

Boat Safety Scheme Risk Management Process



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Process summary

The **BSS Risk Management Process** contains a small number of stages and is designed to assist recognition, tracking and management of risks. The process is simple, transparent and has been designed to deliver the responsible and justifiable actions to control these risks.

The most important stage in identifying new risks and managing existing risks, is **BSS** collecting, acknowledging and verifying relevant information. Verified information is recorded on the **BSS** risk register and a **Risk Review and Assessment Paper** is developed to quantify the risks. Three groups represent stakeholders and make use of the best available information to create integrated recommendations for ensuring risks are proactively managed.

The **BSS Technical Forum** review the impact of change and recommendations to manage these risks.

The **BSS Advisory Forum** considers the acceptability and impact of any recommendations.

The directors of **BSS** sign off an action plan, which is then monitored by **BSS** and stakeholder groups. The results are used to improve risk controls and check the effectiveness of the programme.

Definitions

In this **BSS** Risk Management Process, the following terms have the following meanings:

- a) **ALARP** means as low as reasonably practicable.
- b) **BSS** means Boat Safety Scheme Limited.
- c) **BSSAF** is the stakeholder forum that makes recommendations to the Directors on matters pertaining to the operation and impact of the **BSS** in accordance with the **BSSAF** Terms of Reference.
- d) **BSSTF** is a stakeholder forum calling upon technical expertise and representing the various 'customer groups' of **BSS**, including the **Navigation and/or Harbour Authorities**, the user groups, examiner bodies and the marine trade, in accordance with the **BSSTF** Terms of Reference. Additional technical expertise can be called upon as required.
- e) **BSS Examination** and **BSS Examiner** have the meanings set out in **BSS Quality Assurance Procedure BSSQA018** Boat Safety Scheme Conditions of Registration (Version March 2024).
- f) **BSS Office** made up of full-time **BSS** staff who are responsible for administration of the process. Ultimate responsibility for process administration rests with the **BSS General Manager**.
- g) **Critical Groups** means sub-sets of Participants who by nature of their use of their boat or the particular equipment on it may be exposed to a higher level of risk. **Critical Groups** recognised are included in Appendix A.
- h) **ECPs** means the **Examination Checking Procedures**, which are the procedures set out by **BSS** for the verification of the **Standards Scheme**.

- i) **Memorandum of Understanding** means the Memorandum of Understanding dated 1 April 2024 between: (i) Environment Agency; (ii) Canal & River Trust; (iii) Broads Authority; (iv) Association of Inland Navigation Authorities; and (v) Boat Safety Scheme Limited.
- j) **Navigation and/or Harbour Authorities** means the inland navigation authorities and statutory harbour authorities in the United Kingdom that have adopted the **Standards Scheme**.
- k) **Non-participants** are any other persons including other boaters who may be affected by the actions of, or a hazardous event involving, a boat subject to the **Standards Scheme**.
- l) **Participants** are owners, occupants or users of boats that are subject to the **Standards Scheme**.
- m) **Risk Register** is the repository for all risks identified; it includes information about each risk, e.g. nature of the risk, reference and any mitigation measures. The Risk Register helps **BSSTF** track issues and address any escalation of risk as it arises.
- n) **Risk Review and Assessment Paper or RRAP** is the product of the **BSS Risk Management Process** for identified risks and containing **BSSTF** risk control recommendations.
- o) **SSF** has the meaning given in the Memorandum of Understanding.
- p) **Standards Scheme** has the meaning given in the Memorandum of Understanding.

Introduction and Objectives

Introduction

The purpose of the document is to iterate the process by which **BSS** will achieve its values and visions and ensure that 'real' and accepted boat-related risks are identified and that risk management recommendations to the **Navigation and/or Harbour Authorities** are appropriate, balanced, consistent and timely.

This document is the Fifth edition of the **BSS** 'Risk Management Process', document BSSQA020.

