

Australian Adventure Activity Mt Biking & Cycle Touring Standard

Contents Overview

Introduction	2
Activity	4
Management of risk	4
Planning	5
Participants	5
Environment	5
Equipment & logistics	9
Leadership	11
Glossary	17
Appendices	18
Table of contents	21

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<http://australianaas.org.au/about/>

Introduction

About these standards

*The Australian Adventure Activity Standards (AAS) are a voluntary best-practice framework for safe and responsible planning and delivery of outdoor adventure **activities** with **dependent participants**.*

The standards provide guidance on safety and other aspects of responsible activity delivery, such as respect for the environment, cultural heritage and other users. The standards are not a full legal compliance guide, nor are they a “how to” guide or field manual for outdoor activities. The standards do not provide guidance on providing a high-quality experience over and above safe and responsible delivery.

Do these standards apply to me?

*The Australian AAS are specifically designed to help activity **providers** who are conducting **activities** involving **dependent participants**, to provide a safe and responsible experience and meet their legal obligations. It is for each **provider** to determine based on their own individual circumstances, if they are working with **dependent participants** or not.*

Refer to [Part I – Core Standard](#) for additional information.

Are these standards legally binding?

The Australian AAS are voluntary, not legal requirements. However, they do frequently refer to specific laws and regulations which are legally binding.

*While the Australian AAS are voluntary, some **land managers** and other organisations may require compliance as a condition of obtaining a licence, permit or other permission.*

Refer to [Part I – Core Standard](#) for additional information.

Structure and interpretation of the standards

*Part I of these standards includes guidance that applies to all adventure **activities**. It sets out a common approach to risk management that applies irrespective of the specific **activity** being undertaken. [Part II](#) includes guidance on specific adventure **activities**. For any given **activity**, both Part I and the relevant section of [Part II](#) that applies to that specific **activity** should be consulted.*

*The standards cover only those **activities** specifically listed in [Part II](#). While Part 1 of the standards may be useful in managing **risk** generally for other activities, they may not reflect best practice for such other activities.*

The following key words occur frequently throughout the standards:

Shall: *used where a provision is mandatory, if the **provider** is operating fully in accordance with the standards.*

Should: *used where a provision is recommended, not mandatory. It indicates that the **provider** needs to consider their specific situation and decide for themselves whether it applies or is relevant.*

Can/cannot: *indicates a possibility and capability.*

May/need not: *indicates a permission or existence of an option.*

But are not limited to: used to indicate that a list is not definitive and additional items may need to be considered depending on the context.

The following formatting is used throughout:

Operative provisions are in normal roman text.

Discussion is in italics.

Defined words are in **bold**. A full list of definitions is in the [Glossary](#).

Examples are in *orange italics*.

In document references are in **bold underlined green**. References to other parts of this document are by section heading title. External references are in *plain green*.

“Key words” are in *blue*.

Disclaimer

All reasonable attempts have been made to ensure these standards are accurate, relevant and current at the date of publication. Nevertheless, the standards are only advisory and general in nature, and may not be suitable for all contexts.

*They are recommendations for voluntary application by adventure activity **providers**. They are not directly binding on any person or organisation and have no direct legal force.*

*The Australian AAS will not cover each and every circumstance of an adventure **activity**. Even when they are adhered to, they cannot entirely eliminate the **risk** or possibility of loss or injury.*

This publication and the information it contains is made available on the express condition that the publisher, together with the authors, consultants and advisers who have assisted in compiling and drafting this publication and the Australian AAS:

- *are not rendering professional advice to any person or organisation;*
- *and make no warranties with respect thereto; and*
- *to the maximum extent permitted by law, disclaim all liability and responsibility for any direct or indirect loss, damage or liability which may be suffered or incurred by any person as a consequence of reliance upon anything contained in or omitted from this publication.*

Creation

These standards were developed with the input from a wide range of outdoors and adventure activity experts with extensive field experience. They draw heavily on state- and territory-specific standards previously in place across Australia. The development process included work by a range of technical expert working groups, as well as open consultation throughout the community of activity providers and other experts.

Further details of the creation of the Australian AAS can be found at www.australianaas.org.

It is intended that the standards will be regularly updated to reflect changing practice and better understanding over time. Updates will be noted on the website listed above.

Bicycle activities

Mountain Biking is riding a **bicycle** on **unsealed surfaces**, such as gravel roads, fire trails, single track, or open or rocky ground, and can involve manoeuvring through or around obstacles such as fallen or narrowly spaced trees, creeks, mud, rocks, man-made structures and other technical trail features. This includes overnight or extended mountain biking activities.

