# National Standard for Commercial Vessels

PART F
Special Vessels

SECTION 2
LEISURE CRAFT

First Published:

October 2010

Draft for public comment issued — 8 October 2009

Endorsed by the Australian Transport Council — 27 October 2010

This compilation was prepared by the Australian Maritime Safety Authority on 16 June 2016 taking into account Amendment No.1, 2016 that was approved by the National Marine Safety Regulator on 7 June 2016 to commence on 10 June 2016.

© Australian Maritime Safety Authority

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without written permission of the Chief Executive Officer, Australian Maritime Safety Authority.

Published by Australian Maritime Safety Authority, GPO Box 2181 Canberra, ACT 2601. All inquiries to be addressed to the General Manager, Domestic Vessels, Australian Maritime Safety Authority.

ISBN 0 642 736731

# **FOREWORD**

This Section of the National Standard for Commercial Vessels (NSCV) was developed following a review of the Uniform Shipping Laws (USL) Code and replaces Section 18 *Hire and Drive* (of the USL Code).

In reviewing the USL Code and preparing this Subsection, consideration was given to a number of factors including:

- a) The National Marine Safety Strategy.
- b) Current designs, practices and materials.
- c) Coronial reports and incident investigations.
- d) Relevant national and international standards.
- e) Provisions no longer used.
- f) Current survey practice, both formal and informal.
- g) Discretionary requirements that rely on authority approval.
- h) Current technical standards format and style.

This Section of the National Standard for Commercial Vessels should be read in conjunction with Part B—General Requirements of the NSCV. It should also be read in conjunction with Part C—Design And Construction, and Part E—Operational Practices of the NSCV.

A Class 4 leisure craft operation is based on a different set of parameters, including expectations of vessel safety and voluntary assumption of risk by participants, compared with the parameters applying to a passenger on board a charter vessel of Class 1 or 2, operated by qualified crew. Therefore, this Section of the NSCV applies a lower level of control of risk than would be the case with other commercial vessel operations; but a higher level of control of risk than would be the case for recreational boat operations.

The design and construction requirements of the NSCV are not intended to be applied retrospectively to existing vessels, except in those circumstances indicated in Part B, This applies equally to the design and construction requirements for leisure craft specified in this Section of the NSCV. However, this Section also covers requirements for operational practices that may be applied to any leisure craft, new or existing, following an appropriate transition period.

This Section of the NSCV was prepared by the NMSC Secretariat in consultation with a reference group comprising industry and government representatives.

This draft Section was released for public comment on 8 October 2009.

# **CONTENTS**

CHAPTER	. 1	PRELIMINARY	7
	1.1	Scope	7
	1.2	Application	7
	1.3	Referenced documents	8
	1.4	Definitions	. 10
CHAPTER	2	LEISURE CRAFT OUTCOMES AND SOLUTIONS	. 13
	2.1	Scope	. 13
	Requi	red outcomes	. 13
	2.2	Provider to assume partial responsibility	. 13
	2.3	Vessel to be suited to use by participants with limited competence	÷13
	2.4	Participants to be appropriate for the activity	. 13
	2.5	Provider to have systems in place to deliver and monitor safety outcomes	. 13
	2.6	Information and equipment to be provided	. 14
	Deem	ed-to-satisfy solutions	. 14
	2.7	Compliance	. 14
	Equiva	alent solutions	.14
	2.8	Assessment methods	. 14
	2.9	Other types of leisure craft operations	. 14
CHAPTER	3	GENERAL REQUIREMENTS	. 15
	3.1	Scope	. 15
	3.2	Provider's general responsibilities	. 15
	3.3	Number of participants	. 15
	3.4	Participants' responsibilities	. 15
	3.5	User's responsibilities	. 15
	3.6	Multiple service categories	.16
CHAPTER	4	EQUIPMENT	. 17
	4.1	Scope	. 17
	4.2	Objective	. 17
	4.3	Type and quantity of equipment to be provided	. 17
	4.4	Lifesaving equipment	. 17
	4.5	Mooring equipment	. 17
	4.6	Communications equipment	. 18
	4.7	Navigation equipment	. 18
	4.8	Speed measuring device	. 19

	4.9	Navigation lights	. 19
	4.10	First aid kit	. 19
	4.11	Optional equipment	. 19
CHAPTER	5	OFF THE BEACH CRAFT	. 22
	5.1	Scope	. 22
	5.2	Objective	. 22
	5.3	Design and construction	. 22
	5.4	Operations	. 23
CHAPTER	6	TRADITIONAL HOUSEBOATS	. 25
	6.1	Scope	. 25
	6.2	Objective	. 25
	6.3	Design and construction	. 25
	6.4	Operations	. 29
CHAPTER	7	SMOOTH WATER CRAFT UP TO 10 KNOTS	. 33
	7.1	Scope	. 33
	7.2	Objective	. 33
	7.3	Design and construction	. 33
	7.4	Operations	. 36
CHAPTER	8	PARTIALLY SMOOTH WATERS AND OFFSHORE CRAFT	. 41
	8.1	Scope	. 41
	8.2	Objective	. 41
	8.3	Design and construction	. 41
	8.4	Operations	. 45
CHAPTER	9	TAKE AWAY LEISURE CRAFT	. 50
	9.1	Scope	. 50
	9.2	Objective	. 50
	9.3	Design and construction	. 50
	9.4	Operations	. 53
CHAPTER	10	PERSONAL WATERCRAFT	. 58
	10.1	Scope	. 58
	10.2	Objective	. 58
	10.3	Design and construction	. 58
	10.4	Operations	. 58
CHAPTER	11	OTHER LEISURE CRAFT ACTIVITIES	. 64
	11.1	Scope	. 64
	11.2	Objective	. 64
	11.3	Risk assessment and control	. 64

	11.4	Design and construction	65
	11.5	Specialist Equipment	65
	11.6	Operations	
ANNEX A	EQUI\	VALENT SOLUTIONS AND RISK CATEGORIES	70
	A1	Scope	70
	A2	Objective	70
	А3	Background to risk categories	70
	A4	Assessing equivalent solutions	71
	A5	Examples	72
ANNEX B	SHAR	E BOATS	74
	B1	Scope	74
	B2	Definitions	74
	В3	User's obligations	74
	B4	Safety management	74
ANNEX C	BLACK AND GREY WATER SYSTEMS		
	C1	Scope	76
	C2	Black water systems	76
	C3	Grey water systems	77
ANNEX D	GUIDA	ANCE ON THE EUROPEAN CONFORMITY ASSESSMENT SYSTEM	78
	D1	Scope	
	D2	Background	
	D3	Modular approach	
ANNEX E	REQU	JIREMENTS FOR RECOGNITION OF EU CONFORMITY  ASSESSMENT	
	E1	Scope	
	E2	Application	
	E3	Requirements	80
	E4	Prequalified importer	81
	E5	Importer's declaration	82
ANNEX F	SUMN	MARY OF REQUIREMENTS	85
	F1	Scope	
	F2	Guidance	

# CHAPTER 1 PRELIMINARY

#### 1.1 SCOPE

This Section of the NSCV specifies safety requirements for the design, construction and operation of leisure craft.

Annex B sets out the application of the requirements in this Section of the NSCV to share boat arrangements.

Guidance on the conformity assessment system used under the European Recreational Craft Directive is given in Annex D.

Annex E sets out recommended requirements for the recognition of conformity assessment results from the European Recreational Craft Directive. The content is expressed in normative terms; but as conformity assessment is outside the scope of the NSCV, this Annex can only be a recommendation for consideration by Marine Safety Agencies when establishing conformity assessment requirements.

Annex F provides a summary guide to the differences in the requirements as they apply to various types of leisure craft.

#### NOTES:

- The vessels and the associated operations required to comply with the NSCV (and specifically with this Section of the NSCV) are determined by the applicable maritime safety legislation.
- In addition to the requirements specified in this standard, there may be additional requirements specified in local maritime safety legislation, covering matters such as the licensing of skippers, the wearing of PFDs and speed restrictions.
- 3. Conformity assessment is dealt with in the National Standard for the Administration of Marine Safety (NSAMS) Section 4: Survey of Vessels. However, as recognition of conformity assessment results from the European Recreational Craft Directive is limited to leisure craft, it was felt that including Annex E within this Section of the NSCV would reduce the complexity of NSAMS Section 4 and provide a single point of reference for leisure craft.

# 1.2 APPLICATION

This Section modifies the requirements of certain other Parts and Sections of the NSCV as they apply to leisure craft (Class 4 vessels), as set out below.

**NSCV Parts A and B**: This Section of the NSCV does not modify the requirements of Parts A and B, other than to provide additional definitions as set out in Clause 1.4.

**NSCV Part C Sections 1 to 6**: The required outcomes of NSCV Part C Section 1 to 6 apply to leisure craft.

This Section of the NSCV provides deemed-to-satisfy solutions for various types of Class 4 vessels that may be applied as an alternative to the deemed-to-satisfy solutions in Part C Sections 1 to 6. There are limitations to the application of the deemed-to-satisfy requirements in this Section of the NSCV and types of leisure craft not fitting within those

limitations will need to revert to applying the relevant requirements of Part C Sections 1 to 6.

Compliance with the design and construction requirements for Class 1, 2 or 3 vessels of Part C Sections 1 to 6 would be considered as meeting or exceeding the deemed-to-satisfy requirements for Class 4 vessels.

**NSCV Part C Section 7**: The requirements of the Subsections of NSCV Part C Section 7 do not apply to Class 4 vessels. This Section of the NSCV provides the required outcomes and deemed-to-satisfy solutions for equipment to be carried on leisure craft.

**NSCV Part D**: The requirements of NSCV Part D do not apply to Class 4 vessels. This Section provides required outcomes and deemed-to-satisfy requirements for competency and adequate crewing of a leisure craft.

**NSCV Part E**: The required outcomes of NSCV Part E apply to leisure craft. This Section provides modified deemed-to-satisfy solutions for leisure craft operations that replace those in NSCV Part E. This Section of the NSCV also provides additional required outcomes and associated deemed-to-satisfy solutions for operations of leisure craft.

#### 1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Subsection.

Any document referenced in this Subsection should be considered to be the latest revision of the document including amendments.

TRANSPORT AND INFRASTRUCTURE COUNCIL

National Standard for Commercial Vessels

Part B—General Requirements

Part C—Design and Construction

Section 1: Arrangement, Accommodation and Personal Safety

Section 2: Watertight and Weathertight Integrity

Section 3: Construction

Section 4: Fire Safety

Section 5: Engineering

Subsection 5A—Machinery

Subsection 5B—Electrical

Subsection 5C—LPG for Appliances

Subsection 5D—LPG for Engines

Section 6: Stability

Subsection 6A—Intact Stability Requirements

Subsection 6B—Buoyancy and Stability After Flooding

Subsection 6C—Stability Tests and Stability Information

Section 7: Equipment

Subsection 7A—Safety Equipment

Subsection 7B—Communications Equipment

Subsection 7C—Navigation Equipment

Subsection 7D—Anchoring and Mooring Equipment

Part D—Crew Competencies

Part E—Operations

National Standard for Recreational Boat Safety Equipment

National Standard for the Administration of Marine Safety (NSAMS)

Section 4—Survey of Vessels.

STANDARDS AUSTRALIA

AS 1499—Personal Flotation Devices - Type 2

AS 1657— Fixed platforms, walkways, stairways, and ladders — Design, construction and installation

AS 1926—Swimming pool safety

Part 1: Safety barriers for swimming pools

Part 2: Location of safety barriers for swimming pools

AS 2198—Anchors for small boats.

AS 2675—Portable first aid kits for use by consumers

AS 3542—Pleasure boats—Toilet waste collection, holding and transfer systems

AS/NZS 4132—Boat and ship design and construction

Part 1: Design loadings

AS 4758—Personal flotation devices

Part 1: General requirements

AS 4995—Greywater treatment systems for vessels operated on inland waters

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO 6185—Inflatable boats

Part 1: Boats with a maximum motor power rating of 4.5 kW

Part 2: Boats with a maximum motor power rating of 4.5 kW to 15 kW inclusive

Part 3: Boats with a maximum motor power rating of 15 kW and greater

Part 4.2: Boats with an overall length of between 8m and 24m and with a maximum motor power rating of 75 kW and greater

ISO 8666—Small craft - Principal data

- ISO 9001— Quality management systems Requirements
- ISO 9094—Small craft Fire protection
- ISO 10134—Small craft —Electrical devices Lightning-protection systems
- ISO 11547—Small craft Start-in-gear protection
- ISO 12215— Small craft Hull construction and scantlings
  - Part 1: Non-sailing boats of hull length greater than or equal to 6 m
  - Part 2: Sailing boats of hull length greater than or equal to 6 m
  - Part 3: Boats of hull length less than 6 m
- ISO 13590—Small craft Personal watercraft Construction and system installation requirements
- ISO 15085—Small craft Man-overboard prevention and recovery
- ISO 21487—Small craft Permanently installed petrol and diesel fuel tanks

# **EUROPEAN COMMISSION**

Directive 94/25/EC of the European Parliament and of the Council on the approximation of the laws, regulations and administrative provisions of the Member States relating to recreational craft, as amended by Directive 2003/44/EC [known as the *Recreational Craft Directive*]

#### 1.4 DEFINITIONS

For the purpose of this Subsection of the NSCV—

- a) the definitions provided in Part B of the NSCV and those in this Clause shall apply unless otherwise indicated; and
- b) where there is any conflict between this Clause and Part B, the definitions in this Clause shall apply.

# ACMA —

The Australian Communications and Media Authority.

#### agreement -

the contractual arrangement between the user and the provider that establishes the conditions of use of the leisure craft by the participant or participants.

# avoidable risk -

a risk that can be controlled by the provider.

#### **EXAMPLES**

- Insufficient safety equipment provided
- Unsuitable vessel

#### designated cruising area —

a restricted area of water, designated by the provider, within which the leisure craft may be operated by the user.

NOTE: Where the designated cruising area is surrounded by a set of markers, such as a line of buoys, it may sometimes be referred to as a 'pen'.

#### guide —

a person assigned by the provider to give guidance to participants regarding the designated cruising area and the safe operation of the leisure craft. A guide does not assume the responsibilities of the user or the skipper.

#### NOTES:

- 1. A guide is not intended to act in a manner similar to the master in a commercial charter (Class 2) type of operation.
- A guide would normally only be on board during the early part of the voyage until the skipper becomes acquainted with the designated cruising area and the safe operation of the leisure craft.

#### leisure craft —

any vessel that is let for hire or reward, or for any other consideration whatsoever, and that the user uses solely for pleasure.

NOTE: The expressions 'hire and drive vessel' and 'Class 4 vessel' are synonymous with 'leisure craft'.

#### **EXAMPLES**

Houseboats, jet ski hire, sailing catamaran hire, 'take away' arrangements, bare boat charters, share boats.

# length-

the measured length in accordance with NSCV Part B.

# overall length-

the maximum length of the craft, including appendages, determined in accordance with ISO 8666.

#### mechanical propulsion —

an engine used to propel a leisure craft, including an auxiliary engine, but not including human powered devices, like pedal systems.

#### participants —

all persons undertaking the leisure craft activity, including the skipper or skippers, during the term of the agreement.

#### NOTES:

- 1. Any person on board the leisure craft while it is underway, other than a guide, would be treated as a participant.
- 2. A person on board for a short period while the leisure craft is moored, but not staying overnight, may not necessarily be considered as a participant .

### potential speed -

the greatest speed of which the vessel is capable under its own propulsion, when it is in good condition; is unaffected by tides, currents or winds and is carrying one person only, who weighs not more than 80 kg.

NOTE: Potential speed is measured relative to the ground, rather than relative to the surrounding water.

# provider —

the person responsible for the management of the leisure craft.

### skipper —

person who will be in command of the leisure craft.

NOTE: There may be more than one skipper over the term of the agreement; but the skipper or skippers need to be nominated in a similar manner to the drivers who will be operating a hire car.

#### residual risk -

a risk that cannot be directly controlled by the provider and has to be managed by the skipper and participants.

#### **EXAMPLES**

- Skipper error of navigation leading to a collision
- High speed fall from a personal watercraft

#### user -

the person who enters into the agreement with the provider.

NOTE: The user may not necessarily be the skipper and may not even be onboard the leisure craft during the term of the agreement.

# working deck -

external areas intended for people to stand or walk during normal operation of the leisure craft.

#### NOTES:

- 1. The working deck is normally composed of rigid parts of the vessel, such as decks, coach-roofs, superstructures, flying bridges, etc, but may also consist of flexible parts, such as trampolines and nets.
- 2. On some vessels, the working deck is limited to the cockpit, with the foredeck only being used for access, including to the anchor well.
- 3. Areas having an inclination of more than 25° to the horizontal in a longitudinal direction, or more than 30° in a transverse direction, are not normally considered to be part of the working deck.

# CHAPTER 2 LEISURE CRAFT OUTCOMES AND SOLUTIONS

# 2.1 SCOPE

This Chapter specifies required outcomes and solutions applicable to leisure craft. The required outcomes are either in addition to, or replace, those in other Parts of the NSCV, as set out in Clause 1.2.

The required outcomes are mandatory only to the extent specified in the relevant deemed-to-satisfy solution for a leisure craft and its operations.

#### **REQUIRED OUTCOMES**

#### 2.2 PROVIDER TO ASSUME PARTIAL RESPONSIBILITY

The provider of a leisure craft must assume responsibility to control avoidable risks to the extent necessary to enable participants of limited competence and experience to safely operate the vessel.

# 2.3 VESSEL TO BE SUITED TO USE BY PARTICIPANTS WITH LIMITED COMPETENCE

A vessel used for leisure craft activities must be designed and constructed to facilitate safe operation by participants with limited competence and experience.

