Consultation Paper

Australian Recreational Boating Safety Committee



Review of the ABP Standard

DATE: May 2019

Purpose of Paper:

This consultation paper contains the recommendations of the Australian Recreational Boating Safety Committee (ARBSC) in respect to a review of the ABP Standard.

The review proposes that changes to the ABP Standard are made in the interest of achieving better safety outcomes for Australian recreational boaters.

The paper provides background information regarding a review, proposes changes to the ABP Standard, provides supporting justification for the proposed changes and outlines the consultation process for review participation.

This paper is accompanied by a modified edition of the ABP Standard which contains the proposed changes.

The ARBSC have endorsed the intent of these changes upon the recommendations of the Australian Builders Plate Working Group, with the understanding that these changes are in the interest of improving the safety of recreational boaters.

The proposed changes from this limited review of the ABP Standard may be subject to change following public consultation.

Development of Paper:

To ensure a nationally consistent approach from marine regulators, the initial stages of this proposed review were conducted between regulators, with minimal industry input.

The consultation phase will ensure adequate opportunity for interested parties to participate in this review.

1. Definitions

ABP – The Australian Builders Plate, which is affixed to recreational vessels as required by the National Standard for The Australian Builders Plate for Recreational Boats.

ABP Standard – The current edition (edition 4) of the National Standard for The Australian Builders Plate for Recreational Boats, accessible at: http://www.anzsbeg.com.au/files/7214/4920/4748/ABP_Ed_4.pdf

ABPWG – The Australian Builders Plate Working Group.

ARBSC – The Australian Recreational Boating Safety Committee.

Small volume vessel – A boat that in its volume (as determined by the volume beneath the assigned static float plane) provides a lower level of buoyancy able to support lower passenger loading numbers. For the purposes of this paper, a boat under 4.5 metres in length is considered a small volume vessel.

Specified Standards / Specified Technical Standards – Documents that determine vessel build standards and associated calculations. These are the three referenced standards in the National Standard for The Australian Builders Plate for Recreational Boats. The specified standards referenced are the relevant Australian Standard (**AS**), American Boat & Yacht Council (**ABYC**) Standard and the International Organisation for Standardisation (**ISO**) Standards.

2. The Australian Builders Plate (ABP) Standard

The ABP Standard was first published in 2005 and was introduced *"in response to public demand for recreational boat safety and with the support of Australian boat builders"*.¹

The ABP Standard seeks to enhance the safety of persons on recreational boats, by ensuring that (specified) boats are fitted with Australian Builders Plates which contain essential safety information applicable to the boat's use. The ABP Standard specifies that some of the displayed ABP information, such as maximum loading masses, are determined in accordance with specified technical standards. This aims to ensure that a boat has adequate volume and capacity to safely support the recommended loading and passenger masses listed on the ABP.

The ABP Standard is also "a declaration by the builder or importer that the boat meets, to the extent specified within this Standard, the requirements of relevant national or international standards applicable to recreational boats".²

¹ Page 6. "Introduction", Australian Transport Council, *National Standard for The Australian Builders Plate for Recreational Boats*, Ed. 4, 2011 accessible at: http://www.anzsbeg.com.au/files/7214/4920/4748/ABP_Ed_4.pdf ² Ibid, p.6

3. Introduction

A. Background

The Australian Recreational Boating Safety Committee (ARBSC) recommends that a limited review of *the National Standard for The Australian Builders Plate for Recreational Boats* (the "ABP Standard") be undertaken. This decision was made following a nationwide examination of the current ABP Standard and its application. This examination found widespread non-compliance with the current ABP Standard. It identified that the current ABP Standard is frequently ambiguous and that it may have potential unintended and undesirable safety outcomes, such as vessel overloading.

This review is considered "limited" as the recommended changes do not modify the scope or objectives of the ABP Standard. The review proposes minor changes to the application of the ABP Standard, in respect to reducing moderation of specified standards and proposing that optional warning statements are made mandatory.