Objectives

The **BSS** Risk Management Process is designed to help **BSS** achieve its objectives namely to help reduce the risk to all visitors to the inland waterways and the waterways workforce, and to help protect adjacent property from risks related to the condition, equipment, and use of boats. Specifically, this means that:

- The safety risks to boaters and others affected by their activities are as low as reasonably practicable
- The risk of avoidable pollution from boats is minimised
- The responsibilities of individual boat owners is recognised
- When considering control measures account is taken of their effect on the benefits of the boating activity as experienced by the boater and the acceptability of the resultant risk to the **Navigation and/or Harbour Authorities**, the boat provider (where applicable), the boater and others not participating in the boating activity
- Key decisions are proportionate, risk-based and effective

The overall process is outlined in Figure 1 on the next page.

Process flow map

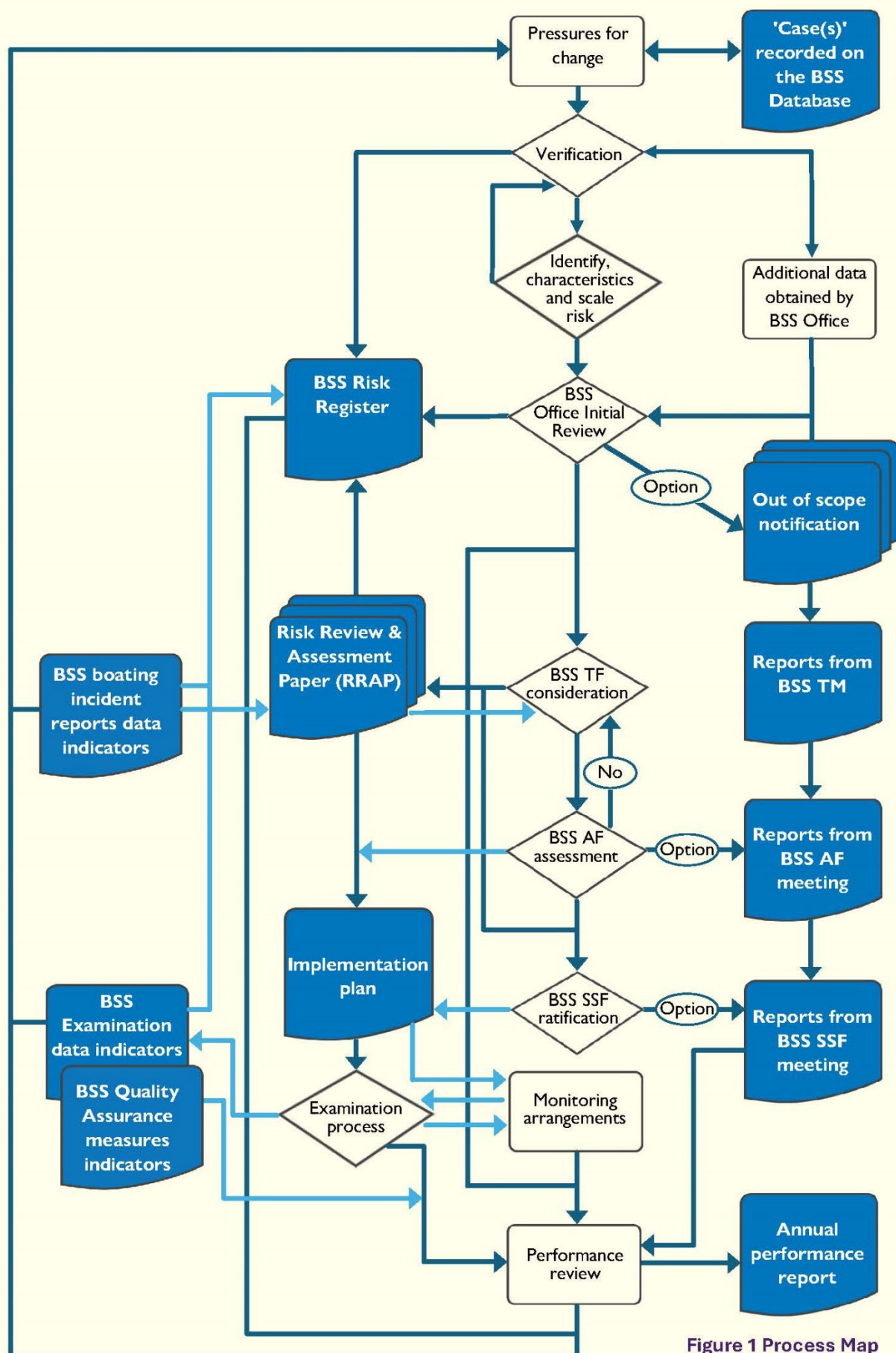


Figure 1 Process Map

Risk Management Process continued

Overview

The overall process is shown in figure 1.