Cycle Touring is riding a **bicycle** on **roads** and formed bike paths or trails. This includes overnight or extended cycle touring activities.

Exclusions

Activities that are not covered by this AAS are:

- **Mountain biking** in competitive events
- **Cycle Touring** in competitive events
- The use of motorcycles
- Activities associated with **Camping** while on overnight or extended mountain biking or Cycle touring activities.

Bicycle related activities

Related activities are:

Camping when undertaking overnight or extended activities.

Refer separate activity standards for Camping.

Bicycle activity specific appendixes

[Appendix 1 - Mountain bike riding trail classifications](#)

[Appendix 2 – Equipment lists](#)

Management of risk

Management of risk

There are no additional specific activity provisions other than [Part I - Core Standard Management of Risk](#) provisions.

Planning

Also refer [planning section Part I - Core Standard](#).

Activity plans

Bicycle activity plans

Specific planning considerations *may* include *but is not limited to*:

- the expected or known trail classification
- the impact of current seasonal factors including the weather forecast for the day(s) of the activity and weather during recent days
- identifying route and terrain specific hazards and risks

- the need for a support vehicle(s)
- the required navigation skills & equipment
- the suitability of maps for navigation
- the access available for support and emergency services for the start and finish locations and throughout the activity

Emergency management planning

Bicycle emergency management plan

A **non-participating contact** *shall* be used as part of the emergency management plan.

Participants

Also refer [participants section Part I - Core Standard](#).

Pre-activity communication

Also refer [pre-activity information section Part I - Core Standard](#).

Bicycle pre-activity information

Pre-activity information provided to participants *should* include *but is not limited to*:

- the level of fitness required for the activity
- the required level of skills and knowledge for the activity
- expected type of gradient and obstacles

Bicycle participant skill assessment

Participants *shall* undertake a skill assessment to confirm the appropriateness of the activity for the participant.

The participant skill assessment *may* include *but is not limited to*:

- ability
- experience
- fitness level.

Environment

Environment related planning

Bicycle environment considerations

Specific environmental considerations *shall* include:

- the road or trail features
- other users
- climate or weather
- the type of flora expected
- the type of fauna expected

Road or trail features that *shall* be used to determine a participant's skill assessment ([see participant section above](#)) include:

- the gradient
- the surface
- the width
- the obstacles to be negotiated

Strategies to reduce the hazards and risks associated with other vehicular, bicycle or pedestrian traffic *shall* be used.

Bicycle severe weather

The following table details the:

- current Australian weather warnings
- associated weather for each warning
- mainland warning trigger points for issuing warnings for strong winds and hail.

Bureau of Meteorology weather warnings and associated weather Table:

Severe Weather warning	Thunderstorm warning	Coastal Waters Wind Warning	Tropical Cyclone Advice: Watch or warning
High tides			
Large surf			
Heavy rain/flash flooding	Heavy rain/flash flooding		
Blizzards	Blizzards		
Strong winds Wind >63 km/h Gusts >90 km/h	Strong winds Gusts >90 km/h	Strong winds Wind >48 km/h or >26 knots	Strong winds Wind >62 km/h or >=34 knots
	Tornadoes		
	Hail Hail >=2cm		
	Lightning		

Bicycle severe weather triggers

Trigger points *shall* be based on the Bureau of Meteorology weather warnings and actual weather conditions.

The **risk management plan** and **emergency management plan** *should* include guidance on **trigger points** and associated actions for:

- severe weather warnings
- thunderstorm warnings
- coastal waters wind warnings
- tropical cyclone advice: watch and warning
- extreme cold temperature
- extreme hot temperatures

Actions for severe weather warnings *may* include *but is not limited to*:

- adjustment of activity based on expected riding surface and riding conditions
- avoid locations effected by tides or surf
- avoiding areas and river crossings that have the potential for flash flooding
- preparations to avoid the risks associated with blizzards
- moving to areas that are protected from strong winds
- managing risks of flying or falling items during strong winds

Actions for thunderstorm warnings *may* include *but is not limited to*:

- adjustment of activity based on expected riding surface and riding conditions
- avoiding areas and river crossings that have the potential for flash flooding
- preparations to avoid the risks associated with blizzards
- moving to areas that are protected from strong winds
- managing risks of flying or falling items during strong winds
- moving to areas that are protected from hail
- preparations to avoid the risks associated with lightning

Actions for coast waters wind warnings *may* include *but is not limited to*:

- moving to areas that are protected from strong winds
- managing risks of flying or falling items during strong winds

Actions for tropical cyclone warnings *may* include *but is not limited to*:

- evacuating to a safe location
- avoid locations effected by tides or surf
- moving to areas that are protected from strong winds
- managing risks of flying or falling items during strong winds
- avoiding areas and river crossing that have the potential for flash flooding

Bushfire, prescribed fire and fire danger

Refer [Part I Core Standard section - Bush fire, prescribed fire and fire danger](#).

