



**AUSCYCLING**

**TECHNICAL REGULATIONS:  
MOUNTAIN BIKE**

2023



# AUSCYCLING

**These Regulations have been developed to ensure safety of all participants and to encourage fair competition.**

**Where any ambiguity or lack of a clear ruling exists the UCI regulations will take precedence.**

## **SECTION 1**

### **GENERAL**

#### **1.00 TECHNICAL GUIDE**

A Technical Guide should be made available from the date of race entries opening and will outline the basic format, provisional timetable and protection rules for each event.

#### **1.01 RIDER BRIEFING**

1.01.01 A rider briefing must take place prior to the race commencing and attendance is compulsory. Changes to the rules, course, timetable, details of course marking, feed stations and assistance locations will be communicated at this briefing.

1.01.02 Non-attendance of the rider briefing will not be accepted as an excuse for any rule violation by any rider.

1.01.03 Failure to attend the rider briefing may result in not being permitted to start the event.

#### **1.02 FIRST AID - MINIMUM STAFF/INFRASTRUCTURE REQUIREMENTS**

1.02.01 National level events require the following at a minimum:

- A minimum of one trained doctor or paramedic to be on site for the duration of the event.
- A minimum of four first aid officers per event discipline. This excludes marathon events where additional first aid personnel will be required, at the discretion of the Technical Delegate or President of the Commissaire Panel (PCP).
- There must be a clearly defined first aid area in the main event village.
- The first aid area must be manned continuously over the duration of the event (for both practice and competition). The first aid area must be obvious and identifiable to all participants.
- Maps that define access arrangements must be distributed to the first aid person/medical crew.
- All first aid/rescue personnel must be easily identifiable with an appropriate mark or uniform which is unique.
- The local ambulance service and the closest hospital must be notified of the race at least 2 weeks before the event date. The local ambulance service must be available to be on the course in case of an accident within 15 minutes.
- Appropriate plans should be made to quickly access awkward areas. Paramedics should be stationed so as they have best access to hazard areas and/or transport options should be available to expedite medical attention.
- Potential hazard areas must be identified and should be accessible by ambulance (four-wheel drive if necessary).
- The organiser must supply each competitor with the details of who to contact in the event of an accident on course

1.02.02 State and Territory level events require the following at a minimum:

- For all events, at least one fully qualified first aid officer must be in attendance.
- This person may be undertaking other roles at the event but must not be a race participant.
- A first aid kit/supplies must be on site at all times. This kit must be capable of dealing with basic injuries such as; grazes, cuts, plus fractures and dislocations.
- Maps that define access arrangements must be distributed to the first aid person/medical crew.
- All first aid/rescue personnel must be easily identifiable with an appropriate mark or uniform which is unique.
- The local ambulance service and the closest hospital must be notified of the race at least 2 weeks before the event date. The local ambulance service must be available to be on the course in case of an accident within 15 minutes.
- Appropriate plans should be made to quickly access awkward areas. Paramedics should be stationed so as they have best access to hazard areas and/or transport options should be available to expedite medical attention.

- Potential hazard areas must be identified and should be accessible by ambulance (four-wheel drive if necessary).
- The organiser must supply each competitor with the details of who to contact in the event of an accident on course

### **1.03 FIRST AID ACCIDENT REPORTING**

A report must be submitted, by the organiser, to AusCycling within seven working days of the end of the final race. The report will list all injuries and treatments rendered with the riders' name and license number.

## SECTION 2

### MOUNTAIN BIKE DISCIPLINES

#### 2.00 CROSS-COUNTRY (XCO)

XCO is the mountain bike discipline included in the Olympic Games and provides a diverse riding experience including climbing and descending. An XCO course must be between 4km and 6km in length, preferably utilising a cloverleaf design to provide optimum course contact with the race village. No more than 15% of the course may be on paved or sealed road.

#### 2.01 CROSS-COUNTRY SHORT COURSE (XCC)

XCC utilises a course of up to 800 metres in length, which should allow for passing opportunities throughout the entire course length. The course may have artificial features if they are safe and easily passable by the majority of riders.