The decision to review the ABP Standard was informed by a triple fatality boating incident, in which vessel overloading was a contributing factor.

Investigation of this incident revealed that the vessels ABP displayed a maximum loading mass which was significantly heavier than the maximum mass determined in the specified standard. The vessel load (at the time of incident) was less than the maximum loading mass displayed on the vessels ABP. However, the load significantly exceeded the actual maximum (specified standard) mass that should have been displayed on the ABP. This finding led to a national examination of the application and outcomes of the current ABP Standard. The national examination has revealed systemic non-compliance with the ABP Standard.

The objective of this review is to more closely align the ABP Standard objectives and outcomes in relation to recreational boating safety. It is intended to produce a clear, easily understood ABP Standard for boat builders to use. A reviewed ABP Standard will also address outdated administrative references and remove unnecessary specified standards.

B. Principle safety risk addressed by the ABP Standard:

The ARBSC and all Australian maritime regulators accept that vessel overloading is a safety risk. The safety risk of vessel overloading has been demonstrated in numerous Australian boating fatalities.

- Vessel overloading reduces freeboard, meaning vessels are much more likely to sink, get swamped or flood.
- Sinking, swamping or flooding increases the chance of boaters unexpectedly entering the water.
- Unexpectedly entering the water raises a boater's chance of drowning, cardiovascular or breathing problems, cold shock, hypothermia and exposure to environmental risks.
- Drowning, cardiovascular or breathing problems, cold shock, hypothermia and exposure to environmental risks increase the chance of a boater succumbing to serious injury or death.

In their endorsement of the ABP Standard, Australian Governments have endorsed the AS, ISO and ABYC standards as the accepted measurements of safe vessel loading capabilities.

- The ARBSC have found that currently, many ABPs list loading masses that significantly exceed the accepted AS, ISO and ABYC standard determinations of maximum load.
- This means that if boaters follow the loading recommendations on an ABP (as they are instructed to do) they are likely to overload their vessel.

Image: A basic definition of vessel overloading as a safety risk.

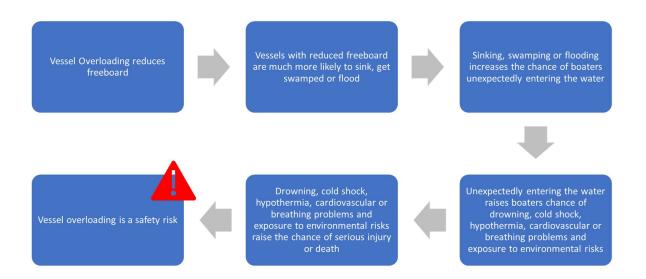
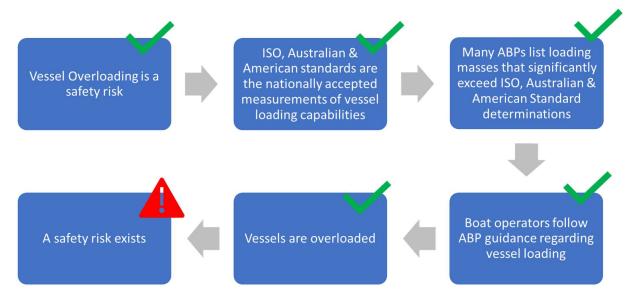


Image: Depiction of the "Principle safety risk" - the link between incorrect ABP loading values and the safety risk of overloaded vessels.



C. Risk basis & evidence of the safety problem:

Vessel overloading is frequently identified as a contributing factor (something that helps cause a result) in serious boating incidents and fatalities. However, vessel overloading is less often identified as a causal factor (a factor that if avoided or eliminated probably would have prevented the fatality). Typically, boating fatalities arise from a combination of contributing factors (rather than a sole causal factor), such as poor weather conditions, operator inexperience, unfit for purpose vessels, overloading and other factors.

Vessel overloading is not often identified as the sole causal factor in a marine incident. Typically, vessel overloading in combination with weather conditions and other factors precede marine incidents.