The process is governed by the Directors who make extensive use of the broad range of knowledge, experience and expertise provided by the representatives of the associated organisations and professional bodies - **BSSTF** and **BSSAF**.

The overall process comprises the following principal sections:

1. **Identification of pressures for change**
2. **BSSTF consideration and endorsement of a RRAP**
3. **BSSAF assessment and endorsement of a RRAP**
4. **Directors' ratification**
5. **Monitoring arrangements**
6. **Examination programme**
7. **Performance review**

Each section has a number of stages and named **BSS** staff will be identified by the **BSS Office** to be involved throughout this process.

The identified **BSS** staff member will be responsible for:

- Identifying, collecting and verifying information provided to **BSS**
- Updating the Risk Register and formally collating risk assessments and risk recommendations

BSS General Manager will be responsible for ownership of the process.

1. Noted in this process as '**BSS Office**'

1. Identification of Pressures for Change

It is critical to **BSS** that the organisation maintains a dynamic approach to identifying the pressures for change and considers a wide range of sources to anticipate, detect and clarify positive or negative risk events.

BSS Office will maintain a close working relationship with external organisations which are relevant to **BSS** operations and activities.

BSS Office staff or representative contractors will actively participate in relevant industry initiatives and events that fit within the **BSS** scope and budget constraints.

BSS Office will identify, register and respond to a wide range of information sources when identifying the prevalent pressures for change:

Collection of information is the critical step. Obtaining the best available information in an accurate and timely manner is fundamental if accurate decisions are to be made. This process is demanding on **BSS** resources and the following table outlines the wide range of sources of information.

Topic	Generated and/ or obtained directly by BSS Office staff	Obtained separately and provided to BSS
Market fluctuations and notifications	1. Concerns about products new or inappropriate to the market introducing potential risk, as may be identified through professional activities e.g. events, meetings, media stories.	2. Suppliers' and manufacturers' safety alerts, warnings and recalls. 3. Consumer, public health and other organisations' alerts and warnings.
Changes to Statutory Requirements	4. Changes to HSE/ EA Approved Codes of Practice (ACOPs), MCA Codes etc. 5. Recreational Craft Directive/ Regulations, Essential Requirements and supporting standards 6. De-regulation pressures 7. HSW Act, Merchant Shipping Acts	8. Other changes to Statutory Requirements
Specific events and investigations		9. Statutory organisations 10. BSS investigations 11. Relevant related industries
BSS Forums	12. Concerns from Forum member organisations 13. Professional opinions raised at meetings 14. Concerns from ultimate duty holders (the Navigation and/or Harbour Authorities)	

Boaters / Users	15. Outcome of targeted BSS boater surveys 16. Boater comments collected through BSS database (Salesforce)	17. Boating Associations 18. Individual boater's views 19. Non boating members of the public (anyone)
BSS Surveyors and Examiners	20. BSS Examination data indicators 21. BSS Examiner Quality Assurance monitoring results 22. Examiner body views	
Regulators and official influencers		23. MCA 24. Enforcement action 25. Expressed concerns from HSE, MCA, MAIB, coroners
Navigation and/or Harbour Authorities		26. Navigation and/or Harbour Authority staff observations 27. Boater observation reports
Partner Organisations		28. Competent bodies such as Liquid Gas UK, Gas Safe Register, CoGDEM, HETAS, National Water Safety Forum, Visitor Safety in the Countryside Group. 29. Government/public bodies such as the Ministry of Housing, Communities and Local Government (formerly DLUHC), HSE and all local fire authorities.
Boating trade		30. Expressed concerns from companies 31. Expressed concerns from British Marine
Incident and Risk Information	32. BSS Incident Data Indicators 33. Results of the risk monitoring process (Section 6 of this process)	34. Coroner, Police and emergency services data available 35. Water Incident Database (WAID) data 36. National Water Safety Forum risk reports 37. RIDDOR 38. MAIB 39. Navigation and/or Harbour Authorities

System information	40. Review of BSS Examination Quality Management System collected data 41. Minutes of other BSS meetings or of the Standards Setting Forum of the Navigation and/or Harbour Authorities	
International	42. International standards and codes of practice	

1.1 Verification

Once the information has been received, it will be logged on the **BSS** database (Salesforce) and recorded as an incident and/or technical query or complaints (from this point forward referred to as 'Case').