NOTE: A vessel having characteristics or equipment requiring high levels of skill and/or knowledge to operate safely is unlikely to meet this requirement or the deemed-to-satisfy solutions within this standard.

# 2.4 PARTICIPANTS TO BE APPROPRIATE FOR THE ACTIVITY

The number and competence of participants operating the leisure craft must be appropriate to the vessel and the nature of the leisure craft activity being undertaken.

NOTE: This is a shared responsibility between the user, the participants and the provider.

# 2.5 PROVIDER TO HAVE SYSTEMS IN PLACE TO DELIVER AND MONITOR SAFETY OUTCOMES

The provider must maintain, implement and monitor a safety management plan that identifies the risks within the control of the provider and provides for the management of those risks such that—

- the activity is operated to avoid unnecessary risk and to minimise risks that cannot be avoided;
- b) systems on board the craft that are essential for safety are maintained to ensure their effectiveness and continued operational status; and
- c) records of events and information relevant to safety are kept by the provider.

#### 2.6 INFORMATION AND EQUIPMENT TO BE PROVIDED

The provider must supply adequate equipment and sufficient safety information needed by the skipper to manage the residual risk to the participants and operate the vessel in normal and abnormal conditions of operation.

NOTE: Safety information includes information about relevant local legislation directly affecting the leisure craft activity being undertaken.

#### **DEEMED-TO-SATISFY SOLUTIONS**

# 2.7 COMPLIANCE

For the purpose of this National Standard, a leisure craft operation shall be deemed-to-satisfy the Required Outcomes identified in Clauses 2.2 to 2.6 if it complies with the provisions of Chapters 3 and 4, together with the provisions of the appropriate one of Chapters 5 to Chapter 10, inclusive, according to the type of leisure craft operation.

NOTE: The types of leisure craft covered by Chapters 5 to 10 are not exhaustive and only cover some of the more common types of activities. Many current activities may not fit within the scope of one of those Chapters, in which case reference should be made to Clause 2.9.

#### **EQUIVALENT SOLUTIONS**

#### 2.8 ASSESSMENT METHODS

Equivalent solutions for leisure craft design, construction and operation shall be appropriate to the risks associated with the specific type of leisure craft operation and shall not increase the residual risk to the participants of the leisure craft beyond the benchmark for that type of leisure craft operation established in the relevant deemed-to-satisfy solutions in Chapters 5 to 10.

# 2.9 OTHER TYPES OF LEISURE CRAFT OPERATIONS

An equivalent solution may also be proposed for a type of leisure craft operation not covered by the scopes of Chapters 5 to 10. In that case, the risk category shall be determined based on Annex A including a review of the residual risks involved, as described in Table A.1. The proposed equivalent solution shall address the required outcomes in Clauses 2.2 to 2.6 in a manner appropriate to the risk category and not less rigorous than the deemed-to-satisfy solutions for other leisure craft in the same risk category.

Where doubt arises as to the appropriate risk category, the activity shall be assumed to be of high risk and assessed from first principles in accordance with Chapter 11.

An equivalent solution for a type of leisure craft operation shall only be accepted if the risk category is deemed by the National Regulator to be acceptable in the area where the activity is proposed to take place.

# CHAPTER 3 GENERAL REQUIREMENTS

#### 3.1 SCOPE

This Chapter specifies requirements applicable to all leisure craft activities.

#### 3.2 PROVIDER'S GENERAL RESPONSIBILITIES

The provider shall ensure that at the time the user takes control of a leisure craft, it is in a seaworthy condition with all required safety equipment on board and fit for use.

The provider shall inform the skipper of the obligations under maritime safety law to navigate the vessel safely that are relevant to the planned operations. This shall include any regulatory provisions related to operations involving increased levels of risk, such as crossing a bar.

The provider shall have arrangements in place to initiate search and rescue, appropriate to the nature of the leisure craft operation.

#### 3.3 NUMBER OF PARTICIPANTS

The provider shall nominate the maximum number of participants to be carried on board the leisure craft which shall not be greater than 12. If a guide is carried on board, the guide shall be counted as a participant. The user shall not permit the nominated maximum permissible number of persons on board, nominated by the provider, to be exceeded.

The provider shall also nominate the minimum number of participants on board in terms of both number and competence to manage the risks associated with the activity conducted by the leisure craft and respond to emergency situations. The user shall, at all times when the craft is underway or operating, ensure that the leisure craft has sufficient participants on board, as nominated by the provider.

# 3.4 PARTICIPANTS' RESPONSIBILITIES

The participants shall follow the instructions of the provider, including all limitations set by the provider.

The skipper or any other participant shall not navigate or attempt to navigate a leisure craft while under the influence of alcohol or drugs to such an extent as to be incapable of having proper control of the vessel or to such an extent as to be in excess of the legal limit for the substance.

# 3.5 USER'S RESPONSIBILITIES

The user shall disclose to the provider truthful and accurate information about the competence and experience of the intended skipper or skippers and their ability to safely manage the leisure craft in the anticipated conditions.

The user shall ensure that safety equipment supplied with the leisure craft is maintained in accordance with the provider's instructions during the period of the agreement and any loss of, or damage to, safety equipment is immediately reported to the provider.

The user shall report to the provider details of any incidents or damage to the leisure craft during the period of the agreement and shall also comply with any statutory requirements to report incidents to the National Regulator.

# 3.6 MULTIPLE SERVICE CATEGORIES

Where a vessel has multiple service categories (see NSCV Part B), the vessel shall comply with the design and construction standards of the most severe service category. The provision of equipment and the control of operational risk shall comply with the standard corresponding to the service category for the operation in which the vessel is engaged at that particular time.

# **EXAMPLE**

The scantlings of a vessel registered dually as Class 4C/2E would need to be assessed against the requirements for leisure craft in operational area C and for trading vessels in operational area E and the heavier of the two sets of scantlings would be applicable.

# CHAPTER 4 EQUIPMENT

#### 4.1 SCOPE

This Chapter specifies the type and minimum quantity of safety, navigation and anchoring equipment to be provided onboard a leisure craft. It also specifies requirements for optional equipment that apply if that equipment is supplied with the leisure craft. This Chapter replaces the requirements in NSCV Part C Section 7 Subsections A, B, C and D, except where one of those Subsections is specified within this Chapter.

#### 4.2 OBJECTIVE

The objective of this Chapter is to specify the equipment to be provided on a leisure craft, appropriate for the hazards and risks that are likely to be encountered.

#### 4.3 TYPE AND QUANTITY OF EQUIPMENT TO BE PROVIDED

The provider shall ensure that equipment of the type specified in this Chapter is available on the leisure craft at the commencement of the period of the agreement. The provider shall ensure that an adequate quantity of equipment in sound working condition is provided for the full complement of participants of the leisure craft.

#### 4.4 LIFESAVING EQUIPMENT

Adequate lifesaving equipment shall be provided in accordance with Table 1. For craft falling within columns 2, 3, 4 and 5 of Table 1, the number and type of personal flotation devices to be carried onboard a leisure craft shall be in accordance with the requirements of Table 3 and Table 5 of the National Standard for Recreational Boat Safety Equipment.

Personal watercraft shall comply with the requirements of Table 1, except that a PFD of a suitable size for the participant, complying with either AS 1499 or with Level 50 of AS 4758.1 shall be provided for each participant regardless of the operational area. Other types of lifejackets or PFDs shall not be provided for use with personal watercraft.

NOTE: In addition to the carriage requirements, the National Standard for Recreational Boat Safety Equipment also includes some recommendations and wearing requirements that do not form part of the requirements of this Section of the NSCV.

# 4.5 MOORING EQUIPMENT

Adequate mooring equipment shall be provided in accordance with Table 1. Where required by Table 1, mooring equipment shall meet the requirements of the National Standard for Recreational Boat Safety Equipment, except in the case of Class 4C leisure craft; which shall comply with the type and quantity provisions as specified in NSCV Part C Subsection 7D.

NOTE: The physical abilities of participants and relevant occupational health and safety lifting limits may be taken into account in determining whether or not a winch or capstan is necessary.

#### 4.6 COMMUNICATIONS EQUIPMENT

Where required by Table 1, a Class 4E or 4D leisure craft shall either—

- a) be fitted with a 27 MHz HF or a VHF marine radio transceiver meeting the requirements of the National Standard for Recreational Boat Safety Equipment; or
- b) have another type of effective means of two-way communication with both the provider and emergency services that has coverage across the area of operation, that is not one of the options in item a).

A Class 4C leisure craft shall carry a radio transceiver or satellite telephone meeting the requirements of NSCV Part C Subsection 7B. In addition, a Class 4C leisure craft shall have a second means of communication complying with item a) or b) of this clause.

#### NOTES:

- A radio operator certificate of proficiency is required to operate a VHF marine radio transceiver and possession of such a certificate would need to be a condition of the agreement if compliance with this clause is based on a VHF radio alone. Information about which certificates of proficiency are suitable for VHF radio operation is available from the ACMA.
- A mobile phone may meet the requirements in item b) provided that there is good network coverage in the designated cruising area. Where a participant's mobile phone is used, the provider will need to assess its ability to meet the requirements of item b), noting that coverage may not be the same for all mobile phone networks.
- 3. It is recognised that with any radio communication system, there may not always be adequate reception at every point within the area of coverage.

#### 4.7 NAVIGATION EQUIPMENT

Where required by Table 1 to comply with NSCV Part C Subsection 7C, compasses shall comply with the applicable standards specified in that Section for Class 2 vessels. Nautical charts may be substituted by appropriate nautical texts covering the area of operations. Electronic navigation equipment may be provided in addition to the nautical charts and compass; but not as a substitute.

If additional items of equipment intended for use in the navigation of the leisure craft are provided, over and above the minimum specified in Table 1, the additional equipment shall comply with the requirements for that type of equipment as specified in this Chapter; or if the equipment is not covered by this Chapter, the applicable requirements of NSCV Part C Subsection 7C.

Where a diagram is indicated in Table 1, this shall be a schematic drawing of the designated cruising area that identifies hazards to be avoided and any other relevant information for the safe operation of the leisure craft.

NOTE: In general, a diagram is not required for Class 4E craft, less than 7.5m in length without mechanical propulsion. However, where the such craft are operating out of sight of the provider's base, a diagram will assist in finding the way back to the base.

#### 4.8 SPEED MEASURING DEVICE

Where required by Table 1, the speed measuring device may be a speedometer, a log or a GNSS receiver with speed measuring capability.

# 4.9 NAVIGATION LIGHTS

Where required by Table 1, navigation lights shall comply with the applicable standards specified in NSCV Part C Subsection 7C.

# 4.10 FIRST AID KIT

Where required by Table 1, the first aid kit shall comply with Type A of AS 2675.

#### 4.11 OPTIONAL EQUIPMENT

#### **4.11.1** Tenders

If a dinghy is provided with a leisure craft as a tender, it shall—

- have level flotation in accordance with NSCV Part C Subsection 6B;
   or
- b) be an inflatable dinghy complying with the relevant Part of ISO 6185.

Each tender shall be equipped with safety equipment in accordance with the requirements for tenders specified in the National Standard for Recreational Boat Safety Equipment.

NOTE: A tender used by participants, but not supplied by the provider as part of the hire agreement is not covered by the requirements of this Section of the NSCV.

# 4.11.2 Vessel Monitoring System

A vessel monitoring system (VMS) may be installed to track leisure craft and assist in search and rescue.

Table 1 — Schedule of required equipment

Leisure craft  Equipment Type	Class 4E, less than 7.5m in length without mechanical propulsion	Other leisure craft, less than 10m in length, without mechanical propulsion	Class 4E, less than 24m in length, with mechanical propulsion and maximum potential speed of 10 knots or less	Class 4D or 4E, less than 24m in length, with mechanical propulsion and capable of a maximum potential speed greater than 10 knots	Class 4C, with mechanical propulsion less than 24m in length
1	2	3	4	5	6
Lifesaving equipment (including EPIRBs and flares, for vessels going beyond Operational Area E waters)	In accordance with the National Standard for Recreational Boat Safety Equipment	In accordance with the National Standard for Recreational Boat Safety Equipment	In accordance with the National Standard for Recreational Boat Safety Equipment	In accordance with the National Standard for Recreational Boat Safety Equipment	In accordance with    NSCV C7A requirements for Class 2 vessels in the operational area
Nautical charts	NO <sup>1</sup>	Diagram	Diagram	Diagram	In accordance with NSCV C7C
Compass	NO	NO <sup>2</sup>	NO	NO <sup>2</sup>	YES
Speed measuring device	NO	NO	NO	YES	YES
Anchor and cable	NO	YES	YES	YES	In accordance with NSCV C7D requirements for Class 2C vessels
Communications equipment	NO	YES	YES	YES	YES
Navigation lights	NO, unless operating at night	NO, unless operating at night	YES	YES	YES
First Aid Kit	NO	NO	YES	YES	YES

#### KEY:

YES The specified equipment shall be carried

I A diagram to be provided for Class 4E if operating remote from the point of hire.

<sup>2</sup> A compass to be provided if operating remote from the point of hire.

Leisure craft  Leisure craft  Class 4E, les 7.5m in len without mech propulsion	gth less than 10m in anical length, without	Class 4E, less than 24m in length, with mechanical propulsion and maximum potential speed of 10 knots or less	Class 4D or 4E, less than 24m in length, with mechanical propulsion and capable of a maximum potential speed greater than 10 knots	Class 4C, with mechanical propulsion less than 24m in length
---	---	---	--	---

NO The specified equipment is not required to be carried

# CHAPTER 5 OFF THE BEACH CRAFT

#### 5.1 SCOPE

This Chapter specifies deemed-to-satisfy requirements for the design, construction and operation of Class 4E leisure craft less than 10m in length, without mechanical propulsion.

These craft have risk category P.

#### 5.2 OBJECTIVE

The objective of this Chapter is to ensure that the risks inherent in these types of activities are controlled to a level that can be managed by a skipper with minimal knowledge and experience of boating.

# 5.3 DESIGN AND CONSTRUCTION

#### 5.3.1 General

Leisure craft falling within the Scope of this Chapter are not required to meet the requirements of NSCV Part C Sections 1 to 6. In addition to the relevant requirements for the specific craft set out in Clauses 5.3.2 to 5.3.5, all craft shall be designed and constructed to:

- a) permit the quick exit of the participant in the event of a capsize or swamping;
- b) support the maximum number of persons permitted onboard, calculated at 80kg per person when the craft is in operating condition;
- support a weight of 25kg per person (calculated for the maximum number of participants) when capsized or swamped without sinking below water level;
- d) have adequate handholds for each participant accessible when the participant has left the craft and is in the water; and
- e) withstand the rigours of normal operations during the term of the agreement without failure.

# 5.3.2 Canoes and kayaks

Canoes and kayaks shall have at least one of the following features:

- a) positive buoyancy material fitted at each end of the craft;
- b) watertight bulkheads, front and back, with watertight hatch covers;
- c) integrated cockpits with watertight hatch covers;
- d) fixed flotation bags at each end of the craft; or
- e) be a 'sit on top' self-draining craft.

# 5.3.3 Sailing craft

Sailing craft, including sail boards, shall be either:

- a) self-righting and self-draining; or
- b) capable of being righted from a capsize or inversion by the number of participants onboard the craft without external assistance.

NOTE: See Clause 3.3 regarding the minimum number of participants required to be onboard.

#### 5.3.4 Pedal craft

Craft operated by pedals shall have the drive mechanism designed and guarded so that there are no accessible pinch-points when the craft is in its normal operating position.

#### 5.3.5 Inflatable craft

Inflatable craft shall comply with the design and construction requirements of the relevant Part of ISO 6185.

NOTE: This does not apply to towable inflatable devices supplied with powered craft.

# 5.4 OPERATIONS

# 5.4.1 Safety Management Plan

Providers of leisure craft falling within the Scope of this Chapter shall develop, implement and monitor a safety management plan that ensures the safe operation of the leisure craft and incorporates the following elements:

- a) An overview of the risks that the provider will be seeking to control through the safety management plan and those that the participants will be expected to manage.
- b) A description of the plans in place to deal with accidents and emergencies, including provisions for rendering first aid and evacuating persons requiring medical treatment.
- c) An assessment of hazards to navigation in the area where the hire leisure craft will be operating and strategies to manage those hazards. For example, restricting the leisure craft to a designated cruising area.
- d) An assessment of weather patterns in the area and strategies to deal with unfavourable weather. For example, sailing activities to cease once the wind strength exceeds a certain force.
- e) A description and justification of the type of safety equipment provided on the leisure craft, including its suitability for the waters where the leisure craft will be operating, taking account of special issues such as participants who are unable to swim.
- f) A description of the system of the support services to be provided, including the arrangements for rendering assistance in case of foreseeable types of misadventure.
- g) The content of the information to be provided to participants including at the briefing.
- h) A description of the procedures established for the inspection, maintenance and potential withdrawal from service of defective leisure craft.
- i) A feedback system for capturing information about incidents and addressing safety issues as they arise.

# 5.4.2 Information to be supplied by the provider

The provider shall make available to the participants the following information prior to the participants taking control of the leisure craft. This may be done verbally at the briefing, or provided in writing.

- a) A description of the designated cruising area, and the local hazards such as submerged rocks, location of shipping channels and the like which may impact on activities.
- b) The action to be taken under the safety management plan in an emergency.
- c) Identification of any specific hazards and dangers to navigation in the leisure craft's intended area of operation.
- d) Any rules regarding the consumption of drugs or alcohol.
- e) Any obligation under the agreement allowing the provider to end the agreement if the leisure craft is operated unsafely.