However, vessel overloading is very frequently present as a contributing factor in serious boating incidents.

While this review is supported where possible by specific evidence of poor safety outcomes arising from incorrect ABP values, it is also guided by the intent to avoid vessel overloading arising from non-specified standard derived ABP values.

Of note, audits of manufacturers and new boats have revealed systemic misapplication of specified standards and/or not using specified standard values at all when determining ABP values. As a result, loading values, particularly of small-volume vessels, have been shown to be significantly overestimated. This in-turn increases the likelihood of vessel overloading.

4. Australian Builders Plate Working Group

NOTE- The Transport and Infrastructure Council subsumed the Australian Transport Council and its endorsing authority, and the ARBSC assumed responsibility for publishing the ABP Standard from the defunct National Marine Safety Council in 2011. It is in this capacity that the ARBSC convened the ABPWG.

The ABP Standard is currently in its fourth edition and was most recently reviewed in 2011. In pursuit of improved safety outcomes for Australian boaters, the ARBSC convened a national Australian Builders Plate Working Group (ABPWG), comprised of delegates from all Australian recreational boating safety regulators, to examine the ABP Standard. The ABPWG membership included Naval Architects, Marine Surveyors, policy experts, regulatory and compliance practitioners and persons involved in previously drafting the ABP Standard.

The ABPWG conducted a study of the ABP Standard, its application and its outcomes across all Australian jurisdictions. The study canvassed states for incident data, audit findings and included lessons learnt from inter-jurisdictional workshops and factory visits. It was the finding of the ABPWG that the ABP Standard and its application are delivering unintended and undesirable safety outcomes for Australian boaters. These outcomes illustrate the ABP Standard has failed to meet its objectives.

The ABPWG determined that the best possible safety outcome of a reviewed ABP Standard would be the requirement that boats are built in full accordance with AS, ABYC or ISO standards (while keeping the ABP as a standardised source of safety information).

The findings of the ABPWG were accepted by the ARBSC, however it was decided that the substantive safety benefits of mandated specified standards could also be achieved by reducing their moderation in the ABP Standard and increasing active regulation of ABP compliance. In consideration of the perceived impost to many in the boating industry if standards were mandated (and the likely cost and timeframe of changes) the ARBSC determined that a limited review of the ABP Standard was currently the appropriate course of action. The mandating of specified standards for boat construction remains a future option.

The ARBSC recommend that a reviewed ABP Standard should aim to:

- i. Moderate the values obtained by the specified standards as little as possible.
- ii. Contain clauses written in clear English, without ambiguity between ABP definition clauses and specified standard definitions.
- iii. Ensure loading values listed on ABPs do not exceed those calculated from a specified standard.
- iv. Encourage level flotation for vessels measuring less than 6 metres.
- v. Update administrative references.

5. Justification of Review Objectives

The proposed changes to the ABP Standard seek to achieve better safety outcomes for Australian boaters, in line with the existing objectives of the ABP Standard. The proposed Standard will improve clarity and ease of understanding, resulting in a more accessible product for boat builders. Attached below are justifications of the objectives of the ABP Standard review.

A. Moderate the values obtained by the specified standards as little as possible.

Correctly derived values without moderation will increase the effectiveness of the ABP as a tool to drive increased safety, by addressing vessel overloading.

The ABP Standard was originally implemented by the National Marine Safety Committee to promote safer recreational vessels without mandating full compliance with specified standards.³ It pursues this goal by requiring that values on ABPs are calculated using parts of a specified standard (AS/ISO/ABYC). This system was implemented in lieu of requiring vessels to be manufactured in full accordance with a specified standard.

It was the finding of the ABPWG that the optimum safety outcome for an ABP Standard review would be the mandatory requirement for boat builders to build vessels in full accordance with a specified standard. Requiring boats be built in full compliance with specified standards would bring Australian vessel regulation into line with the requirements of other OECD nations. It would ensure boats sold in Australia met a mandatory minimum standard in their design and build quality.