Water crossings and flooding

Bicycle water and river crossings

The crossing of swollen creeks, rivers, flooded bridges or fords, or the entry of floodwaters *should* be avoided.

There may be circumstances when it is unclear if a crossing is in flood or not.

When assessing the suitability of a potential crossing that *may* or *may not* be in flood, consideration *should* be given but *is not limited to*:

- if there is debris floating or flowing in the current as this can indicate the risk of being hit and/or swept away by debris
- how clear the water is and if the base of the crossing be seen as this can help determine the depth of crossing and its base
- the depth of the crossing as this can indicate the amount of water and force needed to be overcome to avoid being washed away
- the speed of the water as this can indicate the volume of water and force needed to be overcome to avoid being washed away
- where the water flows as the flow may wash people into dangerous or deadly situations (*e.g. into trees in the water that act as strainers, into narrow rock crevices*)
- the base of the crossing (*e.g. pebbles, sand, small rocks or large rocks*) as moving water can move the base increasing the danger of foot entrapment and/or reducing the likelihood of maintaining stable footing during the crossing)

Bicycle - Flash flooding

Areas likely to experience **flash flooding** *should* be avoided during severe weather or thunderstorms.

The suitability of water for drinking during and after flooding *should* be assessed.

Wildlife safety

Bicycle wildlife safety

Procedures *should* be in place to minimise the risks associated with possible injuries sustained from wildlife that may be encountered.

The type of wildlife that *may* need to be considered include *but is not limited to*:

- Buffaloes
- Cassowaries
- Cattle
- Crocodiles
- Dingoes
- Emu
- Horses
- Pigs
- Snakes
- Ticks

Environmental sustainability procedures

The **procedures** *may* include *but are not limited to* the following:

Bicycle - Plan ahead and prepare

- Ride only in areas where cycling is allowed.

Bicycle - Travel and camp on durable surfaces

- Avoid regeneration areas and places where high user impact is starting to show.
- Ride only on the designated track.
- Do not create new tracks.
- Avoid cutting corners.
- Do not widen tracks.
- Dismounting and walking around obstacles to avoid creating detours.
- Brake gently before corners and avoid skidding to protect the track surface from erosion.
- Do not ride when trails are excessively wet.
- Ride straight through wet areas or puddles to avoid creating detours.
- Avoid mud and soft entrances and exits around water to reduce erosion.

Bicycle - Dispose of waste properly

- Biodegradable products are used wherever possible.

Bicycle - Leave what you find

- Never remove obstacles such as rock and logs from the trail surface.
- Wash your bike tyres before riding in a different area to help prevent spreading disease and unnatural migration of species.

Bicycle - Be considerate of your hosts and other visitors

- Be considerate to other users such as horse riders, walkers and other bikers.

Equipment and logistics

Bicycle equipment requirements

Procedures *shall* be in place to ensure appropriate clothing for the expected and foreseeable weather conditions is available.

Procedures *shall* be in place to ensure appropriate footwear for the expected and foreseeable terrain is available.

An Australian Standard AS/ANZ 2063 – 2008 compliant bicycle helmet *shall* be used.

Bicycles *shall* be designed for the type of activity and terrain they will be used for. (For example, some manufacturer specifications state that the bike is not designed for use for jumps or off-road riding.)

Bicycles *shall* be fitted with tyres appropriate to the type of terrain.

Bicycles for use for Mountain Biking *shall* be:

- fitted with appropriately maintained front and rear brakes
- fitted with gears
- fitted with 'mountain bike'/'straight bar' handle bars

Any bicycle used on roads *shall* comply with the laws, regulations or requirements for the relevant jurisdiction(s).

Any power assisted e-bike used *shall* have specifications that classify it as a bicycle for vehicle licencing or registration requirements in the jurisdiction it is used.

Legal requirements for a bicycle used on roads *may* include *but not limited to*:

- having one effective working brake
- having a working warning device (g. bell, horn)
- having a red reflector that can be clearly seen from behind the bicycle when a vehicle's headlights shine on it
- a white light (flashing or steady), that can be clearly seen from the front of the bicycle at night or in poor visibility weather conditions
- a red light (flashing or steady) that can be clearly seen at back of the bicycle at night or in poor visibility weather conditions
- any loads are attach in a way that does not make the bicycle unstable and it is unlikely to fall from the bicycle.