# 5.4.3 Briefing

The provider shall conduct a full briefing for all participants unless the provider considers, on reasonable grounds, that an element of the briefing is unnecessary having regard to the participant's knowledge and skills to operate the leisure craft safely. The briefing shall be in the English language, unless agreed otherwise between the provider and the user. A full briefing shall include the following elements:

- The correct and safe handling and navigation of the leisure craft, including an explanation of basic right of way rules.
- b) The correct fitting and wearing of personal flotation devices (PFDs).
- c) A direction as to when PFDs are required to be worn by adults and by children.
- d) The appropriate method for summoning assistance.
- e) For sailing craft and other craft with limited stability, the procedure in the event of a capsize.

If, in the opinion of the provider, the participants are unable to understand the information delivered at the briefing, the provider shall terminate the agreement.

#### **EXAMPLE**

The participants do not have an adequate command of English and a suitable translator is not available.

# 5.4.4 Who may give briefing

The briefing shall be given by a person who has sufficient experience and knowledge in the matters mentioned in Clause 5.4.3 to give an adequate briefing.

# CHAPTER 6 TRADITIONAL HOUSEBOATS

#### 6.1 SCOPE

This Chapter specifies deemed-to-satisfy requirements for the design, construction and operation of Class 4E leisure craft, that are houseboats less than 24m in overall length and less than 8.5m in overall beam, with a profile area of not more than 75m<sup>2</sup>, a displacement of not more than 40 tonnes, a maximum potential speed of not more 10 knots, are constructed on pontoons and have a superstructure constructed to generally comply with the requirements for a Class 1 dwelling under the Building Code of Australia (BCA).

These craft have a Category Q risk profile.

Houseboats that do not match these parameters shall be individually assessed using equivalent solutions and may not necessarily have a Category Q risk profile.

#### 6.2 OBJECTIVE

The objective of this Chapter is to ensure that the risks inherent in these types of activities are controlled to a level that can be managed by a skipper with minimal knowledge and experience of boating.

#### 6.3 DESIGN AND CONSTRUCTION

#### 6.3.1 General

Compliance with the requirements of Clause 6.3 is deemed to satisfy the required outcomes of NSCV Part C Sections 1 to 6.

# 6.3.2 Arrangement, accommodation and personal safety

# 6.3.2.1 Accommodation spaces

Accommodation spaces of houseboats shall comply with the following requirements:

- a) A bed shall be provided for each of the maximum nominated number of participants, this may include a double bed for two participants.
- b) Doors to all accommodation spaces shall be capable of being opened from inside the spaces without the use of a key.
- c) Any swimming pool or spa with a water depth greater than 300mm shall be fenced in accordance with AS 1926 Parts 1 and 2 or shall be fitted with a cover secured by a child resistant arrangement.
- d) Decks of different height enclosed within the accommodation space shall be provided with steps complying with the dimensional requirements for stairways specified in NSCV Part C Section 1 or AS 1657.

# 6.3.2.2 Vision from the helm

Houseboats shall be constructed with a view to providing adequate visibility for the helmsperson from the operating position. Rear vision

mirrors, cameras and monitors may be used to improve visibility astern. The tint of glazing materials used in the forward facing sector defined by—

- a) the horizontal arc from directly forward to 112.5° on the starboard side; and
- b) the horizontal arc from directly forward to 112.5° on the port side should not interfere with the recognition of the colour of lights seen through the tinted glass.

# 6.3.2.3 Glazing

Glazing shall meet the relevant requirements for a Class 1 building contained in Section 3 of Part 2 of the Building Code of Australia, using a maximum wind pressure of 375 Pa and other design loadings from AS/NZS 4132.1.

NOTE: The human impact considerations of the BCA mean that glass doors will, in most cases, need to be of Grade A safety glazing.

# 6.3.2.4 Ventilation

Each accommodation sleeping space shall, in addition to any opening windows, be provided with a fixed ventilator having an area of 80cm<sup>2</sup> for each person in the space. All other spaces shall be adequately ventilated in a manner suitable for the purpose of the space.

# 6.3.2.5 Open decks

Where an area of open deck space on a houseboat is intended to be occupied by participants that area shall be constructed so that it is capable of supporting the maximum number of participants that the houseboat is licensed to carry and shall be fitted with a barrier rail in accordance with Clause 6.3.2.6. The maximum persons limit on an open deck space shall be displayed.

Open decks above the main deck intended to be occupied by participants shall be provided with access by means of stairs or fixed ladders complying with the dimensional requirements specified in NSCV Part C Section 1 or AS 1657. Open decks intended to be occupied by persons shall have a non-slip surface.

#### 6.3.2.6 Deck rails

Barrier rails or equivalent protection shall be installed around all decks accessible to persons on board. The barrier shall extend to a height above the level of the deck of 850mm and shall consist of a top and a bottom rail, parallel to the deck, with infill members between the rails that are either vertical or angled at not more than 30 degrees from vertical. The gaps between adjacent infill members and between the deck and the lower rail shall not be wider than 100mm. Gates in deck rails shall not open outwards. When closed, gates in deck rails shall provide an equivalent barrier to deck rails.

# 6.3.2.7 Arrangements for embarkation

Houseboats shall be provided with arrangements for the safe embarkation and disembarkation of persons at a wharf. When these arrangements are deployed, the pathway from the deck of the houseboat to the wharf shall—

- a) have adequate handholds along its length;
- b) be free from trip hazards; and
- c) be unimpeded by obstructions such as deck rails.

# 6.3.2.8 Arrangements for reboarding

Houseboats shall be provided with a means of access for reboarding from the water if the freeboard at the nominated reboarding area is greater than 0.3 m. The nominated reboarding area shall be located such that no point is within 2m of a propeller.

If the means of reboarding is a ladder, the top of the lowest step shall be at least 500 mm below the waterline when the ladder is extended. When the means of reboarding has been deployed, there shall be sufficient stable footholds and handholds, to permit a person of moderate strength to reboard the vessel unassisted and make their way up to deck level. Unstable devices, like a rope ladder, shall not be considered adequate.

The means of reboarding should be capable of being deployed and used without the assistance of anyone on board.

NOTE: The intent is to allow reboarding should the sole occupant of the houseboat fall overboard.

### 6.3.3 Construction

A houseboat shall be constructed in accordance with the requirements for vessels engaged in light operations specified in NSCV Part C Section 3, except that the ISO 12215 series standards may be used for houseboats up to 24m in length. Where the ISO 12215 series standards are used, the structural adequacy of the cross structure of a multihull houseboat may be assessed from first principles.

#### 6.3.4 Stability

# 6.3.4.1 Freeboard

When the houseboat is fully loaded (including all fuel that may be carried on the vessel and all tanks full), the pontoons shall have a reserve buoyancy of at least 25% of the total volume of the pontoons.

# 6.3.4.2 Intact stability of Class 4E houseboats

When a mass equal to the maximum persons load that the houseboat is permitted to carry (calculated in accordance with NSCV Part C Section 6) is on one side of the uppermost deck at its extreme breadth from the centreline of the hull—

a) the angle of heel shall not exceed 7° from the upright; and

b) the minimum freeboard of the hull on the heeled or immersed side, measured from the inclined waterline to the intersection of the edge of the main deck line and sheerline of the main hull at its lowest point, shall not be less than 25% of the freeboard in the upright condition when fully loaded.

# 6.3.4.3 Stability after flooding

Houseboats shall be subdivided so as to comply with a one compartment standard of subdivision. When the compartment giving the most adverse heel and trim effect in the flooded condition is considered, then the vessel shall not heel or trim such that the waterline crosses an imaginary line taken at 75 mm below the freeboard deck at side. For cylindrical hulls, the margin line shall be 75 mm below the highest point of the hull.

Pontoons subdivided by watertight bulkheads spaced at intervals not greater than 1200mm along the length of the vessel shall be deemed to satisfy the requirements of this clause.

# 6.3.5 Black water and grey water systems

Houseboats shall be fitted with at least one installed toilet. All installed toilets shall have a sewage holding system meeting the requirements of Annex C. State legislation may require leisure craft to be fitted with a grey water management system.

#### 6.3.6 Fire Protection

Fire Protection arrangements for houseboats shall be in accordance with NSCV Part C Section 4 with Fire Risk Category I.

# 6.3.7 Engineering

Electrical installations shall comply with NSCV Part C Subsection 5B.

Liquefied petroleum gas installations for appliances shall comply with NSCV Part C Subsection 5C. Non-room sealed heating devices shall not be installed in any sleeping space, including a saloon that mat be used for sleeping.

Liquefied petroleum gas installations for engines shall comply with NSCV Part C Subsection 5D.

Machinery shall comply with NSCV Part C Subsection 5A and the following requirements:

- The houseboat shall have adequate manoeuvring power to maintain a steady heading with a 20 knot wind from any direction.
- b) If an automatically activated and electrically driven extra low voltage pump is fitted, it shall be in addition to the pumping arrangements required under NSCV Part C Subsection 5A.
- c) A hand pump with a capacity of at least 4kL/hr shall be fitted in any unsealed compartment located below the waterline.
- d) Outboard motors shall be fitted with start-in-gear protection in accordance with ISO 11547.
- e) Inboard engines shall be fitted with start-in-gear protection.

- f) If there is more than one helm station, the vessel shall be fitted with the facility to lock out the controls at any helm position when not in use.
- g) All exposed moving parts of machinery shall be guarded to protect persons from injury.
- h) The maximum potential speed shall be governed to not exceed 10 knots.

NOTE: NSCV Part C Subsection 5A does not permit the use of petrol engines below decks and provides limitations on the location of ancillary motors, such as generator sets. It also provides requirements regarding the storage of petrol and other flammable substances in containers. These requirements apply equally to leisure craft.

# 6.4 OPERATIONS

# 6.4.1 Safety Management

Providers of leisure craft falling within the Scope of this Chapter shall develop, implement and monitor a safety management plan that ensures the safe operation of the leisure craft and incorporates the following elements:

- a) An overview of the risks that the provider will be seeking to control through the safety management plan and those that the participants will be expected to manage.
- b) A description of the plans in place to deal with accidents and emergencies, including provisions for rendering first aid and evacuating persons requiring medical treatment.
- c) An assessment of hazards to navigation in the area where the leisure craft will be operating and strategies to manage those hazards. For example, restricting the vessel to a designated cruising area, not allowing travel at night or requiring regular radio contacts.
- d) The content of the information to be provided to participants including at the briefing.
- e) A description of the procedures established for the inspection, maintenance and potential withdrawal from service of defective leisure craft.
- f) A description and justification of the type of safety equipment provided on the vessel, taking account of its suitability for the waters where the vessel will be operating and the level of skills of the participants.
- g) A description of the system of communication and support services to be provided, for example maintaining a regular radio watch and the arrangements for rendering assistance in case of foreseeable types of misadventure.
- h) A feedback system for capturing information about incidents and addressing safety issues as they arise.

# 6.4.2 Skipper's competence

#### 6.4.2.1 General

The provider of a leisure craft shall not allow the user to take control of the leisure craft unless—

- the user can demonstrate that the leisure craft will be operated by a competent skipper throughout the term of the agreement; or
- b) the leisure craft will be under the supervision of a competent guide, assigned by the provider, throughout the term of the agreement.

# 6.4.2.2 Assessment of the skipper's competence

A skipper shall be deemed competent to operate the leisure craft if the provider has reasonable grounds to believe that the skipper has the skills and abilities necessary to operate the leisure craft safely, over the term of the agreement, having regard to the leisure craft's size, type, propulsion power and intended area of operation.

#### EXAMPLES OF EVIDENCE OF COMPETENCE

Licences, interstate or overseas licences or other marine qualifications held, relevant boating experience, observation of the participant's skills, or documents relating to the skipper's medical condition.

# 6.4.2.3 Use of a guide

The use of a guide may form part of the conditions of the agreement. The role of the guide is to advise and guide the skipper in the safe operation of the leisure craft without becoming responsible for its operation.

The provider shall ensure that the guide—

- has demonstrated competence in the safe operation of the leisure craft; and
- b) meets the same requirements, set out in Clause 6.4.5, as apply to a person giving the briefing.

# 6.4.3 Information to be supplied by the provider

The provider shall make available to the participants the following information prior to the participants taking control of the leisure craft. This may be done verbally at the briefing or in writing.

- a) The maximum number of persons permitted on board while the craft is underway.
  - NOTE: The number of persons on board is made up of participants and any guides provided.
- b) A description of the designated cruising area, and the local hazards such as submerged rocks, location of shipping channels and the like which may impact on activities.
- c) The action to be taken under the safety management plan in an emergency.
- d) Handling of the leisure craft while underway, including techniques of stopping, turning and avoiding propeller strike.

- e) Rules for collision avoidance relevant to the operation of the leisure craft while it is hired.
  - NOTE: A sticker at the helm position indicating right of way of approaching vessels may be a useful additional measure.
- f) Advice about mooring, including advice about anchoring, if the leisure craft has provision for anchoring.
- g) Operation of the radio, if the leisure craft is fitted with a radio, including details of radio channels to be used in case of emergency and for everyday communications.
- h) Any regular communications that the participants are required to have with the provider during the term of the agreement.
- i) The correct and safe operation of any on-board (including safety) equipment.
- The location of anchorages and mooring sites in the intended area of operation.
- k) Guidance on tender handling, if a tender is provided.
- I) The obligation of the skipper—
  - not to cause the leisure craft to be operated unsafely, for example, not to cause the leisure craft to be operated unpredictably; and
  - ii) not to operate the leisure craft unless it is equipped with the safety equipment required by this Section of the NSCV; and
  - iii) to report any marine incidents to the National Regulator.
- m) Any rules regarding the consumption of drugs or alcohol.
- n) Any obligation under the agreement allowing the provider to end the agreement if the leisure craft is operated unsafely.

# 6.4.4 Briefing

The provider shall conduct a full briefing for the skipper unless the provider considers, on reasonable grounds, that an element of the briefing is unnecessary having regard to the skipper's knowledge and skills to operate the leisure craft safely. The briefing shall be in the English language, unless agreed otherwise between the provider and the user. A full briefing shall include the following elements:

- a) The correct and safe handling and navigation of the leisure craft, including an explanation of basic right of way rules.
- b) A description of the anticipated weather conditions and strategies to deal with unfavourable weather.
- c) The appropriate method for summoning assistance.
- d) The use of the leisure craft's safety equipment.
- e) The leisure craft's steering and emergency steering.
- f) Bilge pumping.
- g) Arrangements for discharge of sewage, and if relevant, grey water.
- h) Starting and operating the motor and what to do if the motor does not start.

The briefing shall also include a practical demonstration of the handling of the leisure craft while it is underway, unless the provider considers on reasonable grounds that the practical demonstration is unnecessary having regard to the participant's skills and ability to operate the leisure craft safely.

If, in the opinion of the provider, the skipper is unable to understand the information delivered at the briefing, the provider shall terminate the agreement.

# **EXAMPLE**

The skipper does not have an adequate command of English and a suitable translator is not available.

# 6.4.5 Who may give briefing

The briefing shall be given by a person deemed by the provider to have sufficient experience and knowledge in the matters mentioned in Clause 6.4.4 to give an adequate briefing and possesses the ability to convey this information to participants.

At a minimum, the person giving the briefing shall possess a recreational boat licence or ticket.

# 6.4.6 Record keeping

The provider shall keep the following records for a period of 12 months from the date of the end of the agreement.

- a) The hour and date of the start and end of the hire.
- b) The name and address of the user.
- c) The name of the nominated skipper, if not the user.
- d) The number of participants.
- e) The name of the person who gave the briefing.
- f) A description of any evidence used in the assessment of skipper competence.

# **EXAMPLE**

A signed notation by the person who gave the briefing to the effect that the skipper had been observed to satisfactorily manage the craft.

# CHAPTER 7 SMOOTH WATER CRAFT UP TO 10 KNOTS

# 7.1 SCOPE

This Chapter specifies deemed-to-satisfy requirements for the design, construction and operation of Class 4E leisure craft with mechanical propulsion that are not houseboats, are less than 24m in length, operate within a designated cruising area and have a maximum potential speed of not more than 10 knots.

These craft have risk profile Category Q.

Class 4E leisure craft not matching these parameters are outside the scope of this Chapter and may not necessarily have a Category Q risk profile.

Where a Section of the NSCV is referenced in this Chapter and the referenced Section does not identify the requirements applying to Class 4 vessels, the relevant requirements applying to Class 2E vessels shall apply.

#### 7.2 OBJECTIVE

The objective of this Chapter is to ensure that the risks inherent in these types of activities are controlled to a level that can be managed by a skipper with minimal knowledge and experience of boating.

#### 7.3 DESIGN AND CONSTRUCTION

#### 7.3.1 General

Compliance with the requirements of Clause 7.3 is deemed to satisfy the required outcomes of NSCV Part C Sections 1 to 6.

# 7.3.2 Arrangement, accommodation and personal safety

# 7.3.2.1 General

Leisure craft shall comply with NSCV Part C Section 1 and the requirements in the subclauses of Clause 7.3.2. Where there is any conflict between Clause 7.3.2 and NSCV Part C Section 1, the requirements in the subclauses of Clause 7.3.2 shall apply.

# 7.3.2.2 Accommodation spaces

Accommodation spaces of all leisure craft falling within the Scope of this Chapter shall comply with the following requirements:

- a) For leisure craft intended for overnight occupation, a bunk shall be provided for each of the maximum nominated number of participants, this may include a V berth or similar for two participants.
- b) Not less than two avenues of escape complying with the fire escape requirements of ISO 9094 shall be provided from all general areas available to the persons on board.

NOTE: References to the owners manual in ISO 9094 may be ignored.