Requiring closer compliance with technical standards in vessel build and design would bring vessel regulation into line with other Australian passenger transport industry safety regulatory regimes. The "Australian Design Rules", the national motor vehicle safety regulations, were first published in 1969 and have been nationally mandated under the Motor Vehicle Standards Act 1989 (Commonwealth) since 1989.⁴

Due to the scope of imposition on industry, currently the ARBSC are not proposing that a reviewed ABP Standard seek to mandate full compliance with specified standards. The ARBSC determined that a reduced moderation of specified standards would address the primary identified safety concerns. This is principally because the volume and buoyancy values determined from specified standards are considered the core safety measures of the specified standards (and these requirements are contained within the ABP Standard).

The primary identified safety concerns arising from the lack of conformity with specified standards are:

- i. Maximum loading masses which exceed those calculated from specified standards
- ii. Maximum person masses which exceed those calculated from specified standards
- iii. Maximum outboard masses which do not account for the weight of related equipment (batteries, portable fuel tanks, etc)
- iv. Fitting of basic instead of level flotation when ABYC or ISO standards are nominated
- v. "Carry-on" load which does not account for the actual mass of equipment carried

³ National Marine Safety Committee, *Regulatory Impact Statement- National Standard for Recreational Vessels,* 2003 accessible at: http://www.anzsbeg.com.au/files/4413/2096/0347/RIS_Final_ABP__-1_May_2003.pdf ⁴ Further information regarding the Australian Design Rules scheme may be accessed at:

https://infrastructure.gov.au/vehicles/design/

B. Contain clauses written in clear English, without ambiguity between ABP definition clauses and specified standard definitions.

The ABPWG identified that much of the structure of the ABP Standard is non-coherent, several clauses are ambiguously worded and in general, it is a difficult document to understand.

For example, some ABP Standard clauses are written in a manner which make it difficult to understand what is required. This was evidenced by examined vessel ABPs, which demonstrated significant variation in their interpretation of ABP Standard requirements, such as the method for determining outboard mass.

There are also inherent ambiguities where the ABP Standard requires that masses are "calculated in accordance" with a specified technical standard; yet values actually listed on the ABP are required to be "as recommended by the builder".

Re-writing or removing ambiguities will improve the legibility of the ABP Standard and reduce the variation in interpretations (variances which may lead to the listing of inaccurate and potentially unsafe ABP values).

A key aim of the review is to improve the legibility of the document, so it may be easily understood by boat builders, regulators and other stakeholders.

C. Ensure loading values listed on ABPs do not exceed those calculated from a specified standard.

The ABPWG identified that the loading values listed on ABPs frequently differ from those calculated in accordance with specified technical standards. Of concern, a significant proportion of the small volume recreational vessel fleet were observed to list loading values which exceeded values calculated in accordance with specified standards. This promotes the likelihood of vessel overloading, which in turn increases the chance of vessel capsize or swamping (with associated negative safety outcomes).

It is assumed that a clear majority of prospective vessel buyers will look to the ABP (or ABP derived information) to assess the passenger carrying capacity of a vessel as an influencing factor in their boat purchase.

As referenced in the introduction to this paper, the ABPWG noted a significant incident in which a small vessel's ABP displayed values which exceeded those calculated from technical standards.

This vessel was carrying a passenger and maximum load which were less than the passenger and maximum load listed on the ABP, but more than the loads derived from the specified standard calculations. The vessel capsized, resulting in the deaths of all three persons on board. While it is not known if the incident vessels ABP values influenced the boater's decision making, it does constitute a failure of ABP Standard Objective (b) (providing for-) *"ready access to essential safety information on the limitations applicable to the use of the boat to encourage appropriate and responsible use of the boat."*

The intention of the ABP Standard is that person capacity and maximum load information on the ABP are calculated from the specified standards, as per the current ABP Standard clause 9.3 – Person Capacity and Maximum Load Information.

ABP STANDARD EDITION 4.