The **BSS** database will generate a unique Case number and all information received will be recorded against this Case number, including:

1. Date received
2. Source
3. Information used to determine risk rating – for future use
4. Logged as falling within or without scope of the **BSS** purview
5. Risk Register reference
6. Response sent to relevant parties where issues fall outside of **BSS** scope

BSS Office will identify a staff member who will be assigned the case and will verify the information as accurate.

The Case will be marked, where information has been verified as either inaccurate or inapplicable.

Once it has been verified as accurate, it will then be added to the Risk Register (or the **Risk Register** will be updated).

1.2 Identify, characterise and scale risk

BSS Office will assign a staff member to the Case who will identify the character and scale of the risk in a qualitative way and will ensure that sufficient investigation and research is undertaken to identify:

1. What the current risk level is for existing risks.
2. Whether the level of risk may have increased significantly and whether a **Critical Group** of those exposed to the risk may have been identified.
3. What is the scale of any gap between actual risk level and desired risk level?

This will be determined by the **BSS** staff member considering the following factors:

1. Does the issue fall wholly or partly within the **BSS** purview?
2. Is the issue within an already recognised high risk area?
3. Are there any relevant stakeholder or political expectations to which **BSS** should respond?

4. Who are the persons potentially affected? Are they Participants, Non-participants, or belonging to any of the **Critical Groups** identified in [Appendix A](#)?
5. Are there any identifiable unintended consequences?
6. Are there pressures for changes to examinations from stakeholders?
7. Are existing communication strategies adequate?
8. Are existing arrangements robust to cope with changing circumstances of the risk groups e.g. pattern of employment / activity / engagement?
9. Is there evidence of a historical issue in terms of statistics of accidents and ill health and reports of investigations into particular incidents?
10. Is there a recognised perception within stakeholder groups that there is a problem to be addressed?
11. Is there evidence that suggests that existing arrangements are not fit for purpose?
12. Is there a need to act immediately to control any risk?

The **BSS** staff member will review the tolerability of risk factors within [Appendix B](#) and make a judgement to suggest an initial prioritisation of the level of risk as:

1. No apparent change in risk level
2. Low potential risk
3. Medium potential risk
4. Immediate action needed to address risk

The **BSS** staff member will record the information used to determine the risk rating on the **Case**.

The initial review will aim to be completed within one calendar month of receipt of the issue being logged on the database as a **Case**. The findings will be presented to the **BSSTF** at the earliest opportunity, for discussion at the next **BSSTF** meeting. Significant extensions should be agreed between the **BSS** staff member and the **BSS General Manager** based upon the prevailing information.

Where the level of risk is determined to be high, the process will be fast-tracked by the **BSSTF** Convenor as appropriate to the risk presented.

Issues outside of scope

Where an issue falls outside **BSS** purview or is considered low risk, not warranting further investigation, the Case and **Risk Register** will be updated accordingly. The **BSSTF** Convenor will be informed for review at the next **BSSTF** meeting. This will provide **BSSTF** with the opportunity to take a contrary view or raise further questions with the **BSS Office**. A record of the contact will be retained on the Case.

1.3 The Risk Register

The **Risk Register** will be owned by the **BSS General Manager**. The **BSS General Manager** authorises **BSS** staff to update and change the Risk Register.

The **Risk Register** will contain the following information as a minimum:

1. The unique identifying Case number

2. Risk topic area of risk
3. Action plan to control risk (or reference to it)
4. The name of the **BSS** Office staff member who has been assigned the Case

The **Risk Register** will be a live document. Old copies of the Risk Register will be archived indefinitely. Each new version of the **Risk Register** will have a specific version control reference, determined by the **BSS General Manager** so that changes can be tracked.

The current Risk Register will be available to **BSS Office staff** members, authorised contractors and Convenors of the **BSSAF** and **BSSTF** only, who will review the register outside of meetings, as they deem to be necessary.