- c) Doors to all accommodation spaces shall be capable of being opened from inside the spaces without the use of a key.
- d) Decks of different height enclosed within the accommodation space shall be provided with steps complying with the dimensional requirements for stairways specified in NSCV Part C Section 1 or AS 1657.

#### 7.3.2.3 Vision from the helm

Leisure craft shall be constructed with a view to providing adequate visibility for the helmsperson from the operating position. Rear vision mirrors, cameras and monitors may be used to improve visibility astern. The tint of glazing materials used in the forward facing sector defined by:

- a) the horizontal arc from directly forward to 112.5° on the starboard side; and
- b) the horizontal arc from directly forward to 112.5° on the port side should not interfere with the recognition of the colour of lights seen through the tinted glass.

# 7.3.2.4 Glazing

Glazing shall meet the relevant requirements for a Class 1 building contained in Section 3 of Part 2 of the Building Code of Australia, using a maximum wind pressure of 375 Pa and other design loadings from AS/NZS 4132.1.

NOTE: The human impact considerations of the BCA mean that glass doors will, in most cases, need to be of Grade A safety glazing.

#### 7.3.2.5 Ventilation

Each accommodation sleeping space intended for overnight occupation shall, in addition to any opening windows, be provided with a fixed ventilator having an area of  $80 \text{cm}^2$  for each person in the space. All other spaces shall be adequately ventilated in a manner suitable for the purpose of the space.

# 7.3.2.6 Working deck protection

Sailing craft shall be fitted with foot stops, lifelines, stanchions and pulpits in accordance with sailing boat option 1, 2 or 3 of ISO 15085 for category C. Plastic coating may be used on lifelines.

The working decks of non-sailing craft over 6m in overall length shall be—

- a) surrounded by a barrier, extending to a height of not less than 750mm above the working deck. The barrier may consist of bulwarks, rails, lines or any combination. Horizontal rails or lines shall not be more than 230mm apart; or
- b) protected by bulwarks and guard rails in accordance with NSCV Part C Section 1; or
- c) fitted with non-slip surfaces, foot stops, handholds and guard-rails/guard-lines in accordance with the requirements for non-sailing boats of ISO 15085 for category C.

NOTE: Platform vessels, sometimes known as 'barbeque boats', have additional risks associated with falling overboard and may be required to comply with the working deck protection requirements in Chapter 6.

Open decks above the main deck intended to be occupied by participants shall be provided with access by means of stairs or fixed ladders complying with the dimensional requirements specified in NSCV Part C Section 1 or AS 1657.

# 7.3.2.7 Arrangements for embarkation

Leisure craft greater than 7.5 m in length shall be provided with arrangements for the safe embarkation and disembarkation of persons at a wharf. When these arrangements are deployed, the pathway from the deck of the leisure craft to the wharf shall—

- a) have adequate handholds along its length;
- b) be free from trip hazards; and
- c) be unimpeded by obstructions such as deck rails.

# 7.3.2.8 Arrangements for reboarding

Leisure craft greater than 6m in length shall be fitted with a means of access for reboarding from the water if the freeboard at the nominated reboarding point is greater than 0.3 m. If that means is a ladder, the top of the lowest step shall be at least 500 mm below the waterline when the ladder is extended. When deployed, the means of reboarding shall provide stable footholds and handholds. Unstable devices, like a rope ladder, shall not be considered adequate.

The means of reboarding should be capable of being deployed and used without the assistance of anyone on board.

NOTE: The intent is to allow reboarding should the sole occupant of the craft fall overboard.

#### 7.3.3 Construction

Leisure craft shall be constructed in accordance with the requirements for vessels engaged in light operations specified in NSCV Part C Section 3, except that the ISO 12215 series standards may be used for leisure craft up to 24m in length. Where the ISO 12215 series standards are used, the structural adequacy of the cross structure of a multihull leisure craft may be assessed from first principles.

# 7.3.4 Buoyancy and stability

Leisure craft shall comply with NSCV Part C Section 6 with the additional requirement that craft under 7.5m in length shall have level flotation with swamped stability.

# 7.3.5 Black water and grey water systems

All installed toilets shall have a sewage holding system meeting the requirements of Annex C. State legislation may require leisure craft to be fitted with grey water treatment systems.

# 7.3.6 Fire protection

Fire protection arrangements for leisure craft shall be in accordance with NSCV Part C Section 4 with Fire Risk Category I.

# 7.3.7 Engineering

Electrical installations shall comply with NSCV Part C Subsection 5B, except that compliance with ISO 10134 may be used as an alternative to compliance with the requirements for lightning protection.

Liquefied petroleum gas installations for appliances shall comply with NSCV Part C Subsection 5C. Non-room sealed heating devices shall not be installed in any sleeping space, including a saloon that mat be used for sleeping.

Liquefied petroleum gas installations for engines shall comply with NSCV Part C Subsection 5D.

Machinery shall comply with NSCV Part C Subsection 5A and the following requirements.

- a) All exposed moving parts of machinery shall be guarded to protect persons from injury.
- b) If an automatically activated and electrically driven extra low voltage pump is fitted, it shall be in addition to the pumping arrangements and capacity required under NSCV Part C Subsection 5A. Hand pumps may be substituted for powered pumps for vessels up to 12.5 m.
- The maximum potential speed shall be governed to not exceed 10 knots.

Permanently installed petrol and diesel fuel tanks complying with ISO 21487 installed outside of machinery spaces shall be deemed to meet the required outcomes of NSCV Part C Subsection 5A.

NOTE: NSCV Part C Subsection 5A does not permit the use of petrol engines below decks and provides limitations on the location of ancillary motors, such as generator sets. It also provides requirements regarding the storage of petrol and other flammable substances in containers. These requirements apply equally to leisure craft.

# 7.4 OPERATIONS

# 7.4.1 Safety management plan

Providers of leisure craft falling within the Scope of this Chapter shall develop, implement and monitor a Safety Management Plan that ensures the safe operation of the leisure craft and incorporates the following elements:

- a) An overview of the risks that the provider will be seeking to control through the safety management plan and those that the participants will be expected to manage.
- b) A description of the plans in place to deal with accidents and emergencies, including provisions for rendering first aid and evacuating persons requiring medical treatment.

- c) An assessment of hazards to navigation in the area where the leisure craft will be operating and strategies to manage those hazards. For example, restricting the vessel to a designated cruising area, not allowing travel at night or requiring regular radio contacts.
- d) An assessment of weather patterns in the area and strategies to deal with unfavourable weather.
- e) The content of the information to be provided to participants including at the briefing.
- f) A description of the procedures established for the inspection, maintenance and potential withdrawal from service of defective leisure craft.
- g) A description and justification of the type of safety equipment provided on the vessel, taking account of its suitability for the waters where the vessel will be operating and the level of skills of the participants.
- h) A description of the system of communication and support services to be provided, for example maintaining a regular radio watch and the arrangements for rendering assistance in case of foreseeable types of misadventure.
- i) A feedback system for capturing information about incidents and addressing safety issues as they arise.

# 7.4.2 Skipper's competence

# 7.4.2.1 General

The provider of a leisure craft shall not allow the user to take control of the leisure craft unless—

- a) the user can demonstrate that the leisure craft will be operated by a competent skipper throughout the term of the agreement; or
- b) the skipper will be assisted by a competent guide, assigned by the provider, throughout the term of the agreement.

## 7.4.2.2 Assessment of the skipper's competence

A skipper shall be deemed competent to operate the leisure craft if the provider has reasonable grounds to believe that the skipper has the skills and abilities necessary to operate the leisure craft safely, over the term of the agreement, having regard to the leisure craft's size, type, propulsion power and intended area of operation.

# EXAMPLES OF EVIDENCE OF COMPETENCE

Licences, interstate or overseas licences or other marine qualifications held, relevant boating experience, observation of the participant's skills, or documents relating to the skipper's medical condition.

# 7.4.2.3 Use of a guide

The use of a guide may form part of the conditions of the agreement. The role of the guide is to advise and guide the skipper in the safe operation of the leisure craft without becoming responsible for its operation.

The provider shall ensure that the guide—

- has demonstrated competence in the safe operation of the leisure craft; and
- b) meets the same requirements, set out in Clause 7.4.5, as apply to a person giving the briefing.

# 7.4.3 Information to be supplied by the provider

The provider shall make available to the participants the following information prior to the participants taking control of the leisure craft. This may be done verbally at the briefing or in writing.

- a) The maximum number of persons permitted on board while the craft is underway.
  - NOTE: The number of persons on board is made up of participants and any guides provided.
- b) A description of the designated cruising area, and the local hazards such as submerged rocks, location of shipping channels and the like which may impact on activities.
- c) The action to be taken under the safety management plan in an emergency.
- Handling of the leisure craft while underway, including techniques of stopping, turning and avoiding propeller strike.
- e) Rules for collision avoidance relevant to the operation of the leisure craft while it is hired.
  - NOTE: A sticker at the helm position indicating right of way of approaching vessels may be a useful additional measure.
- f) Advice about anchoring, if the leisure craft has provision for anchoring.
- g) Operation of the radio, if the leisure craft is fitted with a radio, including details of radio channels to be used in case of emergency and for everyday communications.
- h) Any regular communications that the participants are required to have with the provider during the term of the agreement.
- i) The correct and safe operation of any onboard (including safety) equipment.
- j) The location of anchorages in the intended area of operation.
- k) Guidance on tender handling, if a tender is provided.
- I) The obligation of the skipper—
  - not to cause the leisure craft to be operated unsafely, for example, not to cause the leisure craft to be operated unpredictably; and
  - ii) not to operate the leisure craft unless it is equipped with the safety equipment required by this Section of the NSCV; and
  - iii) to report any marine incidents to the National Regulator.
- m) Any rules regarding the consumption of drugs or alcohol.
- n) Any obligation under the agreement allowing the provider to end the agreement if the leisure craft is operated unsafely.

# 7.4.4 Briefing

The provider shall conduct a full briefing for all nominated skippers unless the provider considers, on reasonable grounds, that an element of the briefing is unnecessary having regard to the skipper's knowledge and skills to operate the leisure craft safely. The briefing shall be in the English language, unless agreed otherwise between the provider and the user. A full briefing shall include the following elements:

- a) The correct and safe handling and navigation of the leisure craft, including an explanation of basic right of way rules.
- b) A description of the anticipated weather conditions and strategies to deal with unfavourable weather.
- c) The appropriate method for summoning assistance.
- d) The use of the leisure craft's safety equipment.
- e) The leisure craft's steering and emergency steering.
- f) Bilge pumping.
- g) Arrangements for discharge of sewage and grey water, if relevant.
- h) Starting and operating the motor and what to do if the motor does not start.
- i) For a sailing craft, sail handling, reefing and furling.

The briefing shall also include a practical demonstration of the handling of the leisure craft while it is underway, unless the provider considers on reasonable grounds that the practical demonstration is unnecessary having regard to the skipper's skills and ability to operate the leisure craft safely.

If, in the opinion of the provider, the information delivered at the briefing has not been understood, the provider shall terminate the agreement.

# **EXAMPLE**

The skipper does not have an adequate command of English and a suitable translator is not available.

## 7.4.5 Who may give briefing

The briefing shall be given by a person deemed by the provider to have sufficient experience and knowledge in the matters mentioned in Clause 7.4.4 to give an adequate briefing and possesses the ability to convey this information to participants.

At a minimum, the person giving the briefing shall possess a recreational boat licence or ticket.

# 7.4.6 Record keeping

The provider shall keep the following records for a period of 12 months from the date of the end of the agreement.

- a) The hour and date of the start and end of the hire.
- b) The name and address of the user.
- c) The name of the nominated skippers.

- d) The number of participants.
- e) The name of the person who gave the briefing.
- f) A description of any evidence used in the assessment of skipper competence.

## **EXAMPLE**

A signed notation by the person who gave the briefing to the effect that the skipper had been observed to satisfactorily manage the craft.

# CHAPTER 8 PARTIALLY SMOOTH WATERS AND OFFSHORE CRAFT

# 8.1 SCOPE

This Chapter specifies deemed-to-satisfy requirements for the design, construction and operation of Class 4D and 4C leisure craft less than 24m in length operating within a designated cruising area.

These craft have risk profile Category R.

Class 4D and 4C leisure craft not matching these parameters are outside the scope of this Chapter and may not necessarily have a Category R risk profile

Where a Section of the NSCV is referenced in this Chapter and the referenced Section does not identify the requirements applying to Class 4 vessels, the relevant requirements applying to Class 2D vessels shall apply for Class 4D leisure craft and the relevant requirements applying to Class 2C vessels shall apply for Class 4C leisure craft.

#### 8.2 OBJECTIVE

The objective of this Chapter is to ensure that the risks inherent in these types of activities are controlled to a level that can be managed by participants with appropriate knowledge and experience of boating, operating within an appropriate safety management plan.

# 8.3 DESIGN AND CONSTRUCTION

#### 8.3.1 General

Compliance with the requirements of Clause 8.3 is deemed to satisfy the required outcomes of NSCV Part C Sections 1 to 6.

# 8.3.2 Arrangement, accommodation and personal safety

#### 8.3.2.1 General

Leisure craft shall comply with NSCV Part C Section 1 and the requirements in the subclauses of Clause 8.3.2. Where there is any conflict between Clause 8.3.2 and NSCV Part C Section 1, the requirements in the subclauses of Clause 8.3.2 shall apply.

# 8.3.2.2 Accommodation spaces

Accommodation spaces of all leisure craft falling within the Scope of this Chapter shall comply with the following requirements:

- a) For leisure craft intended for overnight occupation, a bunk shall be provided for each of the maximum nominated number of participants, this may include a V berth or similar for two participants.
- b) Doors to all accommodation spaces shall be capable of being opened from inside the spaces without the use of a key.

c) Not less than two avenues of escape complying with the fire escape requirements of ISO 9094 shall be provided from all general areas available to the persons on board.

NOTE: References to the owners manual in ISO 9094 may be ignored.

#### 8.3.2.3 Vision from the helm

There shall be a substantially unobstructed view from each helm position in the forward facing sector defined by—

- a) the horizontal arc from directly forward to 112.5° on the starboard side; and
- b) the horizontal arc from directly forward to 112.5° on the port side.

For a sailing craft this shall be assessed with all sails lowered or furled. NOTE: See Figure 1.

Rear vision mirrors, cameras and monitors may be used to improve visibility astern. The tint of glazing materials used in the clear vision sectors shown in Figure 1 should not interfere with the recognition of the colour of lights seen through the tinted glass.

NOTE: Typically, grey tints are the most suitable tints to fulfil this criterion.

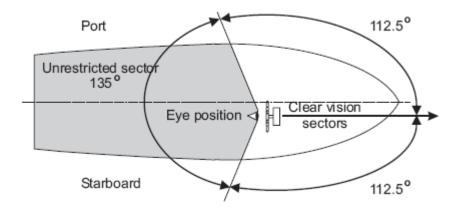


Figure 1 — Vision from navigational space windows

## 8.3.2.4 Ventilation

Each accommodation sleeping space shall, in addition to any opening windows, be provided with a fixed ventilator having an area of 80 cm<sup>2</sup> for each person in the space. All other spaces shall be adequately ventilated in a manner suitable for the purpose of the space.

# 8.3.2.5 Working deck protection

Sailing craft shall be fitted with foot stops, lifelines, stanchions and pulpits in accordance with the requirements for sailing boats specified in ISO 15085 appropriate to the design category and option set out in Table 2.

Class of vessel	ISO design category	Option	
4C	А	1	
4D	В	1, 2 or 3	

Table 2 — ISO design categories

Plastic coating may be used on lifelines.

The working decks of non-sailing craft over 6m in overall length shall be—

- surrounded by a barrier, extending to a height of not less than 750mm above the working deck. The barrier may consist of bulwarks, rails, lines or any combination. Horizontal rails or lines shall not be more than 230mm apart; or
- b) protected by bulwarks and guard rails in accordance with NSCV Part C Section 1; or
- c) fitted with non-slip surfaces, foot stops, handholds and guard-rails/guard-lines, in accordance with the requirements for non-sailing craft specified in ISO 15085, using the design category and option set out in Table 2.

Open decks above the main deck intended to be occupied by participants shall be provided with access by means of stairs or fixed ladders complying with the dimensional requirements specified in NSCV Part C Section 1 or AS 1657.

# 8.3.2.6 Arrangements for embarkation

Leisure craft greater than 7.5 m in length shall be provided with arrangements for the safe embarkation and disembarkation of persons at a wharf. When these arrangements are deployed, the pathway from the deck of the leisure craft to the wharf shall—

- a) have adequate handholds along its length;
- b) be free from trip hazards; and
- c) be unimpeded by obstructions such as deck rails.

# 8.3.2.7 Arrangements for reboarding

Leisure craft shall be fitted with a means of access for reboarding from the water. If that means is a ladder, the top of the lowest step shall be at least 500 mm below the waterline when the ladder is extended. When deployed, the means of reboarding shall provide stable footholds and handholds. Unstable devices, like a rope ladder, shall not be considered adequate.

The means of reboarding should be capable of being deployed and used by a person in the water without the assistance of anyone on board.

NOTE: The intent is to allow reboarding should the sole occupant of the vessel fall overboard.

## 8.3.3 Construction

Leisure craft shall be constructed in accordance with the requirements for vessels engaged in light operations specified in NSCV Part C Section 3, except that the ISO 12215 series standards may be used for leisure craft up to 24m in length. Where the ISO 12215 series standards are used, the structural adequacy of the cross structure of a multihull leisure craft may be assessed from first principles.

# 8.3.4 Buoyancy and stability

Leisure craft shall comply with NSCV Part C Section 6 with the additional requirement that craft under 7.5m in length shall have level flotation with swamped stability.

