's website, detailing the target, current performance against the target and the historic trend.
- 3. It is recommended that **closer ties** with Maritime and Coastguard Agency staff at Humber Coastguard is established and that a programme for team meetings and local knowledge briefings be implemented.
- 4. **Training Records** Evidence of a comprehensive training requirement was presented at the audit, however evidence of completed training was not as easy to locate. It is recommended that a process is introduced to ensure the capture and recording of training undertaken by all employees engaged in marine operations; this should also include the requirement to 'sign off' training on the day that it is verified. A central location, accessible by line managers, should be identified to store this information with a periodic review (3 monthly) process to ensure compliance. A mechanism for reviewing the relevance and effectiveness of training received should be considered. For example, a follow up questionnaire, sent 6 months after the training has been completed, requesting feedback, in terms of applicability, usefulness etc. would allow the management team to monitor training and be better placed to meet the training requirements of the future.
- 5. It is recommended that consideration of **competency standards** is given in order meet this particular aspect of the PMSC. Consideration should be given to specific marine safety competencies. Liaison with Port Skills and Safety (PSS), the port industry's organisation for health, safety, skills and standards, to identify potential competencies and training.
- 6. Review of **incident data** i.e. fatalities on the Broads, as a result of boating related incidents in comparison with other industries/similar leisure activities. The Broads is in a fairly unique position, with such a wide user demographic. Users have a considerable mix of experience and seafaring knowledge. Incident data, collated over the last 20 years, indicates that fatalities, as a result of boating relating activities, are reducing. It would be useful to understand how the fatality rate compares to that of other similar user groups and the national average. In 2012 the National Water Safety Forum (NWSF) published a report detailing the number of water related fatalities from accidents or natural causes across the UK in 2010. This report shows that, the highest number of fatalities 217 (52 per cent) happened in inland waters such as rivers, canals, lakes, lochs, reservoirs and ponds. The same organisation published results for 2013, with an increase to 277 fatalities occurring on inland waters.

## 15. References

1	BMT Isis's letter	nunnani 212EE	/Ta:a F A 200	4-1-4 21-4 May	. つへ14.
1	BIVEL ISIS STREET	ひじりりりられ チェノララ	/ ISIS-E-U- 5UU.	. ((a) e() / (S) Max	/ /014:

- The Port Marine Safety Code (PMSC), December 2012;
- 3 Guide to Good Practice on Port Marine Operations, July 2013;
- 4 Suffolk Broads Act 1988;
- 5 Safety Management System Documentation, 31006/E0018, Issue 4.0, March 2014;
- The Port Marine Safety Code: Development of the Safety Management System, Agenda Item No 15, 22 March 2013.

Draft Date 13 January 2015

# PMSC Safety Management System Audit Action Plan

Audit Recomm endation	Description	Action	Officer	Target Compl Date	Progress to Date	Completed
	Designated Person: It is recommended that succession planning is considered for the position of 'Designated Person'. The current Head of Safety Management appears competent in all aspects of Safety Management and provides suitable advice and guidance to the 'Duty Holder'.	Document roles, responsibilities and procedures relating to the duties of the 'designated person' in order that they are available to any new post holder.	HofSM	Sept 2015		
		Develop People Strategy to include succession planning	Senior HR advisor	June 2015		
2	Measuring Performance: It is recommended that the status of each indicator is clearly presented on a designated page on the Authority's website, detailing the target, current performance against the target and the historic trend.	Metrics to be collated to enable regular publication on Broads Authority Website	HofSM	June 2015		
3	Measuring Performance: It is recommended that closer ties with Maritime and Coastguard Agency staff at Humber Coastguard is established and that a programme for team meetings and local knowledge briefings be implemented.	Set up regular liaison meetings with MCA sector officer. Continue attending MCA East Anglian sub-committee meetings and emergency Planning meetings	HoRS and Hof SM	Aug 2015	Continuing liaison with the acting Sector Manager and local area management.	
4	Training Records: It is recommended that a process is introduced to ensure the capture and recording of training undertaken by all employees engaged in marine operations; this should also include the requirement to 'sign off' training on the day that it is verified. A central location, accessible by line managers, should be identified to store this information with a periodic review (3 monthly) process to ensure compliance.	System to be developed to ensure training is captured in a timely manner and records stored in a central location.	HofSM, Senior HR advisor	Aug 2015		

Draft Date 13 January 2015		Date 13 January 2015					
PMSC Safety Management System Audit Action Plan							
5	Training Records:  A mechanism for reviewing the relevance and effectiveness of training received should be considered. For example, a follow up questionnaire, sent 6 months after the training has been completed, requesting feedback, in terms of applicability, usefulness etc. would allow the management team to monitor training and be better placed to meet the training requirements of the future.		Feedback questionnaires and review process to be developed.	HofSM, Senior HR advisor	Aug 2015		
6	Competency standards: It is recommended that consideration of competency standards is given in order meet this particular aspect of the PMSC. Consideration should be given to specific marine safety competencies. Liaison with Port Skills and Safety (PSS), the port industry's organisation for health, safety, skills and standards, to identify potential competencies and training.		Develop and Review Skill Matrix with Port Skills and Safety to determine any relevant skills deficiencies	HofSM	Sept 2015		
7	Incident data: Incident data, collated over the last 20 years, indicates that fatalities, as a result of boating relating activities, are reducing on the Broads. It would be useful to understand how the fatality rate compares to that of other similar user groups and the national average.		Annual incident report to include benchmarking against other inland navigations and national statistics.	HofSM	May 2015		