#### 2.02 CROSS-COUNTRY MARATHON (XCM)

XCM utilises a course of between 60km and 160km. The event can be run in the following formats; single loop, point-to-point, or over a maximum of three laps. In the event of a single lap format no part of the course may be covered twice. In the event of a multi-lap event, short cuts for some classes are not permitted.

#### 2.03 CROSS-COUNTRY ELIMINATOR (XCE)

XCE is a short course cross-country racing format where riders contest a course up to 1km in length. Riders race in groups of four and are eliminated in a format similar to four cross (4X) racing. The course may include a range of natural and artificial obstacles. Qualification rounds will take place in a similar format to a 4X event.

#### 2.04 SUPER D (SD)

A point-to-point event involving a predominantly descending course contested in a mass start, eliminator or time trial format. A Super D requires a course of at least 2.5km in length with multiple passing opportunities. The course length will often dictate the racing format utilised, with longer courses being more suitable for mass start racing.

#### 2.05 CROSS-COUNTRY ENDURANCE (XCEN)

A multi-lap cross-country event based on a set time format of 1-24 hours in duration. Riders are judged on the number of laps they complete in the given time frame. Course length should be at least 5km, with a longer course required for larger competitor numbers.

#### 2.06 CROSS-COUNTRY POINT-TO-POINT (XCP)

A cross-country format event utilising a point-to-point course of between 20-60km in length. Variations to course length may be allowed at the discretion of the Race Director, Technical Delegate or PCP.

#### 2.07 CROSS-COUNTRY STAGE RACE (XCS)

A multi-stage cross-country event that may include a range of different racing formats. Traditionally an XCS would include a group of time trial events over one or more days, though may now include any connotation of the cross-country events listed above.

#### 2.08 DOWNHILL (DH)

DH is a point-to-point format race involving a course of between 1.5km and 3.5 km. Total race time should be between two and five minutes. The course must contain a maximum of 3% paved roads and will consist of a variety of different terrain types. There should be an emphasis on technical skills rather than pedalling.

## **2.09 ENDURO (END)**

Enduro races include liaison stages and special stages. Liaison stages have a maximum allowed time for the rider to complete without being penalised. The times taken to complete special stages are accumulated to give an overall total time. An Enduro course comprises of varied off-road terrain. The track should include a mixture of narrow and wide, slow and fast paths and tracks over a mixture of off-road surfaces. Each timed stage must be predominately descending but small pedalling or uphill sections are acceptable. Liaison stages can include either mechanical uplift (e.g. chairlift), pedal powered climbs or a mixture of both. The emphasis of the track must be on rider enjoyment, technical and physical ability.

## **2.10 E-MOUNTAIN BIKE (E-MTB)**

An E-Mountain Bike is a bike operated with two energy sources, human pedal power and an electric engine, which only provides assistance when the rider is pedalling.

E-Mountain bike events will be organised in the cross-country and Enduro formats only. Refer Section 12 for details.

## **2.11 FOUR CROSS (4X)**

4X involves a descending course of between 30 and 60 seconds in length. The course should involve a variety of terrain including; jumps, banked turns, flat turns and natural terrain features. 4X is a competition that consists of qualifying round/s or timed qualifying, followed by a series of races (motos) where four riders share the one course. The first and second placed riders in each moto advance to the next round.

## **2.12 OBSERVED TRIALS (OT)**

OT involves short, marked sections of track that include a variety of technical challenges. Riders are penalised via a sliding points scale for mistakes made while trying to 'clean' the section. The regulations provided by the UCI Trials Commission will be used as a reference.

## **2.13 PUMP TRACK (PUM)**

A pump track is a track that consists of rollers and steep turns in various sizes and shapes. The rollers and turns are used to generate speed by pumping the bike, not by pedalling. A pump track is built in a way that promotes technical skills. Speed on a pump track is generated by pumping the bike - not by pedalling and not by gravity. Large flat sections that promote pedalling are to be avoided.

## **2.14 ALPINE SNOW BIKE (ALP)**

Alpine snow bike is an essentially descending mountain bike snow event. Refer Section 11 for details.