# 8.3.5 Black water and grey water systems

All installed toilets shall have a sewage holding system meeting the requirements of Annex C. State legislation may require leisure craft to be fitted with grey water treatment systems.

# 8.3.6 Fire protection

Fire protection arrangements for leisure craft shall be in accordance with NSCV Part C Section 4 with Fire Risk Category I.

# 8.3.7 Engineering

Electrical installations shall comply with NSCV Part C Subsection 5B, except that compliance with ISO 10134 may be used as an alternative to compliance with the requirements for lightning protection.

Liquefied petroleum gas installations for appliances shall comply with NSCV Part C Subsection 5C. Non-room sealed heating devices shall not be installed in any sleeping space, including a saloon that mat be used for sleeping.

Liquefied petroleum gas installations for engines shall comply with NSCV Part C Subsection 5D.

Machinery shall comply with NSCV Part C Subsection 5A and the following requirements:

- All exposed moving parts of machinery shall be guarded to protect persons from injury.
- b) If an automatically activated and electrically driven extra low voltage pump is fitted, it shall be in addition to the pumping arrangements required under NSCV Part C Subsection 5A. Hand pumps may be substituted for powered pumps for 4D vessels up to 12.5 m.

Permanently installed petrol and diesel fuel tanks complying with ISO 21487 installed outside of machinery spaces shall be deemed to meet the required outcomes of NSCV Part C Subsection 5A.

NOTE: NSCV Part C Subsection 5A does not permit the use of petrol engines below decks and provides limitations on the location of ancillary motors, such as generator sets. It also provides requirements regarding the storage of petrol and other flammable substances in containers. These requirements apply equally to leisure craft..

## 8.4 OPERATIONS

# 8.4.1 Safety management

Providers of leisure craft falling within the Scope of this Chapter shall develop, implement and monitor a Safety Management Plan that ensures the safe operation of the leisure craft and incorporates the following elements:

- a) An overview of the risks that the provider will be seeking to control through the safety management plan and those that the participants will be expected to manage.
- b) A description of the plans in place to deal with accidents and emergencies, including provisions for rendering first aid and evacuating persons requiring medical treatment.
- c) An assessment of hazards to navigation in the area where the leisure craft will be operating and strategies to manage those hazards. For example, restricting the vessel to a designated cruising area, not allowing travel at night or requiring regular radio contacts. If a bar crossing might be encountered what special measures are to be taken.
- d) The content of the information to be provided to participants including at the briefing.
- e) A description of the procedures established for the inspection, maintenance and potential withdrawal from service of defective leisure craft.
- f) A description and justification of the type of safety equipment provided on the vessel, taking account of its suitability for the waters where the vessel will be operating and the level of skills of the participants.
- g) A description of the system of communication and support services to be provided, for example maintaining a regular radio watch and the arrangements for rendering assistance in case of foreseeable types of misadventure.
- h) A feedback system for capturing information about incidents and addressing safety issues as they arise.

# 8.4.2 Participant competence

#### 8.4.2.1 General

The provider of a leisure craft shall not allow the user to take control of the leisure craft unless—

- the vessel is 12m or greater in length and the user can demonstrate that the leisure craft will be operated by a competent skipper assisted by at least one other competent participant throughout the term of the agreement;
- b) the vessel is less than 12m in length and the user can demonstrate that the leisure craft will be operated by a competent skipper throughout the term of the agreement; or
- the leisure craft will be under the supervision of a competent guide, assigned by the provider, throughout the term of the agreement.

# 8.4.2.2 Assessment of competence

The participants shall be deemed competent to operate the leisure craft if—

- the provider has reasonable grounds to believe that the skipper has the skills and abilities necessary to operate the leisure craft safely, over the term of the agreement, having regard to the leisure craft's size, type, propulsion power and intended area of operation;
- b) the provider has reasonable grounds to believe that for a vessel 12m or greater in length an additional participant, other than the skipper, has the skills and abilities necessary to assist in the safe operation of the leisure craft over the term of the agreement, having regard to the leisure craft's size, type, propulsion power and intended area of operation;

NOTE: see Clause 3.3.

- c) the provider has received a declaration about the skipper's competence from the user; and
- d) the skipper holds the appropriate licence or ticket under the relevant maritime law to operate the leisure craft if the leisure craft was a recreational boat.

## EXAMPLES OF EVIDENCE OF COMPETENCE

Licences, interstate or overseas licences or other marine qualifications held, relevant boating experience, evidence of carrying out bar crossings; observation of the participant's skills, or documents relating to the skipper's medical conditions.

# 8.4.2.3 Use of a guide

The use of a guide may form part of the conditions of the agreement. The role of the guide is to advise and guide the skipper in the safe operation of the leisure craft without becoming responsible for its operation.

The provider shall ensure that the guide—

- has demonstrated competence in the safe operation of the leisure craft; and
- b) meets the same requirements, set out in Clause 8.4.5, as apply to a person giving the briefing.

## 8.4.3 Information to be supplied by the provider

The provider shall make available to the user the following information prior to the user taking control of the leisure craft:

- a) The maximum number of persons permitted on board while the craft is underway.
  - NOTE: The number of persons on board is made up of participants and any guides provided.
- b) A description of the designated cruising area, and the local hazards, such as submerged rocks, location of shipping channels and the like, which may impact on activities.
- c) The action to be taken under the safety management plan in an emergency.

- d) Handling of the leisure craft while underway, including techniques of stopping, turning and avoiding propeller strike.
- e) Rules for collision avoidance relevant to the operation of the leisure craft while it is hired.
  - NOTE: A sticker at the helm position indicating right of way of approaching vessels may be a useful additional measure.
- f) Advice about anchoring, if the leisure craft has provision for anchoring.
- g) Operation of the radio, if the leisure craft is fitted with a radio, including details of radio channels to be used in case of emergency and for everyday communications.
- h) Any regular communications that the participants are required to have with the provider during the term of the agreement.
- i) The correct and safe operation of any onboard (including safety) equipment.
- j) The location of anchorages in the intended area of operation.
- k) Guidance on tender handling, if a tender is provided.
- I) The obligation of the skipper—
  - not to cause the leisure craft to be operated unsafely, for example, not to cause the leisure craft to be operated unpredictably; and
  - ii) not to operate the leisure craft unless it is equipped with the safety equipment required by this Section of the NSCV; and
  - iii) to report any marine incidents to the National Regulator.
- m) Any rules regarding the consumption of drugs or alcohol.
- n) Any obligation under the agreement allowing the provider to end the agreement if the leisure craft is operated unsafely.

## 8.4.4 Briefing

The provider shall conduct a full briefing for all participants unless the provider considers, on reasonable grounds, that an element of the briefing is unnecessary having regard to the participant's knowledge and skills to operate the leisure craft safely. The briefing shall be in the English language, unless agreed otherwise between the provider and the user. A full briefing shall include a practical demonstration of the following elements:

- The correct and safe handling and navigation of the leisure craft, including an explanation of basic right of way rules.
- b) A description of the anticipated weather conditions and strategies to deal with unfavourable weather.
- c) The appropriate method for summoning assistance.
- d) The use of the leisure craft's safety equipment.
- e) The leisure craft's steering and emergency steering.
- f) Bilge pumping.
- g) Arrangements for discharge of sewage, and if relevant, grey water.

- h) Starting and operating the motor and what to do if the motor does not start.
- i) For a sailing craft, sail handling, reefing and furling.

The briefing shall also include a practical demonstration of the handling of the leisure craft while it is underway, unless the provider considers on reasonable grounds that the practical demonstration is unnecessary having regard to the participant's skills and ability to operate the leisure craft safely.

If, in the opinion of the provider, the participants are unable to understand the information delivered at the briefing, the provider shall terminate the agreement.

#### **EXAMPLE**

The participants do not have an adequate command of English and a suitable translator is not available.

# 8.4.5 Who may give briefing

The briefing shall be given by a person who—

- has sufficient experience and knowledge in the matters mentioned in Clause 8.4.4 to give an adequate briefing and the ability to convey this information to participants;
- b) has a record of sufficient briefings successfully carried out; and
- c) has achieved at least the following qualifications:
  - i) If the leisure craft's length is up to and including 6m—a recreational boat licence or ticket, or holds a restricted coxswain licence.
  - ii) If the leisure craft's length is between 6m and 15m and it is Class 4D—holds a restricted coxswain licence applicable to the area of operation.
  - iii) If the leisure craft's length is greater than 15m in the case of Class 4D vessels, or is greater than 6m in the case of Class 4C vessels—holds a restricted master class 5 licence applicable to the area of operation, or an unrestricted coxswain licence.

#### NOTES:

- A person who does not meet the criterion in item b) may give a briefing for a leisure craft while being monitored by a person who has met the criterion. Monitoring does not need to involve direct supervision of every briefing.
- Fifty briefings would normally be considered an adequate record; however this may be reduced according to the person's maritime experience and ability as a briefer.

## 8.4.6 Record keeping

The provider shall keep the following records for a period of 12 months from the date of the end of the agreement.

- a) The hour and date of the start and end of the hire.
- b) The name and address of the user.
- c) The name of the nominated skippers.
- d) The number of participants.

- e) The name of the person who gave the briefing.
- f) A description of any evidence used in the assessment of skipper competence.

## **EXAMPLE**

A signed notation by the person who gave the briefing to the effect that the skipper had been observed to satisfactorily manage the craft.

# CHAPTER 9 TAKE AWAY LEISURE CRAFT

## 9.1 SCOPE

This Chapter specifies deemed-to-satisfy requirements for the design, construction and operation of Class 4E, 4D and 4C leisure craft less than 15m in length, provided on a trailer and intended to operate without any designated cruising area.

These craft have risk profile Category S.

Class 4E, 4D and 4C leisure craft not matching these parameters are outside the scope of this Chapter and may not necessarily have a Category S risk profile.

Where a Section of the NSCV is referenced in this Chapter and the referenced Section does not identify the requirements applying to Class 4 vessels, the relevant requirements applying to Class 2E vessels shall apply for Class 4E leisure craft, the relevant requirements applying to Class 2D vessels shall apply for Class 4D leisure craft and the relevant requirements applying to Class 2C vessels shall apply for Class 4C leisure craft.

## 9.2 OBJECTIVE

The objective of this Chapter is to ensure that the risks inherent in these types of activities are controlled to a level that can be managed by a skipper with appropriate knowledge and experience of boating.

## 9.3 DESIGN AND CONSTRUCTION

## 9.3.1 General

Compliance with the requirements of Clause 9.3 is deemed to satisfy the required outcomes of NSCV Part C Sections 1 to 6.

## 9.3.2 Arrangement, accommodation and personal safety

# 9.3.2.1 General

Leisure craft shall comply with NSCV Part C Section 1 and the requirements in the subclauses of Clause 9.3.2. Where there is any conflict between Clause 9.3.2 and NSCV Part C Section 1, the requirements in the subclauses of Clause 9.3.2 shall apply.

# 9.3.2.2 Accommodation spaces

Accommodation spaces of leisure craft shall comply with the following requirements:

a) For leisure craft intended for overnight occupation, a bunk shall be provided for each of the maximum nominated number of participants, this may include a V berth or similar for two participants.

- b) Not less than two avenues of escape complying with the fire escape requirements of ISO 9094 shall be provided from all general areas available to the persons on board.
  - NOTE: References to the owners manual in ISO 9094 may be ignored.
- c) Doors to all accommodation spaces shall be capable of being opened from inside the spaces without the use of a key.

#### 9.3.2.3 Vision from the helm

There shall be a substantially unobstructed view from each enclosed helm position in the forward facing sector defined by—

- a) the horizontal arc from directly forward to 112.5° on the starboard side; and
- b) the horizontal arc from directly forward to 112.5° on the port side.

For a sailing craft this shall be assessed with all sails lowered and furled. NOTE: see Figure 2.

Rear vision mirrors, cameras and monitors may be used to improve visibility astern. The tint of glazing materials used in the clear vision sectors shown in Figure 2 should not interfere with the recognition of the colour of lights seen through the tinted glass.

NOTE: Typically, grey tints are the most suitable tints to fulfil this criterion.

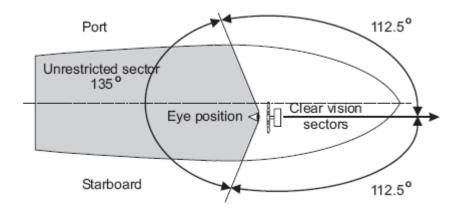


Figure 2 — Vision from navigational space windows

## 9.3.2.4 Ventilation

Each accommodation sleeping space shall, in addition to any opening windows, be provided with a fixed ventilator having an area of 80 cm<sup>2</sup> for each person in the space. All other spaces shall be adequately ventilated in a manner suitable for the purpose of the space.

# **9.3.2.5 Open decks**

Where an area of open deck space on a leisure craft is intended to be used as a sun deck that area shall be constructed so that it is capable of supporting the maximum number of persons that the leisure craft is licensed to carry.

# 9.3.2.6 Working deck protection

Sailing craft shall be fitted with foot stops, lifelines, stanchions and pulpits in accordance with the requirements for sailing boats specified in ISO 15085 appropriate to the design category and option set out in Table 3.

Class of vessel	ISO design category	Option	
4C	А	1	
4D	В	1, 2 or 3	
4E (non-sailing)	В	1, 2 or 3	
4E (sailing)	С	1, 2 or 3	

Table 3 — ISO design categories

Plastic coating may be used on lifelines.

The working decks of non-sailing craft over 6m in length shall be-

- surrounded by a barrier, extending to a height of not less than 750mm above the working deck. The barrier may consist of bulwarks, rails, lines or any combination. Horizontal rails or lines shall not be more than 230mm apart; or
- b) protected by bulwarks and guard rails in accordance with NSCV Part C Section 1; or
- c) fitted with non-slip surfaces, foot stops, handholds and guard-rails/guard-lines, in accordance with the requirements for non-sailing craft specified in ISO 15085, using the design category and option set out in Table 3.

# 9.3.2.7 Arrangements for reboarding

Leisure craft shall be fitted with a means of access for reboarding from the water if the freeboard at the nominated reboarding point is greater than 0.3 m. If that means is a ladder, the top of the lowest step shall be at least 500 mm below the waterline when the ladder is extended. When deployed, the means of reboarding shall provide stable footholds and handholds. Unstable devices, like a rope ladder, shall not be considered adequate.

The means of reboarding should be capable of being deployed and used without the assistance of anyone on board.

NOTE: The intent is to allow reboarding should the sole occupant of the vessel fall overboard.

# 9.3.3 Construction

Leisure craft shall be constructed in accordance with the requirements for vessels engaged in light operations specified in NSCV Part C Section 3, except that the ISO 12215 series standards may be used for leisure craft up to 24m in length. Where the ISO 12215 series standards are used, the

structural adequacy of the cross structure of a multihull leisure craft may be assessed from first principles.

# 9.3.4 Buoyancy and stability

Leisure craft shall comply with NSCV Part C Section 6, with the additional requirement that craft under 7.5m in length shall have level flotation with swamped stability.

# 9.3.5 Black water and grey water systems

All installed toilets shall have a sewage holding system meeting the requirements of Annex C. State legislation may require leisure craft to be fitted with grey water treatment systems.

# 9.3.6 Fire protection

Fire protection arrangements for leisure craft shall be in accordance with NSCV Part C Section 4 with Fire Risk Category I.

# 9.3.7 Engineering

Electrical installations shall comply with NSCV Part C Subsection 5B, except that compliance with ISO 10134 may be used as an alternative to compliance with the requirements for lightning protection.

Liquefied petroleum gas installations for appliances shall comply with NSCV Part C Subsection 5C. Non-room sealed heating devices shall not be installed in any sleeping space, including a saloon that mat be used for sleeping.

Liquefied petroleum gas installations for engines shall comply with NSCV Part C Subsection 5D.

Machinery shall comply with NSCV Part C Subsection 5A and the following requirements:

- All exposed moving parts of machinery shall be guarded to protect persons from injury.
- b) If an automatically activated and electrically driven extra low voltage pump is fitted, it shall be in addition to the pumping arrangements required under NSCV Part C Subsection 5A. Hand pumps may be substituted for powered pumps for 4D vessels up to 12.5 m.

Permanently installed petrol and diesel fuel tanks complying with ISO 21487 installed outside of machinery spaces shall be deemed to meet the required outcomes of NSCV Part C Subsection 5A.

NOTE: NSCV Part C Subsection 5A does not permit the use of petrol engines below decks and provides limitations on the location of ancillary motors, such as generator sets. It also provides requirements regarding the storage of petrol and other flammable substances in containers. These requirements apply equally to leisure craft.

## 9.4 OPERATIONS

## 9.4.1 Safety management

Providers of leisure craft falling within the Scope of this Chapter shall develop, implement and monitor a Safety Management Plan that ensures

the safe operation of the leisure craft and incorporates the following elements:

- a) An overview of the risks that the provider will be seeking to control through the safety management plan and those that the participants will be expected to manage.
- b) Where a leisure craft is to be used to tow skiers or persons using other towed apparatus, an assessment of the additional risks and the steps to manage those risks.
- c) A description of the plans in place to deal with accidents and emergencies, including provisions for rendering first aid and evacuating persons requiring medical treatment.
- d) An assessment of hazards to navigation in the area where the leisure craft will be operating and strategies to manage those hazards. For example, restricting the vessel to a certain geographical area, not allowing travel at night or requiring regular radio contacts. If a bar crossing might be encountered what special measures are to be taken.
- e) The content of the information to be provided to participants including at the briefing.
- f) A description of the procedures established for the inspection, maintenance and potential withdrawal from service of defective leisure craft.
- g) A description and justification of the type of safety equipment provided on the vessel, taking account of its suitability for the waters where the vessel will be operating and the level of skills of the participants.
- h) A description of the system of communication and support services to be provided, for example maintaining a regular radio watch and the arrangements for rendering assistance in case of foreseeable types of misadventure.
- i) A feedback system for capturing information about incidents and addressing safety issues as they arise.