Additional personal protective equipment that *should* be considered includes:

- gloves
- elbow pads
- knee pads
- wrist guards
- eye protection

Additional safety equipment that *should* be considered includes:

- high visibility vests or clothing
- front and rear lights for night or in poor visibility weather conditions

Procedures *shall* be in place to ensure a personal drink supply is available.

An appropriate repair kit *shall* be carried to ensure that bicycles can be maintained in a safe condition.

Example equipment lists can be found in [appendix B](#)

Bicycle use of equipment

A pre-activity safety inspection *shall* be completed.

The safety inspection *shall* include but is not limited to:

- that brakes work effectively
- that tyres are at appropriate pressure
- that bicycle helmets are correctly fitted unless an appropriate exception for wearing a helmet is applicable
- that where required that lights work effectively

Participants *shall* be instructed on the use of the bicycle. (Refer [leadership section](#) below for further details)

High visibility vests or clothing *should* be used when riding on public roads.

Fitting of helmets *shall* consider the safety implications of:

- any head wear worn under the helmet
- the impact of hair and the method hair is controlled or styled.

Bicycle maintenance of equipment

Regular servicing of all bicycles *shall* be completed by an appropriately competent person.

Checks for bicycle serviceability *should* include:

- Brake levers are within reach of two fingers
- Brake levers when pulled, actuate braking is smooth and unrestricted and at roughly half the full range of the brake lever.
- Wear indicators on brake pads are clearly visible
- Wheels are straight, true and with no loose or damaged spokes
- Tyres are not worn and are at the appropriate pressure
- All bearing surfaces and fittings are appropriately adjusted
- Headsets and handlebars are suitably tightened to prevent movement
- Handlebar grips and plugs are fitted and secured
- Wheels are firmly attached
- Pedals are intact
- Saddles are attached and secure
- Appropriate parts lubricated
- Lights work effectively where appropriate
- Power assisted e-bikes:
 - electrical systems are maintained as per manufactures instructions
 - battery has sufficient charge to cover the expected distance of the activity

Bicycle support vehicles

The use of a support vehicle to aid and assist a group during the activity may be useful or necessary and the hazards and risks associated with vehicle operations needs to be managed.

Where a support vehicle is required to operate in terrain that the Four Wheel Driving Activity Standard would apply, then the Four Wheel Driving Activity Standard *shall* be adhered to.

It is foreseeable that a dependent participant will ride in the support vehicle and compliance to the Four Wheel Driving Activity Standard will ensure that support vehicle operators are suitably competent.

Support vehicles *shall* comply with the laws, regulations or requirements for the relevant jurisdiction(s).

Support vehicles *should* have:

- appropriate signage to indicate that the vehicle is constantly stopping
- a flashing amber or yellow warning beacon light on the roof to alert other road or track users when there is an obstruction to the free flow of traffic.

Operators of support vehicles:

- *shall* hold a current and appropriate licence to operate the vehicle
- *shall* be competent to operate the vehicle in the foreseeable conditions (e.g. meet the requirements of the Four Wheel Driving Activity Standard where it applies)
- *should* wear high visibility reflective clothing [or vests] when outside of the vehicle on or near roads
- *should* consider other vehicles by allow them to pass whenever possible and it is safe to do so

Leadership

Naming conventions

Bicycle naming conventions

The **activity leader** naming convention enables this activity standard to be related to **Part I - Core Standard** requirements.

“Support staff” and in particular circumstances “Guide” is equivalent to **Assistant leader** in **Part I – Core standard**.

“Instructor” and in particular circumstances “Guide” is equivalent to **Leader** in **Part I – Core standard**.

The use of **activity leader(s)** refers to either a “instructor” or “guide” or “support staff”.

Naming conventions summary			
Leader =	Instructor (as appropriate)	Guide (as appropriate)	
Assistant leader =	Guide (as appropriate)	Support staff	
Activity Leader =	Instructor	Guide	Support staff

A Mountain Bike “guide” may refer to either a leader or assistant leader depending on the context. It is important to clarify specific roles and competencies required to avoid the possibility of a “guide” leading a group when an the leader should have “instructor” competencies.

All activity leader competencies needed for a particular role *shall* be clearly defined.

Competencies

*This section outlines the **competencies** that activity leaders *should* have.*

Competencies overview

*The Australian AAS refers to units from the Sport, Fitness and Recreation Training Package for descriptive statements of the knowledge and skills required of **activity leaders**.*

The Training Package units are used for the sole purpose of providing descriptions for the knowledge and skills required. It is not intended to imply or require that specific formal training, assessment or qualification is the only means of gaining or recognising knowledge and skills.