## SECTION 3

### CROSS COUNTRY RACING

#### 3.00 START AND FINISH

##### 3.00.01 XCO and other mass start events (National)

- a) The start and/or finish lines must be clearly marked by a gantry or flag structure. Inflatable arches must not be used across any racecourse. All structures must be appropriately weighted and or secured and must be approved by the Technical Delegate or President of the Commissaire Panel (PCP) prior to the commencement of official practice.
- b) The start of the course should be at least 8m wide for a minimum of 100m after the line, after which the riding area may narrow.
- c) The start of the course must be either flat or gentle climbing for a minimum of 750m, or 3 minutes after the start line.
- d) The finish area must be at least 6m wide for a minimum distance of 50m before the finish line.
- e) A clear exit must be marked before the start/finish to allow for rider removal when implementing the 80% rule.
- f) Barriers or a similar form of hard fencing or double secondary marking (tape) to ensure rider and spectator safety must be erected at least 100 metres before and 50 metres after the finish line.
- g) The finish line drawn on the course surface must be placed across the entire width of the course by the shortest possible length.

##### 3.00.02 XCO and other mass start events (Club and Regional)

- a) The start and/or finish lines must be clearly marked.
- b) The start of the course should be at least 6m wide for a minimum of 100m after the line, after which the riding area may narrow.
- c) The start of the course should be either flat or gentle climbing for a minimum of 150m, or 1 minute after the start line.
- d) The finish area should be at least 6m wide for a minimum distance of 25m before the finish line.
- e) Course markings must be placed at least 30 metres before and 30 metres after the finish line, or after the finish line if in a separate location.
- f) The finish line drawn on the course surface must be placed across the entire width of the course by the shortest possible length.

#### 3.1 CROSS COUNTRY (XCO) COURSE REQUIREMENTS

##### 3.1.1 General

- a) The course must be 99% rideable regardless of the terrain and weather conditions.
- b) At National Level events the course must be between 4km and 6km in length achieve a target lap time of between 12 and 18 minutes.
- c) No more than 15% of the course shall be sealed or paved road.
- d) Extended sections of single track must have passing bays included in appropriate places.
- e) Weather conditions may require a change of laps to be completed to achieve target race times. In such cases the decision will be made by the PCP.
- f) If weather conditions require the use of an alternative route(s) it must be marked for the last training session and marked clearly on the rider information board.
- g) The target winning time for a cross country circuit race should be within the range shown in the following table.

**Target Winning Time Range**

Class	Target race time (h:mm)
Elite Men & Women	1:20 – 2:00
Expert Men & Women	1:20 – 2:00
U23 Men & Women	1:15 – 1:30
Masters 1 & 2 Men & Women	1:15 - 1:30
Masters 3 & 4 Men & Women	1:15 – 1:30
Masters 5 & 6 Men & Women	1:00 – 1:15
Masters 7+ Men & Women	1:00 – 1:15
U 19 Men & Women	1:00 – 1:15
U 17 Men & Women	1:00 – 1:15

**3.01.02 Course Marking**

Refer Annexure B plus the following;

- a) The course should be marked clearly at a minimum of 250m intervals or to a standard that allows course marking to be seen from any point of the course.
- b) Any course signage or marking used will not hinder the rider.
- c) Course marking should involve a combination of arrows and tape/bunting.
- d) All intersections or junctions must be clearly marked.
- e) Arrows and other directional or warning signage should be black arrows on white or yellow panels and have minimum dimensions of 20cm x 40cm and be sited no more than 1.5 metres off the ground.
- f) Arrows should be placed on the rider's right-hand side, except for right hand turns where arrows should be placed on the riders left hand side.
- g) Each intersection will be marked by an arrow placed 10m before the intersection. Another arrow will be placed at the intersection.
- h) A sign "X" will be positioned within easy eyesight to mark the wrong direction.
- i) In all potentially dangerous situations, one or more arrows will be placed upside down 10m to 20m before the obstacle, and also at the obstacle.
- j) Two upside down arrows mean a more dangerous situation.
- k) Three upside down arrows means a most dangerous situation, proceed with caution.
- l) Water crossings and bridges must be marked appropriately.
- m) Signage examples can be found at Annexure B.
- n) Stakes must not be metallic or wooden, with PVC plastic conduit (without metal insert) being the preferred option.
- o) Distance markers **should** be placed at 1km intervals along the course.
- p) **Alternatively, the entire course can be bunted/taped on both sides for its entire length removing the need for directional markings.**