9.3 - "The person capacity and maximum load information specified in Clauses 8.1 e), 8.1 f), 8.2 e), and

8.2 f) shall be determined in accordance with one of the following:

a) ABYC Standards and Technical Information Reports for Small Craft. *b*) AS 1799.

c) ISO 6185.
d) ISO 13590 or SAE J 1973.
e) ISO 14946."

The ABPWG formed the opinion that the application of clause 9.3 may be undermined through the terminology in clauses 8.1 e), 8.1 f), 8.2 e), and 8.2 f) (edition 4) *"as recommended by the boat's builder."* This terminology introduces ambiguity, where a boat's builder might incorrectly recommend values which are not consistent with those determined in accordance with clause 9.3.

D. Provide comment that encourages level flotation for vessels measuring less than 6 metres.

The ARBSC endorse that level flotation provides better safety outcomes for boaters when compared to basic or no flotation. Level flotation reduces the likelihood of vessel capsize and sinking, as well as providing a better chance of vessel recovery in swamping and capsize incidents. Additionally, it provides a safer refuge for boaters in the case of a marine incident.

The ABPWG reviewed marine incident data and identified a strong case supporting the need for level flotation. In one state, 267 marine incidents between 2007 and 2018 had descriptions indicating powered recreational vessels (under 6 metres in length) sinking, swamping or capsizing. These incidents resulted in 12 fatalities and 12 seriously injured persons (serious injuries including hypothermia).⁵ Multiple fatal incidents were identified where boaters were unable to cling to the hulls of upturned vessels which were floating at altitudes indicative of basic flotation.

The ABPWG contend that the risks and harms of these incidents could have been significantly mitigated if the vessels were fitted with level flotation.

It is noted that the ABP Standard does not mandate level flotation. It provides no comment or guidance on the improved safety outcomes of level flotation (when compared to basic flotation) in recreational vessels. Of the specified standards listed in the current clause 9.5 (Buoyancy Information), AS1799 strongly recommends level flotation, while ISO and ABYC standards mandate level flotation for (the majority of) small powered vessels.

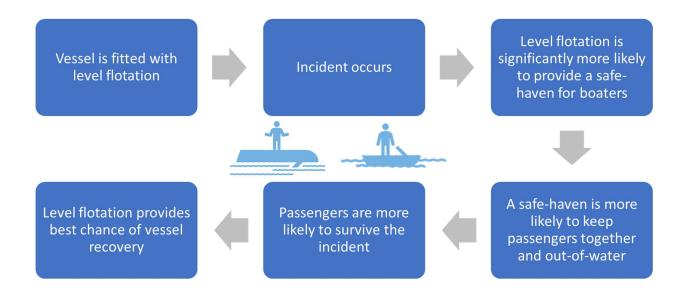
In line with the findings of the ABPWG, the ARBSC recommends that the ABP Standard should encourage boat builders to fit level flotation for its desirable safety outcomes. The promotion of level flotation as a preferred buoyancy state is considered to better align the ABP Standard outcomes with Objective c) – *"information on the buoyancy characteristics of the boat so that persons may make informed decisions regarding its purchase and use."*

The ARBSC determined that where a specified standard does not require a boat be fitted with level flotation, it is outside the scope of this review to require it. However, in line with objective A. (reduced moderation of specified standards), the proposed ABP Standard requires flotation to be fitted as required by the specified standard.

It is considered that the ABP Standard should highlight the improved safety outcomes of level flotation when compared to basic flotation. This is intended to encourage boat builders and consumers to preference level flotation for its desirable safety outcomes.

⁵ It should be noted that these figures are a conservative interpretation of incident data. Incomplete incident records and vessels which capsized in bar crossings have been excluded.

Image: Depiction of preferable safety outcomes of level flotation.



E. Update administrative references.

Since the last review of the ABP Standard in 2011, several organisational changes have occurred which have not been reflected in the ABP Standard. The ABPWG identified that updating these references is important to both ensure industry and consumers recognise that the ABP Standard is current and enforced, and to maintain oversight through clearly identified ownership of the ABP Standard.