Providers can recognise activity leaders as having the 'ability to apply knowledge and skills to achieve expected results' (i.e. competencies) in a number of different ways as detailed in Part I – Core Standard Recognition of competence.

The Training Package units listed can be found by searching for the units on the training.gov.au/Home/Tga website. The code provided with the unit name assists in this search.

Bicycle competencies

Also refer to [competencies section in Part I - Core Standard](#).

Cycle touring competencies

All activity leaders *shall* have the appropriate competencies for the context of the activity, as listed in the various units of training (or the unit's equivalent), listed in the following table.

Situation	Cycle touring (Assistant Leader)		Cycle touring (Leader)	
	Unit	Code	Unit	Code
Guide a cycling tour	All core standard (Part I) units plus		All core standard (Part I) units plus	
	Operate communications systems and equipment	PUAOPE002B	Operate communications systems and equipment	PUAOPE002B
			Plan for minimal environmental impact	SISOOPS304A
			Use and maintain a temporary or overnight site	SISOOPS202A
	Select, set up and maintain a bike	SISOCYT201A	Select, set up and maintain a bike	SISOCYT201A
	Demonstrate basic cycling skills	SISOCYT202A	Demonstrate basic cycling skills	SISOCYT202A
	Apply on-road cycling skills	SISOCYT303A	Apply on-road cycling skills	SISOCYT303A
			Guide on-road cycle tours	SISOCYT304A
			Plan and navigate routes	TLIH3002A
	Guide overnight or extended tours	All above units plus		All above units plus
Apply overnight cycle touring skills		SISOCYT405A	Apply overnight cycle touring skills	SISOCYT405A
			Guide overnight and extended cycle tours	SISOCYT406A
			Implement and monitor occupational health and safety policies	SISXOHS402A
Instruct cycle touring			All above units plus	
			Instruct cycle touring skills	SISOCYT407A
			Coordinate emergency responses	SISXEMR402A
			Implement and monitor occupational health and safety policies	SISXOHS402A

Mountain Biking competencies

All activity leaders *shall* have the appropriate competencies for the context of the activity, as listed in the units of training (or a units equivalent), listed in the following table.

Trail Rating	Mt Bike (Assistant Leader)		Mt Bike (Leader)	
	Unit	Code	Unit	Code
Common units	All core standard (Part I) units plus		All core standard (Part I) units plus	
	Operate communications systems and equipment	PUAOPE002B	Operate communications systems and equipment	PUAOPE002B
			Plan for minimal environmental impact	SISOOPS304A
			Use and maintain a temporary or overnight site	SISOOPS202A
Very easy	All above units plus		All above units plus	
	Select, set up and maintain a bike	SISOCYT201A	Select, set up and maintain a bike	SISOCYT201A
	Demonstrate basic cycling skills	SISOCYT202A	Demonstrate basic cycling skills	SISOCYT202A
			Guide off-road cycling tours	SISOMBK303A
Easy	All above units plus		All above units plus	
	Demonstrate basic off-road cycling skills	SISOMBK201A	Demonstrate basic off-road cycling skills	SISOMBK201A
Intermediate	All above units plus		All above units plus	
	Apply advanced off-road cycling skills	SISOMBK302A	Apply advanced off-road cycling skills	SISOMBK302A
			Apply navigation skills in an intermediate environment	SISONAV302A
			Coordinate emergency responses	SISXEMR402A
			Implement and monitor occupational health and safety policies	SISXOHS402A
Difficult	All above units plus		All above units plus	
	Apply navigation skills in an intermediate environment	SISONAV302A		
	Coordinate emergency responses	SISXEMR402A		
			Instruct off-road cycling skills	SISOMBK404A
Extreme	All above units plus		All above units plus	
	As above		As above	
Involving Overnight activities	As per above requirements for the trail grade plus		As per above requirements for the trail grade plus	
	Apply overnight cycle touring skills	SISOCYT405A	Apply overnight cycle touring skills	SISOCYT405A
			Guide overnight and extended cycle tours	SISOCYT406A

Recognition of competence

Bicycle recognition pathways

Refer to considerations for recognition pathways outlined in [Part I - Core standard](#).

Group size

Bicycle group size

Also, refer to considerations for determining group size in [Part I - Core standard](#).

Cycle Touring

The recommended maximum group size that *should* be used is provided in the table below.

	Notes	Day		Overnight	
		Minors	Adults	Minors	Adults
Cycle touring	Includes activity leaders	25	25	20	20

Mountain Biking

The recommended maximum group size that *should* be used is provided in the table below.