The **BSSTF** Convenor will determine which risk items will need to be passed to the **BSSTF** for agreement at the next meeting.

2 Boat Safety Scheme Technical Forum consideration

The **BSSTF** will consider each new and changed risk recorded on the **Risk Register**. They will use their technical knowledge and ability alongside their peer group contacts to identify the cause and consequence of the risk factor and to suggest pragmatic plans to control these risks where these are needed. The **BSSTF** will achieve this by:

1. Agreeing the frame and characterisation of the risks identified;
2. Identifying any uncertainties in the information provided;
3. Working to close any gaps in knowledge necessary to accurately establish the level of risk;
4. Agreeing the level of risk for each risk factor using the risk factors within [Appendix B](#) and make a judgement;
5. Agreeing and endorsing a **RRAP**, or agreed risk control plan if the risk item is deemed not to warrant a **RRAP**.
6. Using experience and professional judgement to identifying areas where new controls will positively and negatively impact other risks and amend any existing risk action plans as necessary.

If there is any benefit in evaluating the risk level and the demands of any possible controls the **BSSTF** may decide the risk needs further quantification to assist with identifying the scope of the issue and potential controls. This will be specific to the risk and can include:

1. Numbers of people exposed per year.
2. Numbers of relevant pieces of equipment or boats.
3. Geographical spread or location specific information.
4. Accident and incident numbers and statistics from same and similar incidents or industries.
5. Trends from **Critical Groups** identified.
6. Specialist assessments by competent specialists (e.g. HAZOPS, Safety cases).
7. Issues identified for consideration on the **RRAP**.

Consideration will be given to the factors identified in [Appendix B](#) when determining tolerability.

There will be two main outputs from the **BSSTF**:

1. An up to date risk rating for each identified risk factor using experience and professional judgement and the factors identified in [Appendix B](#); and
2. An agreed and endorsed **RRAP** for each risk factor, a request for further consideration (or an agreed risk control plan where a **RRAP** is not warranted).

The **BSSTF** will meet in accordance with the most recent Terms of Reference for the **BSSTF**.

The agreed and endorsed **RRAP** and recommendations will be passed to the **BSSAF Convenor** for them to be consideration to be added to the agenda of the next meeting. This will be included within the report of the **BSSTF** Convenor. The **BSSTF** Convenor can decide to distribute the report to expedite the issue if deemed necessary.

3 BSSTF Recommendations

When formulating and supporting recommendations within a **RRAP**, the **BSSTF** will consider the risks and tolerability of these factors before and after the suggested **ALARP** mitigation measures in accordance with [Appendix B](#).

Upon agreement the **BSSTF** will formulate and frame any proposals for actions related to the management and regulation of public risks. The **BSSTF** will use the principles in [Appendix A](#), [B](#) and [C](#) as a guide.

Risk control recommendations will be made with the experience and expertise of the members, giving full consideration of the cost and effort of implementation against the benefits derived.

The full range of recommendations will be considered, including 'no action at this time' with and without a specific monitoring action and with or without the development and promotion of specific guidance for stakeholders, identified risk creators and at-risk parties. and the introduction of further **ECPs**. Consideration will be given to the priority for risk treatment, taking into account existing risk action plans and budgets available.

The results will be documented within the **RRAP**. The **RRAP** will not record each and every rationale, only the recommendations considered to be suitable. Each finalised **RRAP** will contain the following relevant information:

1. Outline of the risk to be managed and a summary of the recommendations
2. Identified pressures for change
3. Existing risk controls
4. Identification, characterisation and scale of the risk, including:
 - What is the risk and who is at risk
 - Any relevant studies, including case studies
 - Details concerning any **Critical Groups**
 - Identifying any uncertainties in the information provided (known unknowns)
 - Future gazing, is the risk increasing or decreasing
 - The level of importance of awareness campaigning to influence behaviour
5. Tolerability of risk
 - Level of personal acceptability of risk to those exposed to it

- **ALARP** assessment
 - Risk-benefit assessment of any planned new **ECP** risk control measures
 - Any adverse effects of any planned new **ECP** risk control measures
6. Specific considerations, (scope and any other bodies with an interest)
 7. Summary Impact Assessment
 8. The proposed recommendations
 9. Outline implementation plan, including monitoring requirements

4 BSS Advisory Forum (BSSAF) assessment

The **BSSAF** will receive the **BSSTF**-supported **RRAP**, consider the issue and then evaluate the recommendations, giving consideration to the following questions:

1. Do the recommendations support the **BSS** aims and objectives?
2. Will the recommendations achieve the desired aims?
3. Do the recommendations themselves introduce new risks?
4. Do the recommendations consistent with, and do they complement, existing **BSS** risk controls?
5. Do the recommendations help support **BSS** stakeholder objectives?
6. Will any proposed monitoring arrangements provide a suitable check of risk and controls?