6. General Comments on the Proposed ABP Standard

A. Restructuring the ABP Standard

The proposed new edition of the ABP Standard contains minor changes to the content (and subsequent requirements) of the current Standard, however it proposes significant changes to the order and structure of the document.

It is believed that much of the ambiguity of the ABP Standard arises from the complex structure of the current document. By proposing a major rethink of the structure, it is hoped that all users of the ABP Standard will benefit from a less bureaucratic, more practical document.

Major structural changes include:

- The addition of a "scope" for each chapter, so readers may quickly locate desired information
- Improved logic of chapter titles
- Removal of definitions not used in the Standard
- Addition of definitions used in the Standard
- Improvements to the consistency of terminology (it's proposed that "relevant national or international standards", "referenced standards", "standard specified" or "nominated standards" are now termed "specified standards")

- Moving requirements out of subordinate, small font "Notes" and into actual clauses
- Where clauses currently reference other chapters, bring the information together into a single clear clause
- Introduce a table identifying which specific standard is to be used for each item of information (*Eg. ABYC Buoyancy Values = ABYC H-8*)
- Introduce a reference table listing vessel requirements, so a boat builder may easily understand what is required without flipping back-and-forward in the Standard

This new structure provides a simpler presentation of information and should remove ambiguity.

B. Changes to the content of the ABP Standard

Key proposed changes to the requirements of the ABP Standard are outlined in the chapter 8 of this paper.

C. Some questions identified by the ABPWG for consideration during the consultation process

- 1. Should boats be required to be built in full compliance with specified standards?
- 2. Should the ABP Standard allow builders to nominate more conservative values (eg. lower maximum load) than the values determined in accordance with the specified standard? Or should the ABP Standard require complete conformity with specified standard values (with warning statements potentially recommending any reductions in load)?
- 3. Is the general restructure of the ABP Standard supported?
- 4. Does the introduction of reference tables assist boat builders? Is one table adequate, or should a table be created for each category of vessel (under/over 6 metres, outboard/inboard)?
- 5. Should Personal Water Craft continue to be included in the ABP Standard?
- 6. Should the length of hull be determined in accordance with ISO 8666? Or should the ABP Standard itself contain a definition of hull length?
- 7. Should the mandatory warning statement include a statement regarding the area of operation for which the boat was designed?
- 8. Should the ABP Standard specify the size of an ABP, and whether multiple plates can be used (eg. one plate for vessel loading items, another plate for vessel warnings)?

7. Comparison of the Tables of Contents -

Edition 4 and Proposed Edition 5 of the ABP Standard

To facilitate the comparison of proposed changes to the ABP Standard, the following table compares the existing ABP Standard (Edition 4) in column one, with the proposed ABP Standard (edition 5) in column two. Where a chapter (or clause) has been shaded a colour in column one, that requirement can be found in the "Part" in column two with the corresponding colour.

COLUMN ONE:	COLUMN TWO:	
National Standard for The Australian Builders Plate for Recreational Boats (EDITION 4)	Proposed National Standard for The Australian Builders Plate for Recreational Boats (EDITION 5)	
1 PREAMBLE 5 1.1 Introduction 5 1.2 Publication history and amendments 5 1.3 Background 5 2 OBJECTIVE 6 3 SCOPE AND APPLICATION 6 3.1 Scope 6 3.2 Application 6 4 REFERENCED DOCUMENTS 7 5 TERMS AND DEFINITIONS 8 6 ABBREVIATIONS 11 7 GENERAL REQUIREMENTS 11 7.1 Location 11 7.2 Fixing and marking 11 7.3 Symbols 11 7.4 Size of text and symbols 12 8.1 Boats less than 6 metres in length 12 8.1 Boats less than 6 metres in length 13 8.3 Inflatable boats 14	FOREWORD 5 Part 1 Preliminary 7 1.1 Objective 7 1.2 Scope 7 1.3 Application 7 1.4 Referenced documents 8 1.5 Terms and definitions 9 1.6 Abbreviations 12 Part 2 GENERAL REQUIREMENTS 13 2.1 Scope 13 2.2 Location 13 2.3 Fixing and marking 13 2.4 Items of information to be displayed 14 2.5 Symbols 15 2.6 Size of text and symbols 15 2.7 Design of the ABP 16 2.8 Provision of additional safety information 16 2.9 Sample plates 16 Part 3 Specified Standards and the determination of information on a plate 17 3.1 Scope 17	