Trail Rating	Notes	Day		Overnight	
		Minors	Adults	Minors	Adults
Very easy	Includes activity leaders	25	25	20	20
Easy	Includes activity leaders	25	25	20	20
Intermediate	Includes activity leaders	25	25	20	20
Difficult	Includes activity leaders	20	20	20	20
Very difficult	Includes activity leaders	12	12	12	12

Activity leader to participant ratios

Bicycle recommended supervision ratios

Also, refer to considerations for determining supervision requirements in [Part I - Core Standard](#).

Cycle Touring

The recommended maximum group size that *should* be used is provided in the table below.

	Activity leader requirements	Day		Overnight	
		Minors	Adults	Minors	Adults
Cycle touring					
	1 leader (minimum)		1-15		1-10
	1 leader and 1 responsible person	1-12		1-12	
	1 leader and 2 responsible persons	13-18			
	1 leader and 1 assistant leader		15-23		11-18
	1 leader, 1 assistant leader and 1 responsible person	19-22		13-17	
	Maximum group size (also refer land owner/manager requirements)	25	25	20	20

There *shall* be a minimum of one leader and one responsible person for activities involving minors.

The number of participants supervised by one person *shall* not exceed a ratio of 7.7 participants who are minors or 15 participants that are adults.

Mountain Biking

The recommended supervision requirements that *should* be used is provided in the table below.

Trail Rating	Activity leader requirements	Day		Overnight	
		Minors	Adults	Minors	Adults
Very easy					
	1 leader (minimum)		1-15		1-10
	1 leader and 1 responsible person	1-12		1-12	
	1 leader and 2 responsible persons	13-18			
	1 leader and 1 assistant leader		15-23		11-18
	1 leader, 1 assistant leader and 1 responsible person	19-22		13-17	
	Maximum group size (also refer land owner/manager requirements)	25	25	20	20
Easy					
	1 leader (minimum)		1-15		1-10
	1 leader and 1 responsible person	1-12		1-12	
	1 leader and 2 responsible persons	13-18			
	1 leader and 1 assistant leader		15-23		11-18
	1 leader, 1 assistant leader and 1 responsible person	19-22		13-17	
	Maximum group size (also refer land owner/manager requirements)	25	25	20	20
Intermediate					
	1 leader (minimum adults)		1-10		1-10
	1 leader and 1 assistant leader (minimum minors)	1-12	11-23	1-12	11-18
	1 leader, 1 assistant leader and 1 responsible person	13-22		13-17	
	Maximum group size (also refer land owner/manager requirements)	25	25	20	20
Difficult					
	1 leader and 1 assistant leader (minimum)	1-12	1-18	1-12	1-18
	1 leader, 1 assistant leader and 1 responsible person	13-17		13-17	
	Maximum group size (also refer land owner/manager requirements)	20	20	20	20
Very difficult					
	1 leader and 1 assistant leader (minimum)	1-10	1-10	1-10	1-10
	Maximum group size (also refer land owner/manager requirements)	12	12	12	12

There *shall* be a minimum of two activity leaders for difficult and very difficult trails.

There *shall* be a minimum of one leader and one responsible person for activities involving minors.

The number of participants supervised by one person *shall* not exceed 7.7 participants who are minors or 15 participants that are adults.

Supervision and management during the activity

Bicycle supervision and management

Road legislation or regulation *shall* be complied with.

The leader of the activity *should* be familiar with the activity location and/or trail network.

Appropriate risk management procedures *shall* be implemented when using vehicle tracks or roads.

Participants *should* be able to easily identify activity leaders (e.g. by having different clothing or helmet colour or design).

Procedures *shall* be used to reduce the potential of participants becoming separated or lost.

Activity briefing

Also refer [activity briefing section Part I - Core Standard](#).

Bicycle activity briefing

Instruction on the use of the bicycle and the activity *should* include *but is not limited to*:

- appropriate fitting of helmet including the usage of headwear under the helmet and appropriate method(s) to controlled or style hair]
- the use of the brakes, gears and any other adjustable components of the bicycle
- correct adjustment of the seat and/or handlebars to maintain a safe and comfortable riding posture
- appropriate emergency braking technique
- safe and appropriate riding techniques appropriate to the expected terrain, current and anticipated conditions to enable the rider to stay in control
- the need to secure loose clothing
- the appropriate distance required between riders
- how the group will avoid becoming separated
- what to do if they become separated from the group or lost
- appropriate interaction with other users
- managing their own health and wellbeing during the activity
- legal requirements when riding on roads
- procedures for interaction with vehicles if activity has any elements on roads

Glossary

Bicycle activity specific terms & definitions

Bicycle is a vehicle consisting of two wheels held in a frame one behind the other, propelled by pedals and steered with handlebars attached to the front wheel. Designs may vary and include designed for riding on road, off road, in hybrid of conditions or for mountain biking. Bicycle may also include:

- power assisted e-bikes
- tri bikes
- quad bikes.