If consensus supporting endorsement of the recommendations contained within the **RRAP** is achieved, the **Paper** will go to the Directors.

If consensus is not achieved, any comments will return to **BSSTF** for consideration and if appropriate, the **RRAP** amended. Any lack of consensus between **BSSTF** and **BSSAF** will be reported to the Directors.

Where the level of risk is determined to be high, the process will be fast-tracked to the Directors by the **BSSAF** Convenor and **BSSTF** Convenor, as appropriate to the risk presented.

5 Director ratification

The Directors will review the recommendations from the **BSSAF** and ratify the **RRAP** as appropriate, giving additional consideration to the intended actions of the **BSS** being:

1. Appropriate and proportionate
2. Have minimal unintended consequences (such as adverse effects on the boating experience or hidden costs)
3. Supported by stakeholders
4. Supported by the boating and general public who may be affected by the boating activity

The Directors will then ensure that sufficient resources are made available to implement the recommendations via an implementation plan created by the **BSS Office**.

The Directors will set any parameters for monitoring and review. If no specific parameters are set then any benchmarks included in the **BSS** Annual Risk-activity Plan will be applied.

The results of the meeting will be recorded in the notes of the meeting.

6 Monitoring and Reporting Arrangements

The implementation plan will be developed by the **BSS Office** to include requirements for resources, consultation and communication.

The implementation plan will identify how the controls will be checked and monitored, including,

1. Who will check?
2. How will the check be conducted?
3. What are the indicators for monitoring the plan?
4. What is the measure of success?
5. How will monitoring results be reported to **BSSTF** and **BSSAF**?

This **BSS Risk Management Process** will be subject to monitoring and periodic review by the **BSS Office**. Any changes to this **BSS Risk Management Process** will be notified to the **SSF**, **BSSTF** and **BSSAF**.

Failure rates will be monitored and reported regularly to **BSSTF**. This data will be recorded in the notes of the meetings, subject to any personally sensitive data being removed. Any necessary improvement measures will be identified and recommended and recorded.

7 The BSS Examination and BSS Examiner Support Processes

The **BSS Office** will maintain the **BSS** Examination processes.

The **BSS** Office will employ quality assurance measures to assure the quality and consistency of **BSS** Examinations. This is specific to **BSS** Examinations and in addition to the metrics identified in section 6; the quality of the **BSS** Examination processes will be monitored via a specific quality assurance and **BSS** Examiner support measures implemented by **BSS Office** which records and evaluates the following standard factors as a minimum:

1. Number of **BSS** Examiners
2. Number of **BSS** Examiners up to date with the required training
3. Rate of **BSS** Examinations per **BSS** Examiner
4. Number of faults detected per **BSS** Examiner, per each **Standards Scheme** fault
5. Number of boats examined
6. No. of complaints received
7. Results of any peer review activities
8. Results of quality assurance assessments (including reviews of **BSS Examination** Record forms, **BSS Examiner** Desktop Assessments and Field Assessments and quality assurance assessments from complaints investigations).

The **BSS** Examination programme will be designed to ensure that the **Standards Scheme** is robust over the four-year examination cycle. The monitoring arrangement and quality assurance measures applied to the **BSS** Examinations programme will be used by the **BSS** Office to ensure that the **BSS Examination Checking Procedures** are robustly applied by **BSS** Examiners and that the **BSS Examination** data produced is robust.

The results of the programme will be shared with the **BSSTF** and **BSSAF** and **BSS** Examiners, as appropriate.

8 Performance review

The results from the monitoring metrics identified in the implementation plans will be presented in writing by the responsible person to the **BSS Office**, who will then pass this to **BSSTF** and **BSSAF** for review during their periodic meetings.