## 9.4.2 Skipper competence

# 9.4.2.1 General

The provider of a leisure craft shall not allow the user to take control of the leisure craft unless—

- the user can demonstrate that the leisure craft will be operated by a competent skipper throughout the term of the agreement; or
- b) the leisure craft will be under the supervision of a competent guide, assigned by the provider, throughout the term of the agreement.

## 9.4.2.2 Assessment of the skipper's competence

A skipper shall be deemed competent to operate the leisure craft if—

a) the provider has reasonable grounds to believe that the skipper has the skills and abilities necessary to operate the leisure craft safely,

- over the term of the agreement, having regard to the leisure craft's size, type, propulsion power and intended area of operation; and
- the skipper holds the appropriate licence or ticket under the relevant maritime law to operate the leisure craft if the leisure craft was a recreational boat.

#### EXAMPLES OF EVIDENCE OF COMPETENCE

Relevant boating experience, such as evidence of successful crossing of a bar, observation of the participant's skills, or documents relating to the skipper's medical conditions.

# 9.4.2.3 Use of a guide

The use of a guide may form part of the conditions of the agreement. The role of the guide is to advise and guide the skipper in the safe operation of the leisure craft without becoming responsible for its operation.

The provider shall ensure that the guide—

- a) has demonstrated competence in the safe operation of the leisure craft; and
- b) meets the same requirements, set out in Clause 9.4.5, as apply to a person giving the briefing.

# 9.4.3 Information to be supplied by the provider

The provider shall make available to the user the following information prior to the user taking control of the leisure craft:

- a) The maximum number of persons permitted on board while the craft is underway.
  - NOTE: The number of persons on board is made up of participants and any guides provided.
- b) The action to be taken under the safety management plan in an emergency.
- c) Handling of the leisure craft while underway, including techniques of stopping, turning and avoiding propeller strike.
- Rules for collision avoidance relevant to the operation of the leisure craft while it is hired.
  - NOTE: A sticker at the helm position indicating right of way of approaching vessels may be a useful additional measure.
- e) Advice about anchoring, if the leisure craft has provision for anchoring.
- f) Operation of the radio, if the leisure craft is fitted with a radio, including details of radio channels to be used in case of emergency and for everyday communications.
- g) Any regular communications that the participants are required to have with the user during the term of the agreement.
- h) The correct and safe operation of any onboard (including safety) equipment.
- i) Guidance on tender handling, if a tender is provided.
- j) The obligation of the skipper—

- not to cause the leisure craft to be operated unsafely, for example, not to cause the leisure craft to be operated unpredictably;
- ii) not to operate the leisure craft unless it is equipped with the safety equipment required by this Section of the NSCV; and
- iii) to report any marine incidents to the Authority.
- k) Any rules regarding the consumption of drugs or alcohol.
- I) Any obligation under the agreement allowing the provider to end the agreement if the leisure craft is operated unsafely.

# 9.4.4 Briefing

The provider shall conduct a full briefing for all participants unless the provider considers, on reasonable grounds, that an element of the briefing is unnecessary having regard to the participant's knowledge and skills to operate the leisure craft safely. The briefing shall be in the English language, unless agreed otherwise between the provider and the user. A full briefing shall include a practical demonstration of the following elements:

- a) The correct and safe handling and navigation of the leisure craft, including an explanation of basic right of way rules.
- b) A description of the anticipated weather conditions and strategies to deal with unfavourable weather.
- c) The appropriate method for summoning assistance.
- d) The use of the leisure craft's safety equipment.
- e) The leisure craft's steering and emergency steering.
- f) Bilge pumping.
- g) Starting and operating the motor and what to do if the motor does not start.
- h) For a sailing craft, sail handling, reefing and furling.
- i) The mode of any regular communications that the participants are required to have with the user during the term of the agreement.

The briefing shall also include a practical demonstration of the handling of the leisure craft while it is underway, unless the provider considers on reasonable grounds that the practical demonstration is unnecessary having regard to the participant's skills and ability to operate the leisure craft safely.

If, in the opinion of the provider, the participants are unable to understand the information delivered at the briefing, the provider shall terminate the agreement.

# **EXAMPLE**

The participants do not have an adequate command of English and a suitable translator is not available.

# 9.4.5 Who may give briefing

The briefing shall be given by a person who—

- has sufficient experience and knowledge in the matters mentioned in Clause 9.4.4 to give an adequate briefing and the ability to convey this information to participants;
- b) has a record of sufficient briefings successfully carried out; and
- c) has achieved at least the following qualifications:
  - i) If the leisure craft's length is up to and including 6m—a recreational boat licence or ticket, or holds a restricted coxswain licence.
  - ii) If the leisure craft's length is between 6m and 15m and it is Class 4D—holds a restricted coxswain licence applicable to the area of operation.
  - iii) If the leisure craft's length is greater than 15m in the case of Class 4D or 4E vessels, or is greater than 6m in the case of Class 4C vessels—holds a restricted master class 5 licence applicable to the area of operation, or an unrestricted coxswain licence.

#### NOTES:

- A person who does not meet the criterion in item b) may give a briefing for a leisure craft while being monitored by a person who has met the criterion. Monitoring does not need to involve direct supervision of every briefing.
- 50 briefings would normally be considered an adequate record; however this may be reduced according to the person's maritime experience and ability as a briefer.

# 9.4.6 Record keeping

The provider shall keep the following records for a period of 12 months from the date of the end of the agreement.

- a) The hour and date of the start and end of the hire.
- b) The name and address of the user.
- c) The name of the nominated skippers.
- d) The number of participants.
- e) The name of the person who gave the briefing.
- f) A description of any evidence used in the assessment of skipper competence.

# **EXAMPLE**

The recreational boater licence number.

# CHAPTER 10 PERSONAL WATERCRAFT

## 10.1 SCOPE

This Chapter specifies deemed-to-satisfy requirements for the design, construction and operation of leisure craft that are personal watercraft operating in operational area E.

These craft have risk profile Category T.

NOTE: Personal watercraft operations in operational areas C or D will need to be individually assessed using Chapter 11 and Annex A.

#### 10.2 OBJECTIVE

The objectives of this Chapter are—

- to ensure that the overall risks inherent in the types of activities covered by this Chapter are controlled to a level that equates to a tolerable level of risk; and
- b) because the level of residual uncontrolled risk to be managed by participants is substantially above the negligible level, and that fact may not be readily apparent to participants, to ensure that participants give informed consent before being exposed to those risks.

#### 10.3 DESIGN AND CONSTRUCTION

## 10.3.1 **General**

Compliance with the requirements of Clause 10.3 is deemed to satisfy the required outcomes of NSCV Part C Sections 1 to 6 for personal watercraft.

## 10.3.2 Functional design

Personal watercraft shall be designed and constructed in accordance with ISO 13590.

# 10.3.3 Cut-off device

Personal watercraft shall be equipped with an automatic engine cut-off device that will activate if the rider becomes separated from the craft.

**EXAMPLE** 

A 'kill switch' with a wrist lanyard.

## 10.3.4 Identification

Personal watercraft shall be marked on both sides with the registration number.

# 10.4 OPERATIONS

# 10.4.1 Safety management

Providers of leisure craft falling within the Scope of this Chapter shall develop, implement and monitor a Safety Management Plan that ensures

the safe operation of the leisure craft and incorporates the following elements:

- a) An overview of the risks that the provider will be seeking to control through the safety management plan and those that the participants will be expected to manage.
- b) An assessment of the special skills, abilities and level of medical fitness required by a participant to undertake the activity.
- c) A description of the plans in place to deal with accidents and emergencies, including provisions for rendering first aid and evacuating persons requiring medical treatment.
- d) An assessment of hazards to navigation in the area where the leisure craft will be operating and strategies to manage those hazards.
- A precise description of the boundaries of the designated cruising area where the personal watercraft will be operating.
- f) An assessment of the interactions anticipated with other persons using the local area, and the plans in place to minimise any impacts, including, but not limited to, noise generation and the potential for incidents involving swimmers and other craft.
- g) The content of the information to be provided to participants including at the briefing.
- h) A description of the procedures established for the inspection, maintenance and potential withdrawal from service of defective leisure craft.
- A description and justification of the type of safety equipment provided on the vessel, taking account of its suitability for the waters where the vessel will be operating and the level of skills of the participants.
- j) For a tour operation in accordance with Clause 10.4.5, the maximum ratio of participants to leaders, any restrictions on speed to be observed by participants, the arrangements for communication between the leader and participants and any additional safety precautions to be observed.
- k) For a pen operation, the minimum separation distances, any restrictions on speed to be observed by participants, the arrangements for communication with participants and any additional safety precautions to be observed.
  - NOTE: See Clause 10.4.4, item b) ii).
- A description of the system of communication and support services to be provided and the arrangements for rendering assistance in case of foreseeable types of misadventure.
- m) A feedback system for capturing information about incidents and addressing safety issues as they arise.

# 10.4.2 Participant requirements

Participants in personal watercraft operations shall comply with the following requirements.

a) Participants under 18 years of age shall provide proof of their age.

- b) Participants shall declare any medical conditions likely to affect their ability to safely undertake the activity.
- c) While using the craft, each participant shall wear a properly fitted and an appropriately-sized PFD supplied by the provider in accordance with Clause 4.4. Other types of PFD shall not be used.
- Participants shall not take personal watercraft outside the designated cruising area or pen.

# 10.4.3 Participant age and competence

The provider of a leisure craft shall not allow the user to take control of the personal watercraft unless—

- a) all participants, including pillion passengers, are over the age of 12 years; and
- b) the personal watercraft will be operated by a competent skipper throughout the term of the agreement.

# 10.4.4 Assessment of the skipper's competence

A skipper shall be deemed competent to operate the personal watercraft if—

- the provider has reasonable grounds to believe that the skipper has the skills and abilities necessary to operate the craft safely, over the term of the agreement, having regard to the personal watercraft's propulsion power and the intended area of operation; and
- b) the skipper—
  - holds a recreational personal watercraft licence or ticket issued under the relevant maritime law; or
  - ii) is only operating the personal watercraft within a pen that is being directly supervised by the provider or in a tour that is being directly supervised by a leader, in accordance with Clause 10.4.5, and the skipper is over the age of 16 years of age or is under the direct supervision of a pillion participant who is over 18 years of age.

# NOTES:

- Skippers riding personal watercraft within a pen, or as part of a tour complying with Clause 10.4.5, may not be required by this standard to hold a recreational personal watercraft licence or ticket; however, local licensing requirements for riders of personal watercraft may apply and would override the requirements of this Section of the NSCV.
- 2. Pen and tour operations involving unlicensed riders would only be suitable in relatively benign designated cruising areas with little other maritime traffic.

#### EXAMPLES OF EVIDENCE OF COMPETENCE

Relevant personal watercraft and/or boating experience, observation of the participant's skills, or documents relating to the skipper's medical conditions.

## 10.4.5 Tours supervised by a leader

A tour operation may be undertaken under the direct supervision of one or more leaders. The role of the leader is to monitor the safe operation of the personal watercraft by participants and ensure that the provisions of the safety management plan are followed. The leader will normally be using his or her personal watercraft, rather than riding with a participant.

The provider shall ensure that each leader—

- has demonstrated competence in the safe operation of the personal watercraft;
- b) possesses an adult recreational personal watercraft licence or ticket issued under local maritime law;
- c) holds a restricted coxswain licence applicable to the designated cruising area or higher maritime qualification;
- d) holds a current first aid certificate; and
- e) is available throughout the period of the agreement.

# 10.4.6 Information to be supplied by the provider

The provider shall make available to the user the following information prior to the user taking control of the leisure craft:

- a) The maximum number of persons permitted on board while the craft is underway, which shall not exceed the number of persons shown on the compliance plate.
- b) Advice about the special risks inherent in the personal watercraft activity.
- c) A description of the area of operations, and the local hazards such as submerged rocks, location of shipping channels and the like which may impact on activities.
- d) The action to be taken under the safety management plan in an emergency.
- e) Handling of the personal watercraft, including techniques of stopping and turning.
- f) Rules for collision avoidance relevant to the operation of the personal watercraft while it is hired.
- g) The correct and safe operation of any onboard (including safety) equipment.
- h) The obligation of the skipper—
  - not to cause the personal watercraft to be operated unsafely, for example, not to cause the personal watercraft to be operated unpredictably; and
  - ii) not to operate the leisure craft unless all participants are wearing properly fitted PFDs; and
  - iii) to report any marine incidents.
- i) Any rules regarding the consumption of drugs or alcohol.
- j) Any obligation under the agreement allowing the provider to end the agreement if the leisure craft is operated unsafely.

# 10.4.7 Briefing

# 10.4.7.1 Special briefing

The provider shall conduct a special briefing for all participants. The briefing shall be in the English language, unless agreed otherwise between the provider and the user. The special briefing shall include the following elements:

- a) An explanation of the special hazards associated with the activity and the fact that the participant has a significantly higher risk of injury and/or death than they would experience in their daily life.
- b) A practical demonstration of any special techniques that are required to be utilised as part of the safety management system.
- c) Advice that the instructions of the provider are to be explicitly followed, including any directions to immediately cease the activity, if in the opinion of the provider, an unsafe situation has developed or may develop.

If, in the opinion of the provider, any of the participants fail to comprehend the information delivered at the special briefing, the provider shall terminate the agreement.

#### **EXAMPLE**

A participant does not pay adequate attention to the briefing or fails to take the risks seriously.

# 10.4.7.2 General briefing

The provider shall conduct a general briefing for the skipper unless the provider considers, on reasonable grounds, that an element of the briefing is unnecessary having regard to the skipper's knowledge and skills to operate the leisure craft safely. The briefing shall be in the English language, unless agreed otherwise between the provider and the user. A full briefing shall include the following elements—

- a) The boundaries of the designated cruising area or pen.
- b) A practical demonstration of the leisure craft's safety equipment, including any 'kill switch'.
- c) The method for summoning assistance.
- d) Starting and operating the motor and what to do if the motor does not start.

The briefing shall also include a practical demonstration of the handling of the personal watercraft while it is underway, unless the provider considers on reasonable grounds that the practical demonstration is unnecessary having regard to the skipper's skills and ability to operate the personal watercraft safely.

If, in the opinion of the provider, the skipper is unable to understand the information delivered at the general briefing, the provider shall terminate the agreement.

# **EXAMPLE**

The skipper does not have an adequate command of English and a suitable translator is not available.

# 10.4.8 Who may give briefing

The briefing shall be given by a person who—

- has sufficient experience and knowledge in the matters mentioned in Clause 10.4.7.1 and 10.4.7.2 to give an adequate briefing and the ability to convey this information to participants; and
- has a record of sufficient briefings successfully carried out; and holds at least a recreational PWC licence or ticket or a restricted coxswain licence applicable to the designated cruising area;
   NOTES:
  - 1. A person who does not meet the criterion in item b) may give a briefing for a leisure craft while being monitored by a person who has met the criterion. Monitoring does not need to involve direct supervision of every briefing.
  - Fifty briefings would normally be considered an adequate record; however this may be reduced according to the person's maritime experience and ability as a briefer.

# 10.4.9 Record keeping

The provider shall keep the following records for a period of 12 months from the date of the end of the agreement.

- a) The date of the hire.
- b) The name of the user.
- c) The name of the nominated skipper.
- d) The number of participants.
- e) The name of the person who gave the briefing.
- f) A description of any evidence used in the assessment of skipper competence.

**EXAMPLE** 

The PWC licence number.

# CHAPTER 11 OTHER LEISURE CRAFT ACTIVITIES

## 11.1 SCOPE

This Chapter sets out a framework for assessing, from first principles, the risk associated with leisure craft activities to ensure that they meet the required outcomes specified in Clauses 2.2 to 2.6. In some cases, it may not be practicable to apply sufficient controls to achieve a tolerable level of risk, in which case the leisure craft activity would not be capable of complying with this Section of the NSCV.

NOTE: Examples of activities requiring assessment in accordance with this Chapter could include sea kayaks, white-water rafting, a submersible or other higher risk activities.

## 11.2 OBJECTIVE

The objectives of this Chapter are—

- a) to ensure that the overall risks are controlled to a level that does not exceed a tolerable level of risk; and
- to ensure that participants give informed consent before being exposed to those risks.

## 11.3 RISK ASSESSMENT AND CONTROL

# 11.3.1 **Process**

The provider shall conduct a hazard identification and risk assessment of the activity and shall document the results in a risk register.

The register shall identify and differentiate between risks that are within the control of the provider and residual risks that are intrinsic to the particular activity.

# **EXAMPLE**

The hazard of injuries resulting from wakeboarding is associated with multiple risks. Some risks, such as the failure of equipment and operating in unsuitable conditions, can be controlled by the provider. Other risks associated with participant error while operating at considerable speed are intrinsic to the activity and cannot be controlled by the provider.

# 11.3.2 Acceptability

The activity shall not be undertaken as a leisure craft operation if the level of risk to participants, after applying the controls specified in Clauses 11.4 to 11.7, is above a tolerable level.

NOTE: The National Regulator is responsible for assessing the tolerable level of risk applicable in the area where the activity is to take place.

## 11.4 DESIGN AND CONSTRUCTION

## 11.4.1 General

Leisure craft falling within the Scope of this Chapter shall comply with a construction standard recognised in Australia and appropriate to the risks and loads involved in the activity. As a minimum, that standard shall not be less onerous than the relevant deemed-to-satisfy solution specified in this Section of the NSCV for a vessel of the same type, length and operational area.