Cycle Touring is riding a **bicycle** on **roads** and formed bike paths or trails.

Flash flooding: is flooding in a localised area with a rapid onset, usually as the result of relatively short intense bursts of rainfall.

Mountain bike is a **bicycle** that has a design for off **road** use that includes off-road tyres, front and rear brakes, gears and 'mountain bike' design handle bars.

Mountain Biking is riding a **mountain bike** on **unsealed surfaces** and may involve manoeuvring through or around **obstacles**.

Motorcycles a vehicle powered by a motor. Designs may vary and include designed for riding on road, off road and in hybrid of conditions. Motorcycles may also include:

- power assisted e-bikes, where its specifications are deemed to be classified as a motorcycle for vehicle licencing or registration requirements in the jurisdiction it is used,
- tri-motorcycles and
- quad-motorcycles.

Obstacles: in relation to:

- **Mountain Biking**: *may* include *but is not limited to* fallen or narrowly spaced trees, tree branches, shallow water crossings, mud, rocks, steep terrain, depressions, potholes, jumps, logs, ruts, bridges, drainage grates or man-made structures.
- **Cycle Touring** *may* include *but is not limited to* bridges, water on road, bumps, depressions, pot holes, drainage grates, train lines, parked vehicles or other man-made structures.

Road is a formed sealed and unsealed carriageway, that requires vehicles to comply with relevant 'transport' or 'road' law or regulation.

Support vehicle: a vehicle used to follow or meet a group that can provide any aid or assistance

Trail a sealed or **unsealed surface** designed for bicycle riding that is not a **road**.

Unsealed surfaces *may* include gravel roads, loose surfaces, fire 'trails', single track, open ground, sand or rocky ground

Also refer [terms and definitions Part I - Core Standard](#).

Also refer [terms and definitions Camping Activity Standard](#).

Bicycle Appendices

Bicycle appendix 1 – Mountain bike riding trail rating

International Mountain Bicycling Association (IMBA) Australian Trail Difficulty Rating System

	Very easy	Easy	Intermediate	Difficult	Extreme
Symbol	White circle	Green circle	Blue square	Single black diamond	Double black diamond
Description	Likely to be a fire road or wide single track with a gentle gradient, smooth surface and free of obstacles. Frequent encounters are likely with other cyclists, walkers, runners and horse riders.	Likely to be a combination of fire road or wide single track with a gentle gradient, smooth surface and relatively free of unavoidable obstacles. Short sections may exceed these criteria. Frequent encounters are likely with walkers, runners, horse riders and other cyclists.	Likely to be a single trail with moderate gradients, variable surface and obstacles.	Likely to be a challenging single trail with steep gradients, variable surface and many obstacles.	Extremely difficult trails will incorporate very steep gradients, highly variable surface and unavoidable, severe obstacles.
Suitable for	Beginner/novice cyclists. Basic bike skills required. Suitable for most bikes.	Beginner/novice mountain bikers. Basic mountain bike skills required. Suitable for off-road bikes	Skilled mountain bikers. Suitable for mountain bikes.	Experienced mountain bikers with good skills. Suitable for better quality mountain bikes.	Highly experienced mountain bikers with excellent skills. Suitable for quality mountain bikes
Fitness level	Most people in good health.	Most people in good health.	A good standard of fitness	Higher level of fitness	Higher level of fitness
Trail width	Two riders can ride side by side.	Shoulder width or greater	Handlebar width or greater.	Can be less than handlebar width.	Can be less than handlebar width.
Trail surface & obstacles	Hardened with no challenging features on the trail.	Mostly firm and stable. Trail may have obstacles such as logs, roots and rocks.	Possible sections of rocky or loose tread. Trail will such as logs, roots and rocks.	Variable and challenging. Unavoidable obstacles such as logs, roots, rocks drop-offs or constructed obstacles.	Widely variable and unpredictable. Expect large, committing and unavoidable obstacles.
Trail gradient	Climbs and descents are mostly shallow.	Climbs and descents are mostly shallow but trail may include some moderately steep sections.	Mostly moderate gradients but may include steep sections.	Contains steeper descents or climbs.	Expect prolonged steep, loose and rocky descents or climbs.