The report will demonstrate how the work of **BSS** has been:

1. appropriate and proportionate and consistent in application
2. have minimal unintended consequences (such as adverse effects on the boating experience or hidden costs)
3. supported by stakeholders
4. supported by the boating and general public who may be affected by boating activity.

This report will be provided to the **BSSTF**, **BSSAF** and stakeholders via their representatives.

The Directors will advise on acceptability of performance of this **BSS Risk Management Process** where relevant at Directors' meetings.

9 Process review

This process document is subject to 5-year review by the Directors, or sooner if the Directors determines any need.

BSS Office will identify a staff member who will be responsible for establishing the scope of the review. The scope will take account of any recorded comments received from the **BSSTF** and **BSSAF** since the last review.

BSS Office will work with RoSPA to produce an updated draft of this **BSS Risk Management Process**. The updated process will be passed to **BSSTF** for consideration.

BSSTF will be responsible for making any recommendations for change and proposing these to **BSSAF**.

If agreement is not reached by **BSSAF**, any comments will return to **BSSTF** for consideration and revision.

BSSAF will evaluate the process. When agreed recommendations are reached, they will be passed to the Directors for ratification.

The Directors will review the recommendations for change and ratify the revised version. If agreement is not reached by the Directors, any comments will return to the **BSSTF** for its consideration and to make any revised recommendations.

In the event consensus cannot be reached, ultimately the Directors, being mindful of any recommendations, will make the final decision.

Appendix A Critical Groups

Introduction and Purpose

The **BSS Risk Management Process** highlights the importance to successful risk management of identifying persons within the boating population who may be at substantially higher risk than the average across the whole population. These persons, referred to as '**Critical Groups**', may require more detailed work to establish them as a defined group who experience these higher levels of risk.

Definitions

For the purposes of the **BSS Risk Management Process**, a **Critical Group** is defined as follows:

'A **Critical Group** is a subset of the overall boating population within the scope of the **BSS** who by virtue of their ability levels, behaviours, knowledge, exposure to technical hazards, areas of operation etc. experience substantially higher risks compared with the mean exposure across the whole boating population.'

Examples

These partial examples illustrate some factors that any one alone or in combination, can **Critical Group**:

Ability and Competence limitations

- Experience
- Training
- Knowledge
- Physical ability (lack of ability, impairments)
- Intellectual ability (mental health and capacity)
- Income levels that cannot sustain a safe boat
- Language matters for written and spoken instructions and guidance

Behaviour

- Use/abuse of protective equipment or safety systems
- Intentional/unintentional ignoring of advice or instruction (verbal or written)

Craft condition

- Equipment type faults
- Inadequate installation
- Incorrect use (intentional or not)
- Random faults
- Lack of, or inappropriate maintenance

Identifying Critical Groups

- Use of incident data (WAID etc) to correlate incidents with factors listed above.
- Monitoring changes to patterns of use (established or new)
- User feedback
- Expert opinion
- Testing incident rates for suspected **Critical Groups** against the mean (whole population)

Appendix B - Tolerability of Risk factors

For each actual or potential hazardous situation, the process considers:

- Likelihood of occurrence
- Range of outcomes
- Who may be affected and to what extent
- Availability and effectiveness of risk control measures
- Cost of implementing risk control measures and their effect on the nature and extent of participation in the activity and the ability of a responsible party to pay
- Priority for implementing change.

The following four factors will be considered when determining the tolerability of risk:

1. **As Low as Reasonably Practicable (ALARP).** Showing that a principal requirement of health and safety law has been met.
2. **Personal acceptability.** Evaluating the acceptability of the risk to Participants and Non-participants.
3. **Risk-benefit assessment.** Ensuring as far as possible that risk control measures do not detract from the health and well-being benefits to Participants [this is relevant to any **ECP** being considered].
4. **Other effects.** Identify any adverse effects of the risk control measure particularly on the environment and on the accessibility of boating activity.

These factors are described below.

Where the considerations of personal acceptability, risk-benefit and other effects leads to a reconsideration of the risk control measures, the **ALARP** assessment will be repeated to show that risks remain as low as reasonably practicable.

(a) ALARP

The requirement is to reduce risks.