#### 11.4.2 Fast craft

Fast craft other than personal watercraft shall be designed and constructed to meet the loads associated with NSCV Part F Section 1.

## 11.5 SPECIALIST EQUIPMENT

In addition to the requirements of Chapter 4, specialist equipment required for the activity shall be fit for its intended purpose and comply with any applicable standards recognised in Australia.

#### **EXAMPLE**

Many national sporting associations have recognised equipment standards for their particular sports.

#### 11.6 OPERATIONS

# 11.6.1 Safety management

Providers of leisure craft falling within the Scope of this Chapter shall develop, implement and monitor a Safety Management Plan that ensures the safe operation of the leisure craft and incorporates the following elements:

- a) An overview of the risks that the provider will be seeking to control through the safety management plan and those that the participants will be expected to manage, based on the risk register.
- b) An assessment of the special skills, abilities and level of medical fitness required by a participant to undertake the activity.
- c) A description of the plans in place to deal with accidents and emergencies, including provisions for rendering first aid and evacuating persons requiring medical treatment.
- d) An assessment of hazards to navigation in the area where the leisure craft will be operating and strategies to manage those hazards. For example, restricting the vessel to a certain geographical area, not allowing travel at night or requiring regular radio contacts. If a bar crossing might be encountered what special measures are in place.
- e) The content of the information to be provided to participants including at the briefing.
- f) A description of the procedures established for the inspection, maintenance and potential withdrawal from service of defective leisure craft.

- g) A description and justification of the type of safety equipment provided on the vessel, taking account of its suitability for the waters where the vessel will be operating and the level of skills of the participants.
- h) A description of the system of communication and support services to be provided, for example maintaining a regular radio watch and the arrangements for rendering assistance in case of foreseeable types of misadventure.
- A feedback system for capturing information about incidents and addressing safety issues as they arise.

# 11.6.2 Participant competence

The provider of a leisure craft shall not allow the user to take control of the leisure craft unless the user can demonstrate that all intended participants possess the special skills, abilities and level of medical fitness required to undertake the activity; and—

- the user can demonstrate that the leisure craft will be operated by a competent skipper throughout the term of the agreement; or
- b) the leisure craft will be under the supervision of a competent guide, assigned by the provider, throughout the term of the agreement.

# 11.6.3 Assessment of the skipper's competence

A skipper shall be deemed competent to operate the leisure craft if—

- the provider has reasonable grounds to believe that the skipper has the skills and abilities necessary to operate the leisure craft safely, over the term of the agreement, having regard to the leisure craft's size, type, propulsion power and intended area of operation;
- the skipper holds the appropriate licence or ticket to operate the leisure craft under the relevant maritime law if the leisure craft were a recreational boat; and
- c) the provider has received a declaration about the skipper's competence from the user.

#### EXAMPLES OF EVIDENCE OF COMPETENCE

Licences, interstate or overseas licences or other marine qualifications held, relevant boating experience, observation of the participant's skills, or documents relating to the skipper's medical conditions. Diving qualifications and experience could also be relevant in some types of operation.

# 11.6.4 Use of a guide

The use of a guide may form part of the conditions of the agreement. The role of the guide is to advise and guide the skipper in the safe operation of the leisure craft without becoming responsible for its operation.

The provider shall ensure that the guide—

 has demonstrated competence in the safe operation of the leisure craft; and  meets the same requirements, set out in Clause 11.6.7, as apply to a person giving the briefing.

# 11.6.5 Information to be supplied by the provider

The provider shall make available to the user the following information prior to the user taking control of the leisure craft:

- a) The maximum number of persons permitted on board while the craft is underway.
  - NOTE: The number of persons on board is made up of participants and any guides provided.
- b) Advice about the special risks inherent in the leisure craft activity.
- c) A description of the area of operations, and the local hazards such as submerged rocks, location of shipping channels and the like which may impact on activities.
- d) The action to be taken under the safety management plan in an emergency.
- e) Handling of the leisure craft while underway, including techniques of stopping, turning and avoiding propeller strike.
- f) Rules for collision avoidance relevant to the operation of the leisure craft while it is hired.
- g) Advice about anchoring, if the leisure craft has provision for anchoring.
- h) Operation of the radio, if the leisure craft is fitted with a radio.
- i) Any regular communications that the participants are required to have with the user during the term of the agreement.
- j) The correct and safe operation of any onboard (including safety) equipment.
- k) The location of anchorages in the intended area of operation.
- I) Guidance on tender handling, if a tender is provided.
- m) The obligation of the skipper-
  - not to cause the leisure craft to be operated unsafely, for example, not to cause the leisure craft to be operated unpredictably;
  - ii) not to operate the leisure craft unless it is equipped with the safety equipment required by this Section of the NSCV; and
  - iii) to report any marine incidents.
- n) Any rules regarding the consumption of drugs or alcohol.
- Any obligation under the agreement allowing the provider to end the agreement if the leisure craft is operated unsafely.

# 11.6.6 Briefing

# 11.6.6.1 Special briefing

The provider shall conduct a special briefing for all participants. The briefing shall be in the English language, unless agreed otherwise

between the provider and the user. The special briefing shall include the following elements:

- a) An explanation of the special hazards associated with the activity and the fact that the participant has a significantly higher risk of injury and/or death than they would experience in their daily life.
- A practical demonstration of any special equipment and techniques that are required to be utilised as part of the safety management system.
- c) Advice that the instructions of the provider are to be explicitly followed, including any directions to immediately cease the activity, if in the opinion of the provider, an unsafe situation has developed or may develop.
- If, in the opinion of the provider, any of the participants fail to comprehend the information delivered at the special briefing, the provider shall terminate the agreement.

#### **EXAMPLE**

A participant does not pay adequate attention to the briefing or fails to take the risks seriously.

# 11.6.6.2 General briefing

The provider shall conduct a full briefing for the skipper unless the provider considers, on reasonable grounds, that an element of the briefing is unnecessary having regard to the skipper's knowledge and skills to operate the leisure craft safely. The briefing shall be in the English language, unless agreed otherwise between the provider and the user. A full briefing shall include a practical demonstration of the following elements:

- a) The leisure craft's safety equipment.
- b) The leisure craft's steering and emergency steering.
- c) Bilge pumping.
- d) Starting and operating the motor and what to do if the motor does not start.
- e) For a sailing craft, sail handling, reefing and furling.

The briefing shall also include a practical demonstration of the handling of the leisure craft while it is underway, unless the provider considers on reasonable grounds that the practical demonstration is unnecessary having regard to the participant's skills and ability to operate the leisure craft safely.

If, in the opinion of the provider, the skipper is unable to understand the information delivered at the general briefing, the provider shall terminate the agreement.

#### **EXAMPLE**

The skipper does not have an adequate command of English and a suitable translator is not available.

# 11.6.7 Who may give briefing

The briefing shall be given by a person who—

- has sufficient experience and knowledge in the matters mentioned in Clause 11.6.6.1 and 11.6.6.2 to give an adequate briefing and the ability to convey this information to participants;
- b) has a record of sufficient briefings successfully carried out; and
- c) has achieved at least the following qualifications:
  - i) If the leisure craft's length is up to and including 6m—a recreational boat licence or ticket or holds a restricted coxswain licence.
  - ii) If the leisure craft's length is between 6m and 15m and it is Class 4D or 4E—holds a restricted coxswain licence applicable to the area of operation (i.e. D or E waters).
  - iii) If the leisure craft's length is greater than 15m in the case of Class 4D or 4E vessels, or is greater than 6m in the case of Class 4C vessels—holds a restricted master class 5 licence applicable to the area of operation (i.e. D or E waters), or an unrestricted coxswain licence.

#### NOTES:

- A person who does not meet the criterion in item b) may give a briefing for a leisure craft while being monitored by a person who has met the criterion. Monitoring does not need to involve direct supervision of every briefing.
- Fifty briefings would normally be considered an adequate record; however this may be reduced according to the person's maritime experience and ability as a briefer.

# 11.6.8 Record keeping

The provider shall keep the following records for a period of 12 months from the date of the end of the agreement.

- a) The dates of the start and end of the hire.
- b) The name of the user.
- c) The name of the nominated skipper.
- d) The number of participants.
- e) The name of the person who gave the briefing.
- f) A description of any evidence used in the assessment of skipper competence.

## **EXAMPLE**

A signed notation by the person who gave the briefing to the effect that the skipper had been observed to satisfactorily manage the craft.

# ANNEX A EQUIVALENT SOLUTIONS AND RISK CATEGORIES

#### A1 SCOPE

This Annex sets out an approach to determining equivalent solutions for leisure craft activities based on the risk category and the residual risks intrinsic to the type of activity.

This Annex is referenced in Clause 2.9. It forms a normative (mandatory) part of this document.

#### A2 OBJECTIVE

The objective of this Annex is to ensure that appropriate controls are applied to avoidable risks, commensurate with the nature of the leisure craft activity and the public perception of the level of risk they might reasonably expect to experience while undertaking that activity with that type of craft.

## A3 BACKGROUND TO RISK CATEGORIES

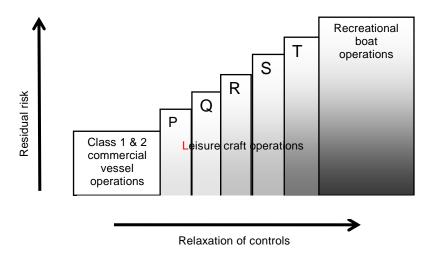


Figure A.1— Residual risk categories for leisure craft in comparison to other types of maritime activities

Leisure craft activities involve exposing participants to a higher level of residual risk than would be experienced by a passenger on a Class 1 or Class 2 commercial vessel. This reflects two fundamental aspects of leisure craft that, taken together, differentiate leisure craft from other commercial vessel operations:

a) Leisure craft activities are an amusement intended to provide a degree of adventure.

b) The leisure craft is driven by participants who do not hold professional maritime qualifications.

In addition, the level of residual risk posed by different types of leisure craft activities is not uniform. This reflects the expectation of different sectors of the public for access to activities with a range of levels of challenge and personal risk. However, the public also has an expectation that there will be controls on this regulated sector, such that there is an upper limit on the risk to which persons can be exposed.

This standard therefore applies a step-wise progression in residual risk from the lowest risk category of leisure craft activity (Category P), which is closest to the level of residual risk experienced by passengers on board Class 1 or Class 2 commercial vessels, up to the highest risk category (Category T) which is the most challenging (see Figure A.1).

The concept underpinning the standard is that the provider is responsible for controlling the avoidable risks, for example by supplying well-designed craft and equipment in good order, as well as by providing local knowledge and information about the craft. The remaining residual risk, intrinsic to the activity, has to be managed by the participants and should be readily apparent to any member of the public considering undertaking the activity. For example, kayaks are not very stable and are liable to capsize; houseboats are large vessels that are not as manoeuvrable as other craft; or personal watercraft are akin to motor bikes in terms of speed and exposure of the rider in a collision.

The more significant residual risks associated with common types of leisure craft activity are described and categorised in Table A.1. These categories relate to the residual risks once the measures set out in the body of this standard have been implemented to control avoidable risks. In all of the categories, the extent to which it is possible to mitigate the consequences of operator error while preserving the essential character of the particular leisure craft activity is a major consideration.

## A4 ASSESSING EQUIVALENT SOLUTIONS

Equivalent solutions for the control of avoidable risk shall satisfy the required outcomes to a level of safety at least equivalent to that of the deemed-to-satisfy solutions specified within this Section of the NSCV for that type of leisure craft activity. The remaining residual risk shall not increase, nor shall the risk category increase, as a result of the implementation of an equivalent solution.

When considering a proposed type of activity, not exactly matching the scope of one of Chapters 5 to 10, the risk category of the established activity that most closely matches the proposed activity shall be used. The avoidable risks shall be controlled such that the residual risk associated with the risk category of the established activity is not increased.

Table A.1 — Risk categories

Risk category	Typical residual risks after controls have been applied to certain avoidable risks	Examples of specific controls to be applied to avoidable risks	Typical activities
1	2	3	4
Category P	Reasonable probability of immersion in benign waters with provider assistance immediately available and minor consequences. Reasonable probability of skipper error leading to low speed collisions by lightweight craft with minor consequences.	Chapter 5	Unpowered craft, including off the beach sailing, paddle and pedal craft, sail boards, paddle boards.
Category Q	Reasonable probability of skipper error leading to low speed collisions with minor consequences. Very remote probability of incidents with hazardous consequences, such as propeller strike to swimmers.	Chapter 6 Chapter 7	Vessels capable of less than 10 knots, including houseboats and some traditional power boat hire
Category R	Remote probability of skipper/participant error leading to incidents of major consequence, eg fire or grounding, in areas where provider assistance has to be summoned from a distance.	Chapter 8	Craft operating in C and D waters, including bare boat sailing yachts and offshore game fishing boats
Category S	Remote probability of skipper/participant error leading to incidents having various levels of consequence with no provider assistance available to ameliorate the consequences.	Chapter 9	Hire boats on a trailer without a designated cruising area and share boats
Category T	Reasonable probability of incidents with hazardous consequences due to multiple risk factors, such as a combination of skipper error and high speed.	Chapter 10 Chapter 11	High speed craft, including PWCs. Submersible craft Ocean kayaking

# A5 EXAMPLES

# A5.1 Example 1

A provider of leisure craft in Class 4D wishes to add a new traditionally designed power vessel capable of 20 knots to his fleet. Because of the vessel's unusual design, clear vision from the helm is obstructed for 15 degrees either side of straight ahead by the raised bow, providing only 195 degrees of clear vision, rather than the 225 degrees specified in the deemed-to-satisfy solution. The provider acknowledges that the vision is restricted and indicates that he would deal with this by treating the operation as having a risk category T. He proposes providing a special briefing to ensure participants fully understand the consequences of the obstructed vision and are willing to accept the resulting higher level of risk of collision.

This is not an acceptable equivalent solution. The lack of adequate vision from the helm is an avoidable risk that the provider is obliged to control in accordance with Clause 2.2. It is not permissible to reclassify the risk as residual and transfer responsibility for managing it to the participants by changing the risk category.

#### A5.2 Example 2

A houseboat is proposed to be offered for hire with some other craft stowed on board for use by the hirers. The vessel is basically a conventional houseboat, fitting within the scope of Chapter 6; and once the controls from that Chapter are applied it would have a residual risk of category Q.

The provider first proposes to supply two kayaks with the houseboat. Provided that the kayaks meet the craft and operational requirements of Clause 5, they would have risk category P. The overall risk of the hire package (houseboat plus kayaks) would therefore go to the higher risk category, namely Q, which is how it would be perceived by the public. The proposed equivalent solution is therefore capable of complying with this Section of the NSCV.

After the success of the kayaks as a means of exploring the area, the provider proposes offering two personal watercraft (PWCs) on board so participants can explore farther afield. The provider proposes to stipulate in the briefing that only licensed PWC riders may use these craft.

Even if the PWCs are designed and operated in accordance with Chapter 10, the speed of the craft will dictate risk category T. The overall residual risk of the hire package would therefore go to the higher risk category, namely T. As the closest activity is a conventional houseboat with risk category Q; and there are no conceivable controls that would reduce the overall risk to Category Q, the proposed equivalent solution could not meet the requirements of this Section of the NSCV.

#### ANNEX B SHARE BOATS

#### B1 SCOPE

This Annex B sets out the modified definitions and safety management plan requirements applying to share boat arrangements determined to be commercial in nature and therefore coming within the ambit of the NSCV.

NOTE: Marine Safety Authorities are responsible for determining whether or not a particular share boat arrangement is commercial in nature, based on definitions in the applicable law. Such questions of legal interpretation are outside the Scope of the NSCV.

The modified requirements in this Annex reflect the fact that the roles of parties taking part in share boat arrangements are slightly different to those involved in other leisure craft arrangements. Apart from the modified requirements specifically modified by this Annex, all other requirements in the relevant Chapter of this Section of the NSCV apply.

This Annex is referenced in Clause 1.1. It forms a normative (mandatory) part of this document.

#### B2 DEFINITIONS

The definitions in Clause 1.4 apply to share boats, except that in share boat arrangements the following modifications apply:

- a) Each of the parties entering into the agreement with the provider shall be considered as a separate user.
- b) The party that manages the maintenance of the leisure craft shall be deemed to be the provider.

#### B3 USER'S OBLIGATIONS

The responsibilities of the provider shall be read as the provider's obligations to each user who would then be responsible for managing the safety of the participants.

#### **EXAMPLE**

The user ensures that other participants are made aware of emergency procedures.

#### **B4** SAFETY MANAGEMENT

Providers of leisure craft falling within the Scope of this Annex shall develop, implement and monitor a safety management plan that ensures the safe operation of the leisure craft and incorporates the following elements:

- a) An overview of the risks that the provider will be seeking to control through the safety management plan and those that the participants will be expected to manage.
- b) An assessment of hazards to navigation in the area where the leisure craft will be operating and strategies to manage those hazards. For example, restricting the vessel to a certain geographical area, not allowing travel at night or requiring regular radio contacts.

- c) The content of the information to be provided to users including at the briefing.
- d) An explanation of the process for assigning access to the leisure craft for each user.
- e) A description of the procedures established for the inspection, maintenance and potential withdrawal from service of defective leisure craft.
- f) A description and justification of the type of safety equipment provided on the vessel, taking account of its suitability for the waters where the vessel will be operating and the level of skills of the participants.
- g) A description of the support services to be provided, for example whether the provider is contactable in case of accident or misadventure.
- A feedback system for capturing information about incidents and addressing safety issues as they arise.