8.4 Personal watercraft 15	3.2 Determination of information 17
9 STANDARDS FOR DETERMINING INFORMATION 15	3.3 Use of specified standards 18
9.1 Use of standards 15	3.4 Values displayed 19
9.2 Engine power rating and Mass information 15	3.5 Conversion to metric values 19
9.3 Person capacity and maximum load information 15	Part 4 Information to be displayed on the plate 21
9.4 Optional warning statement – person and load capacity 16	4.1 Scope 21
9.5 Buoyancy information 16	4.2 Information required to be displayed on an ABP 21
9.6 Build date information 17	4.3 Inflatable boats 21
9.7 HIN information 17	4.4 Personal watercraft 21
9.8 Mandatory warning statement – alteration of the boat 17	Annex A - TEMPLATES FOR AUSTRALIAN BUILDERS PLATES 29
ANNEX A - TEMPLATES FOR AUSTRALIAN BUILDERS PLATES 18	A.1 Scope 29
A1 Scope 18	A.2 ABP templates for boats less than 6 metres in length 29
A2 ABP templates for vessels less than 6 metres in length 18	A.3 ABP templates for boats 6 metres or more in length 33
A3 ABP templates for vessels 6 metres or more in length 22	

8. Commentary on Proposed Changes

The following table summarises and comments on the changes to requirements proposed for edition 5 of the ABP Standard.

COLUMN 1:	COLUMN 2:	COLUMN 3:
PROPOSED NEW REQUIREMENT	PROPOSED EDITION 5 – RELEVANT NEW CLAUSE	SUPPORTING JUSTIFICATIONS FOR NEW REQUIREMENTS
Addition of the term and concept of "Full accordance". This concept is used to communicate the requirements of a boat builder when calculating ABP values. The concept is intended to reduce ambiguity and clarify what a boat builder must undertake to comply with the ABP Standard.	 3.3.3 Full accordance with the specified standard/s When determining the information to be displayed on a boat's ABP, the person responsible for determining the information shall ensure that: a) all calculations and tests required by the specified standard for the particular item on the plate are undertaken in full accordance with the requirements of that standard; and b) all considerations within the specified standard relevant to the information required to be displayed on the ABP are met. 	Prevent vessel overloading Ensure all relevant aspects of a specified standard are complied with in respect to loading calculations By ensuring listed ABP loading values are calculated in full accordance with specified technical standards (including mass, person area constraints, stability, down flooding calculations, etc.) instances of overloading (within listed ABP values) should be reduced.
Removal of Level Flotation moderation. While the current ABP Standard allows boat builders to nominate and calculate values in accordance with ABYC and ISO specified standards, it moderates these values by allowing boat builders to fit basic flotation to boats where he standard specifies level flotation should be fit. This change does not remove the ability of a boat builder to nominate a basic flotation	[Removal of ABP Clause 9.5 "Buoyancy Information" – Note 2.] Addition of- 3.3.3 Full accordance with the specified standard/s EXAMPLE 4 Full accordance requires that a boat's builder shall ensure that where the specified standard requires	Level flotation provides for better safety outcomes than basic flotation. Specified standard values are intended to be accompanied by the buoyancy performance specified (in said standard). ABP values are dependent on the specified standard being properly applied. By eroding the specified standard flotation requirements, the methodology of the specified standard is undermined.