For existing risks assess whether the risk could be expected to decrease or increase and if the latter, whether the risk could be considered no longer to be as low as reasonably practicable.

Any risks in excess of 'high' can be considered intolerable to the duty holder even where the Participant may be prepared to take the risk. For risks classed as 'high', a correspondingly high level of expenditure or resources is justified in order to reduce them. For risks classed as 'low', little or no commitment of resources will be necessary beyond what may be considered as good practice.

(b) Personal Acceptability

In considering the overall acceptability of a new or changed risk the **BSS Office** will consider the extent to which it is likely to be acceptable to the members of the public, whether **Participants** or Non-participants. The **BSS Office** may choose to consult with groups to establish levels of acceptability.

Factors which act against risks being acceptable are:

- **Unawareness of the risk**, therefore depriving the affected person of any opportunity to accept the risk, take mitigating action, or remove themselves from the risk.
- **Benefits of the risk not apparent or going to others**. Taking appropriate boating risks brings benefits to the individual (see below) but may be considered unacceptable if it means others, especially Non-participants, have risks placed upon them.
- **Accident rates are perceived to be high** although in reality they may not be.
- **Little or no control over outcomes**. Risks are likely to be considered more acceptable where those potentially affected consider they have a degree of control over outcomes that falls within their level of competence.
- **Children may be affected**. Any risk where children may be affected especially if they are the predominant group at risk.

(c) Benefits from Boating activities

The activity of boating brings with it a wide range of benefits to the **Participants'** health and well-being which include:

- A slower, more relaxed pace of life
- Access to pleasant environments less affected by noise and pollution
- Access to biodiversity through 'green corridors'
- Educational benefits through access to a semi-natural environment and historic network
- Helping to sustain a historic and vibrant waterways network for society to enjoy

These are reflected in the **Navigation and/or Harbour Authorities'** common goal of making every visit to the waterways a safe and pleasant experience. The effects on these benefits of proposed changes to risk and their control need to be considered and where there appears to be a reduction in benefits then consideration should be given to alternative methods for risk control and taken account of in the **ALARP** assessment.

(d) Other effects

- **Environment**. Consideration of carbon and other emissions to the environment and the effects on flora and fauna (with reference to the Green-Blue Environmental Code of Practice)
- **Inclusivity and Access**. The effects of changes on the access of special needs or other minority groups to boating activity.

Appendix C - Risk Estimation Process within the ALARP Region

A risk considered to be within the **ALARP** region is divided into areas of nominally high, medium and low risk.

When evaluating a change to an existing risk or a possible new risk control measure it may be that the original and the new risk both fall within the same area. In these cases, it will be necessary for the **BSS Office** to make a judgement as to whether the risk is the same, higher or lower.

The **BSS Office** can choose to use the following **ALARP** check formula if these assist the decision-making process:

[Risk management: Expert guidance - ALARP at a glance \(hse.gov.uk\)](https://www.hse.gov.uk/riskmanagement/expertguidance/alarpataglance/)

If it is not considered clear or there is uncertainty that the risk is **ALARP** in terms of risk to people, it will be necessary to consider possible additional risk reduction measures and evaluate the resulting risk level. When there is confidence that the measures, current and proposed, can be considered to provide risks which are as low as possible at proportionate¹ cost then the acceptability of the risk taking into account other risks and the benefits of the activity should be determined.

Risk Assessment Characterisation²:

Immediate action needed to address risk (towards the borders of unacceptability)

- Significant likelihood of a single fatality within 5 years
- Potential for multiple fatal incidents
- Potential for incidents with multiple fatalities
- Regular occurrence of serious injuries
- Most incidents have potential to escalate to serious or fatal outcomes
- Fatal incident within last 5 years

Medium potential risk

- Fatalities possible but unlikely within 15 years
- Some potential for escalation to serious or fatal outcomes

Low potential risk (tending towards 'broadly acceptable')

- Negligible potential for fatalities
- Little or no potential for escalation to serious or fatal outcomes
- No potential for multiple fatalities
- No actual fatalities recorded

No apparent change in risk level

- The situation offers no identifiable increase in normal life risks

¹ The higher the risk the greater the expenditure considered justifiable to reduce that risk.

² Numerical fatality periods based on BS8800 factored by 10 for risks to public from workplace activities.