### ANNEX C BLACK AND GREY WATER SYSTEMS

#### C1 SCOPE

This Annex C sets out health and safety requirements for black and grey water systems where they are required to be fitted aboard leisure craft. It does not set out which type of system is to be fitted to a particular leisure craft.

NOTE: The requirements governing the effluent permitted to be discharged from vessels is subject to environmental law, which is beyond the scope of this standard. Such requirements will necessarily vary around Australia according to the sensitivity of the environment in which the vessel is operating. As well, the effluent that can be handled by pump-out stations will vary and some may not be able to handle salt water, meaning that fresh water has to be used for flushing. There may also be a requirement for a macerator to be fitted. Therefore, the appropriate authority should be contacted to obtain the relevant requirements.

This Annex is referenced in Clauses 6.3.5, 7.3.5, 8.3.5 and 9.3.5. It forms a normative (mandatory) part of this document.

#### C2 BLACK WATER SYSTEMS

#### C2.1 General

Black water (sewage) holding systems shall be designed, constructed and installed in accordance with AS 3542 and the other requirements in Clause C2.

The shape of the holding tank may conform to that of the hull of the vessel, but the lower part shall be sloped to be self-cleansing. Flexible tanks may be used.

No overflow device shall be fitted to the holding tank.

#### C2.2 Outlet from tank

The outlet pipe from the tank shall be a minimum of 38 mm nominal diameter and shall be arranged so that not more than 40 mm depth of waste shall remain in the tank after evacuation of the contents. The upper end of this pipe shall be rigidly attached to the vessel, and be exposed on, or accessible from, the deck external to the superstructure. The female side of a 38 mm (nominal diameter) quick coupling shall be fitted to the upper end. A removable gastight cover capable of protecting the seal shall be provided over this coupling.

#### C2.3 Inspection

Arrangements for inspection of the inside of the tank shall be provided. The following arrangements shall be deemed to satisfy this requirement:

- A toilet with a mechanical seal mounted directly on top of the holding tank.
- b) A 100 mm diameter removable and accessible inspection opening in the top of the tank fitted with a gastight cover.

c) Other means of inspection not requiring an opening in the tank may also be used.

#### C2.4 Wash-out arrangements

A pipe of not less than 38 mm diameter shall be fitted to the tank for the purpose of washing out the holding tank. The end of the pipe shall be rigidly attached to the craft and be accessible from, or exposed on the deck, external to the superstructure. A removable gastight cover shall be provided over this end. The outlet pipe may be used as the flushing water inlet.

#### C2.5 Freshwater flushing

Where a leisure craft is using a freshwater flushing sewage system and is not drawing flushing water from outside the craft, facilities shall be provided to store flushing water on board with a capacity equal to the volume of the holding tank. The flushing water may be drawn from the potable water supply, in which case the capacity of the potable water supply shall be increased to include this additional volume.

#### C3 GREY WATER SYSTEMS

#### C3.1 General

Grey water is waste water that has been used for washing, laundering, bathing or showering containing by-products such as fats and oils as well as surfactants. Vessels operating in areas where grey water release is not permitted may be required to install a grey water holding or treatment system.

#### C3.2 Grey water holding tanks

The volume of grey water held in holding tanks may be significant and shall be taken into account when undertaking stability assessments. Some indicative volumes of grey water generated by overnight participants is are given Table C.1; however they do not form requirements of this standard.

Table C.1 Indicative volumes of grey water

Source of grey water	Volume/person /day		
	Litres		
Kitchen	10		
Hand basin	7		
Bath/shower	32		
Laundry	31		
Dishwasher	18 to 40		

#### C3.3 Grey water treatment systems

Where fitted, grey water treatment systems shall comply with AS 4995.

# ANNEX D GUIDANCE ON THE EUROPEAN CONFORMITY ASSESSMENT SYSTEM

#### D1 SCOPE

This Annex D describes the European conformity assessment system under the Recreational Craft Directive (RCD).

This Annex is referenced in Clause 1.1. It forms an informative part of this document.

#### D2 BACKGROUND

In common with other European Directives, the RCD includes a common set of conformity assessment requirements that have been agreed to be accepted throughout the European Union. This mutual recognition of conformity assessment throughout the Union is aimed at avoiding the need for reassessment of vessels made in one member state and sold in another.

It is important to remember that the RCD only includes requirements to be met at the point of initial sale of a recreational boat. It does not address requirements for second-hand boats, nor the ongoing compliance of boats in service.

The RCD makes reference to Notified Bodies which are third-party organisations accredited by the government of a member state to undertake assessment of conformity assessment for the purposes of the RCD.

#### D3 MODULAR APPROACH

The conformity assessment requirements used in the European Directives are broken down into various modules:

- Module A Internal Production Control This is entirely a selfassessment module with no involvement with a Notified Body, or any other 3rd party.
- Module Aa Internal Production Control plus Tests Stability and buoyancy data or tests have to be verified by a Notified Body, but all other criteria are still self-assessed.
- Module B EC Type-Examination A 'type-approval' procedure the responsible person submits a completed boat and its technical documentation for assessment by a Notified Body.
- Module C Conformity To Type When one boat of a class or family has been approved under Module B, subsequent craft of the same class or family may use Module C, which is a self-declaration of conformity by the builder.

- Module D Production Quality Assurance This is similar to the quality assurance approach in ISO 9001. Compliance with ISO 9001 is not a requirement, but the chosen quality assurance procedure needs to be approved by a Notified Body.
- Module E Product Quality Assurance This involves final product inspection and testing under the surveillance of a Notified Body.
- Module F Product Verification Inspection by a Notified Body either of every product or of homogeneous lots.
- Module G Unit Verification The Notified Body examines the individual boat (normally a custom built boat) to assess conformity.
- Module H Full Quality Management The equivalent of the quality management approach in ISO 9001. This approach is similar to Module D, but with the addition of quality management of the design process using a procedure needs approved by the Notified Body.

Under the RCD, the required module is determined according to the design category and length of the craft. A relationship between the European design categories and the Operational Areas used in Australia is set out in Part C Section 3 of the NSCV. Because the RCD is directed to recreational craft and the NSCV is directed to commercial vessels, a conservative approach has been taken in determining the correspondence between design categories and operational areas.

# ANNEX E REQUIREMENTS FOR RECOGNITION OF EU CONFORMITY ASSESSMENT

#### E1 SCOPE

This Annex E sets out recommendations for the recognition of evidence from the conformity assessment system of the Recreational Craft Directive (RCD) of the European Union as a solution for review and inspection during the design and construction phases of the survey process.

This Annex is referenced in Clause 1.1. It forms a normative (mandatory) part of this document.

NOTE: See Clause 1.1 for an explanation of the role of this Annex.

#### E2 APPLICATION

This Annex is intended to provide a common national approach in those cases where the National Regulator decides to accept conformity assessment evidence developed for the RCD system when assessing a leisure craft. It is only applicable when assessing the evidence of conformance with those ISO standards that are permitted solutions for leisure craft under the NSCV. This Annex does not change the obligation for a leisure craft to meet the requirements specified within the body of this Section of the NSCV.

#### NOTES:

- Only certain aspects of the NSCV, such as construction, permit the use of the ISO standards commonly associated with RCD compliance. A vessel that fully meets the RCD would not automatically be acceptable under the NSCV.
- The NSCV may exclude some options in the ISO standards available under the RCD. For example, not all the options in ISO 15085 would be acceptable under this Section of the NSCV.

#### E3 REQUIREMENTS

#### E3.1 Providers

For each leisure craft, the provider shall supply the National Regulator with a completed declaration in accordance with Clause E4 made by a prequalified importer.

On request by the National Regulator, the provider shall arrange for production of any document in the file of technical documents, including a certified translation of any document in the file of technical documents not in the English language.

#### E3.2 Importers

The importer shall—

a) become a recognised importer in accordance with Clause E4;

- ensure that the conformity assessment of the leisure craft is in accordance with the module of the RCD specified in Column 5 of Table E.1 for the class and length of craft;
- c) provide the manufacturers declaration of conformance for the leisure craft in question, in accordance with Clause E5; and
- d) complete the Australian importer's declaration in accordance with Clause E5.

Table E.1 —Application of modules

Requ	irements unde	Requirements for leisure craft using RCD evidence			
Survey category	Craft by category and length		Design phase	Construction phase	RCD Module
1	2		3	4	5
W	Class 4D and 4E	< 24 m	Design type approval	Quality management system—production	Module D (plus Module B)  (or B+E or B+F or G or H)
Х	Class 4E Class 4C and 4D	< 16 m ≤ 13 m	Design type approval	Internal production control with sample vessel verification by the National Regulator	Module D (plus Module B) (or B+E or B+F or G or H)
Y	Class 4D and 4E	< 7.5 m	Design type approval	Internal production control with reactive sample vessel verification by the National Regulator	Module C (plus Module B)  (or B+D or B+E or B+F  or G or H)
Z	Non- powered Class 4C, 4D, 4E	< 7.5 m	Internal design control	Internal production control with reactive sample vessel verification by the National Regulator	Module Aa (or B+C or B+D, or B+E or B+F or G or H)

#### NOTES:

- 'Survey Category' relates to the proposed survey regime as set out in NSAMS Section 4.
- NSCV Part C Section 3 Construction permits the use of the ISO 12215 series of standards for vessels up to 13m in length engaged in light operations. This standard (NSCV Part F Section 2) goes further and permits the use of ISO 12215 for Class 4 vessels up to 24m in length. However, this standard does not vary the requirements in NSCV Part C Section 3 for classes of vessels, other than Class 4, engaged in light operations..
- The lengths in this table refer to the measured length as defined in NSCV Part B.

#### E4 PREQUALIFIED IMPORTER

The importer of a leisure craft assessed and approved by a notified body outside of Australia for compliance with the RCD shall prequalify as being in a position to make the declaration set out in Clause E5. The National Regulator may maintain a register of prequalified importers.

Prequalification of importers shall be based upon demonstration by the importer that—

- the importer has the financial means, through capital or insurances, to provide compensation to cover the consequences of any errors or misstatements in the declarations described in Clause E5.;
- the importer has a history of probity and all documentation provided with each vessel imported over the previous five years has been truthful and validly issued in accordance with the RCD; and
- c) the importer has a direct and ongoing relationship with the manufacturer of the leisure craft adequate to make the investigations necessary to assess the truthfulness and validity of documentation provided in support of the leisure craft for the purpose of accurately completing the importer's declaration.

NOTE: The probity requirements apply to the Directors and Chief Executive (or member of staff holding the equivalent role) if the importer is a company.

#### E5 IMPORTER'S DECLARATION

For each leisure craft, the importer shall provide a signed declaration in the form of a statutory declaration enforceable under the law of the jurisdiction in which the declaration was made includes the following:

- The name and address of the importer established within Australia and the name of the authorised signatory.
- b) The name and address of the overseas manufacturer and the model of the leisure craft.
- c) The unique craft identification number of the leisure craft.
- d) The name of the notified body for the design and construction assessment.
- e) A statement as follows signed by the authorised signatory:

I declare as the importer of the craft that the craft mentioned above complies with all applicable essential requirements of the Recreational Craft Directive in the way specified in the EC attached declaration of conformity and I declare that the said EC declaration of conformity is a true copy issued in relation to the craft identified above.

- f) The date that the declaration is made.
- g) The European declaration of conformity containing at least the information in the example shown in Figures E.1 and E.2 where that information is relevant to the aspect of design and construction for which the equivalent solution is being proposed.
- h) The type approval certificate for the vessel, and for the fuel tank if applicable.

#### NOTES:

- 1. There are legal consequences for making false statements on a statutory declaration.
- 2. The example in Figures E.1 and E.2 was in use at the time this Section of the NSCV was published, but may change with revisions of the RCD.
- 3. Information that is not relevant to the required outcomes in this standard, such as information on noise emission, may be disregarded.

### Declaration of Conformity of Recreational Craft with the Design, Construction and Noise Emission requirements of Directive 94/25/EC as amended by Directive 2003/44/EC (To be completed by boat builder)

Name of craft manufacturer: \_\_ Fort Code: \_\_Country:\_ Town: Name of Authorized Representative (if applicable): \_\_\_Country:\_ Post Code: Toron: Name of Notified Body for design and construction assessment (if applicable): \_\_\_\_\_\_ Font Code: ID Number: Country:\_\_\_\_ \_\_\_\_\_\_Date: (yr/month/day) \_\_\_\_/ \_\_\_\_/ ECtype-examination Certificate number:\_\_\_ Name of Notified Body for <u>notice emission assessment (</u>if applicable): \_\_\_\_\_ Address Post Code: ID Number: A A B+C B+D B+E B+F G H Module used for construction assessment: A A G H Module used for noise emission assessment : Other Community Directives applied: \_ DESCRIPTION OF CRAFT Craft Identification Number Brand name of the craft: Type or number: Type of main Propulsion: Type of craft: and the petrol engine \_\_edibost motorboot diesel engine ■electric motor indistable 0908 ction (specify): \_\_\_ other (specify); Type of hult: Type of engine: monohuli | Iterlitien certbourd imbound other (specify): a or stembile without integral exhaust Construction material: z or atsemátive with integral exhaust plastic, fiber reinforced plastic Simulation, alternation alleys other (specify): steel, steel alloys wood Hweek \_\_other (specify);\_\_ Manimum Design Category: A | B |  $C\square$ fully decked pacity decited  $D \square$ open. Engine power: Max. Recommended: other (specify):\_\_ Installed:\_\_\_\_kW (If applicable) Longth of hull Later m. Boson of hull Bater m. Draught T: \_\_\_\_m This declaration of conformity is issued under the sole responsibility of the manufacturer. I declare on behalf of the craft manufacturer that the craft mentioned above complies with all applicable essential requirements in the way specified (and is in conformity with the type for which above mentioned EC type examination certificate has been issued) – delete text between brackets if no EC type examination certificate has been issued. (identification of the person empowered to sign on behalf of the correspondent marking) manufacturer or his authorized representative) Name and function: Date and place of issue: (yr/month/day) \_\_\_\_/ \_\_\_/

Figure E.1—European Declaration - Page 1

Essential requirements Other nomative document methods reference to relevant articles in Standards Annex IA & IC of the Directive) Please specify in more detail (\*: Mandatory Standards) × EN ISO 8666:2002 \* General requirements (2) × EN ISO 10087:2006 \* Craft Identification Number - CIN (2.1) Builder's Plate (2.2) Protection from falling overboard and means of reboarding (2.3) Visibility from the main steering position (2.4) Owner's manual (2.5) ntegrity and structural requirements (3) Structure (3.1) Stability and freeboard (3.2) Buoyancy and Statation (3.3) Openings in hull, deck and superstructure (3.4) Flooding (3.5) Manufacturer's maximum recommended load (3.6) Uferaft downge (3.7) Decape (3.6) Anchoring, mooring and lowing (3.9) Handling characteristics (4) Engines and engine spaces (6.1) inboard engine (5.1.1) Ventilation (5.1.2) Exposed parts (5.1.3) Outboard engine starting (5.1.4) uel system (6.2) General - fuel system (5.2.1) Puel tanks (5.2.2) Eleotrical systems (6.3) Steering systems (6.4) General - steering system (5.4.1) Emergency arrangements (5.4.2) Gas systems (6.5) Fire protection (5.8) General - Sire protection (5.6.1) Fire-fighting equipment (5.6.2) Navigation lights (6.7) Discharge prevention (6.8) Annex I.B – Exhaust Emissions see the Declaration of Conformity of the engine manufacturer innex I.C - Noise Emissions<sup>1</sup> Noise emission levels (LC.1) Owner's manual (I.O.2) 

ADCO represent - 15 Dec 2005

Figure E.2—European Declaration - Page 2

Only to be completed for boats with inboard engines or stemdrive engines without integral exhaust

#### ANNEX F SUMMARY OF REQUIREMENTS

#### F1 SCOPE

This Annex F provides a summary of the requirements in this Section of the NSCV.

This Annex is referenced in Clause 1.1. It forms an informative part of this document.

#### F2 GUIDANCE

Table F.1 provides a summary of the requirements contained in this Section of the NSCV as they apply to different types of common activities. Only those requirements that are significantly different between activities have been included.

The summary is necessarily brief and does not contain the full details of the requirements. In all cases, the requirements in the body of this standard and in the other Annexes take precedence over the summary in Table F1. National Standard for Commercial Vessels Part F Section 2

Table F.1 Summary of Deemed-to-Satisfy Requirements

	Off the beach craft	Traditional houseboats	Smooth water craft less than 10 knots	Partially smooth water and offshore craft	Take away craft	Personal watercraft
Risk category	Р	Q	Q	R	S	Т
Chapter	5	6	7	8	9	10
Operational area	Е	Е	E	D or C	E or D or C	Е
Designated cruising area	Yes	Yes	Yes	Yes	No	Yes
Construction	Basic safety outcomes only	NSCV C3	NSCV C3	NSCV C3	NSCV C3	ISO 13590
225° view from helm	N/A	No	No	Yes	Yes	N/A
Rail heights – non-sailing craft	N/A	850mm	750mm	750mm	750mm	N/A
Rail heights – sailing craft	No	N/A	ISO 15085 category C	ISO 15085 category B/A	ISO 15085 category C/B/A	N/A
Stability assessment	No	Specific requirements	NSCV C6	NSCV C6	NSCV C6	No
Speed to not exceed 10 knots	N/A	Yes	Yes	No	No	No
Skipper to hold licence or ticket	No	No	No	Yes, unless <10 knots	Yes, unless <10 knots	Yes, unless in pen or with leader
Formal qualifications to give briefing	No	No	No	Yes	Yes	Yes

This page has been intentionally left blank