buoyancy performance, but it does require that buoyancy performance must conform with the buoyancy required by the specified standard.	that level flotation be fitted to a boat, the boat shall have level flotation fitted, list the term "level flotation" and meet all the requirements of that standard to achieve level flotation.	This may undermine the intended safety performance of a boat in a boating incident. The ABP Standard is not a technical standard, and it should not seek to specify technical requirements that contradict specified standards.
 Change from optional to mandatory warning statements. The current ABP Standard contains an optional warning statement regarding the decreasing of loading masses in certain conditions ("reduction of load"). For boats with a flybridge, it also includes an optional warning statement regarding safe passenger numbers to be carried on the flybridge. It's proposed that these statements are made mandatory where applicable; and that the "reduction of load" warning statement references the intended operational limitations of the boat consistent with the specified standard used. When ABYC is the nominated standard, it requires that the intended operational limitations are consistent with AS1799. This is because ABYC does not itself 	 Table 5— Requirements for the information to be displayed on an ABP Row 9. Warning statement 2 – Operating capacity The operating capacity warning statement displayed shall be a statement/s providing information to the consumer as to any operational limitations, or reductions required to the maximum load or maximum person capacity in different operating conditions (eg: weather, operational area, time of day). Where AS1799 or ISO standards are the specified standards, the operating capacity warning statement/s shall be consistent with the provisions of the specified standard used: a) Where AS1799 is the specified standard, this warning statement shall state that the values listed are valid for operations within protected waters only, as defined in AS1799.1.3.32 and state that protected waters are "Lakes, rivers, bays, estuaries and similar bodies of water." 	 Prevent vessel overloading Ensure compliance with ABP Standard Objective (b) b) ready access to essential safety information on the limitations applicable to the use of the boat to encourage appropriate and responsible use of the boat; The specified standards state intended operational limitations (eg. ISO category model and AS protected waters limitations) which are fundamental to understanding that the calculated loading values listed on ABPs are designed within condition tolerances. It seems logical that these standard limitations should be required to be listed along with any statements the specified standard makes to operating the vessel beyond these limitations. An improved and mandatory warning statement will assist boat operators to adhere to safe loading practices and better understand the limitations of
contain operational limitations, but the methodology and design parametres of ABYC standards are comparable to AS1799.	b) Where ISO standards are the specified standard, this warning statement shall state the boat design category within which the values have	their vessels. This should assist risk mitigation in relation to vessels operating in unsafe conditions.

	been calculated and the limiting wind forces and significant wave height for that category.	
	Where ABYC standards are the specified standard, this warning statement shall be consistent with the operational capacity contained within AS1799.	
	The operating capacity warning statement/s may refer to the boat's operating manual.	
	Table 5— Requirements for the information to be displayed on an ABP	
	Row 10. Warning Statement 3 – Flybridge capacity	
	For boats with a flybridge, a warning statement providing the maximum number of persons to be carried on the flybridge shall be displayed on the ABP.	
	Where a boat is fitted with a flybridge then an additional plate shall be affixed to the flybridge in a prominent position adjacent to the flybridge steering position.	
Move auxiliary engine mass from "outboard engine mass" to "maximum load".	Table 5— Requirements for the information to be displayed on an ABP	Reduce moderation of the specified standards and improve the logic of the ABP.
	Row 6. Maximum Load	
The ABP Standard currently requires that when a boat may be fitted with an auxiliary engine, an allowance for the auxiliary engine mass is provided for in the maximum engine mass value.	The maximum load capacity displayed shall be the maximum load for the boat as determined in accordance with the specified standard, and shall include, as a minimum, the sum of the following items:	
This is inconsistent with the requirement		
that maximum outboard engine mass		

should be determined from a specified standard.		
As such, it is proposed that (when a boat may be fitted with an auxiliary engine) the mass of the auxiliary engine and associated masses (batteries, mounting brackets, etc) are allocated mass from the vessels maximum load.	d) The mass of any auxiliary outboard engine that may be carried.	