Bicycle appendix 2 – Equipment list

Tools

Suggested tools to carry:

- chain breaker
- pliers
- spoke key
- spanners/adjustable spanner
- screwdrivers (4 millimetre, 5 millimetre, 6 millimetre)
- Allen key tool (4 millimetre, 5 millimetre, 6 millimetre)
- Two tyre levers
- Pump with suitable connector(s)

Additional tools for multi-day trips either with group or via support vehicle:

- Headset spanner
- Pedal spanner
- Crank puller
- Pliers with cable cutter
- Pressure gauge
- Adjustable, 300-millimetre spanner
- Two cone spanners

Spares

Suggested spares to carry:

- Puncture repair kit (glue and patches)
- Tube of lubricant
- piece of chain and chain repair components
- Inner tubes of appropriate size, with valve stems appropriate for the rims in use
- brake pads appropriate for the brakes in use

Suggested spares to carry on multiday rides:

- brake cable / hydraulic inners
- gear cable inners

Suggested additional spares for multi-day trips either with the group or via support vehicle:

- Rear derailleur and hanger appropriate for the bikes in use
- Lubricant spray
- Rags
- Pair of pedals
- Various cable ties
- Duct tape
- Spare bikes

Other equipment

The equipment required and the appropriate “type” of equipment used is dependent on the specific context of the activity.

Equipment used for Mountain Biking or Bicycle Touring *may* include *but is not limited to*:

Emergency/rescue

- Documentation (see Part I – Core Standard 2.5.1 activity leader required documentation)
- Emergency communication equipment (see Part I Core Standard 6.4 emergency communication)
- First aid kit (see Part I – Core Standard 6.3 first aid equipment and medication) in waterproof storage
- A waterproof method of storing and carrying documentation and communications equipment
- Emergency shelter where appropriate for the context
- Emergency equipment to keep a patient warm (g. mat, sleeping bag) where appropriate for the context
- Signalling device(s) g. mirror, flares

Activity Leaders

- communications equipment (standard communication rather than emergency communication where this differs) and spare batteries or backup “power banks”
- relevant maps and navigation information
- a waterproof method of storing and carrying maps and navigation information
- compass and/or other navigation aids g. GPS
- pen/pencil and blank writing paper
- watch or equipment suitable to tell and measure time for first aid purposes
- head torch and spare batteries
- plus same as for participant (see below)

Group

- trowel for toileting
- toilet paper
- hand sanitiser
- water purification ‘system’
- food for duration plus spare
- rubbish bags
- sunscreen
- insect repellent

Participant

- appropriate clothing
- appropriate footwear
- personal protective equipment (see section 6.1)
- personal medications (including for asthma and anaphylaxis)
- sunglasses
- prescription glasses
- high visibility vest
- sunscreen
- water container
- food or snacks

Additional equipment used for overnight or extended duration mountain biking or cycle touring refer [camping activity standard](#).

Table of contents

Contents

Introduction	2
About these standards	2
Do these standards apply to me?	2
Are these standards legally binding?	2
Structure and interpretation of the standards	2
Disclaimer	3
Creation	3
Bicycle activities	4
Exclusions	4
Bicycle related activities	4
Bicycle activity specific appendixes	4
Management of risk	4
Management of risk	4
Planning	4
Activity plans	4
Bicycle activity plans	4
Emergency management planning	5
Bicycle emergency management plan	5
Participants	5
Pre-activity communication	5
Bicycle pre-activity information	5
Bicycle participant skill assessment	5
Environment	5
Environment related planning	5
Bicycle environment considerations	5
Bicycle severe weather	6
Bicycle severe weather triggers	6
Bushfire, prescribed fire and fire danger	7
Water crossings and flooding	7
Bicycle water and river crossings	7
Bicycle - Flash flooding	7
Wildlife safety	8
Bicycle wildlife safety	8
Environmental sustainability procedures	8
Bicycle - Plan ahead and prepare	8

Bicycle - Travel and camp on durable surfaces	8
Bicycle - Dispose of waste properly	8
Bicycle - Leave what you find	8
Bicycle - Be considerate of your hosts and other visitors	8
Equipment and logistics	9
Bicycle equipment requirements	9
Bicycle use of equipment	10
Bicycle maintenance of equipment	10
Bicycle support vehicles	10
Leadership	11
Naming conventions	11
Bicycle naming conventions	11
Competencies	11
Competencies overview	11
Bicycle competencies	12
Recognition of competence	13
Bicycle recognition pathways	13
Group size	14
Bicycle group size	14
Activity leader to participant ratios	14
Bicycle recommended supervision ratios	14
Supervision and management during the activity	16
Bicycle supervision and management	16
Activity briefing	16
Bicycle activity briefing	16
Glossary	17
Bicycle activity specific terms & definitions	17
Bicycle Appendices	18
Bicycle appendix 1 – Mountain bike riding trail rating	18
Bicycle appendix 2 – Equipment list	19
Table of contents	21