**3.01.03 Feed and Technical Zones**

- a) State/Territory level events and above require the use of a designated, managed feed zone.
- b) In the event of hot weather an additional feed zone/s should be considered for inclusion.
- c) The final location and design of the feed zone/s must be approved by the Technical Delegate or PCP.
- d) Where possible the feed and technical zones should be on the right side of the course.
- e) The feed zone must be a minimum of 40 metres in length. Variations to this rule must be approved by the Technical Delegate or PCP.
- f) The feed zone should be on a slight incline or on flat ground, with a slow, clear entry and exit.
- g) The technical zone will ideally be on the same side as the feed zone.
- h) The technical zone must be a minimum of 20 metres in length. Variations to this rule must be approved by the Technical Delegate or PCP.
- i) *Feed/Technical Assistance Zone - See Annexure C.*

**3.2 CROSS COUNTRY SHORT COURSE (XCC) COURSE REQUIREMENTS****3.2.1 General**

- a) An XCC course take between 1:00 minute to 1 minute 30 seconds to complete a lap.
- b) The final 100m of the course should be straight and have no obstacles.
- c) The entire course should allow for passing and riders to travel at least two abreast.
- d) Short climbs and descents are preferred, with no sections that will significantly slow the field down.
- e) Basic technical features are permissible at the discretion of the Technical Delegate, PCP or Race Director.
- f) A clear exit must be marked where riders may be removed from the course, this must be before the start/finish line.

**3.02.02 Course Marking**

- a) The entire course should be marked both sides.
- b) Modification to this rule is at the discretion of the Technical Delegate, PCP or Race Director.
- c) *For further information refer to Annexure C.*



### 3.3 CROSS-COUNTRY MARATHON (XCM) COURSE REQUIREMENTS

#### 3.03.01 General

- a) An XCM course should be between 60-160 km in length with a preferred length of 100km.
- b) The course may involve a lapped format of a maximum of three laps. **At regional events the number of laps may be increased to achieve the required distance.**
- c) The course may involve a point-to-point format where no section of the course is repeated in either direction.
- d) Extended single track sections should be avoided, where necessary these sections should allow for regular passing.
- e) The course may involve a single lap format where no section of the course is to be repeated in either direction.

#### 3.03.02 Course Marking

*Refer Annexure B plus the following;*

The course must be marked every 10km with distance markers.

#### 3.03.03 Feed and Technical Zones

Marathon events run in a multi lap format must utilise a feed zone as described in Section 5.2.1.3.

These events may also include a second feed zone, which may be a neutral feed zone.

Single loop or point to point events must provide a feed station at a minimum of every 30km.

### 3.4 CROSS-COUNTRY ELIMINATOR (XCE) COURSE REQUIREMENTS

#### 3.04.01 General

- a) An XCE course should be approximately 1km in length.
- b) The course should include a variety of terrain features, allowing for a 'showcase' event for the sport.
- c) The entire course should be wide enough to allow multiple passing opportunities.

#### 3.04.02 Course Marking

*Refer Annexure B plus UCI Regulations Part IV: Mountain Bike.*



### 3.5 SUPER D (SD) COURSE REQUIREMENTS

#### 3.5.1 General

- a) A SD course should be between 2- 20km in length.
- b) The course should follow an essentially descending route.
- c) The course should allow for various passing opportunities.
- d) The course should include a wide variety of terrain, including short uphill and flat sections.

#### 3.05.02 Course Marking

*Refer Annexure B.*

### 3.6 CROSS-COUNTRY ENDURANCE (XCEN) COURSE REQUIREMENTS

#### 3.6.1 General

- a) An XCEN course should be between 8-15km in length.
- b) The course should follow the basic course characteristics outlined in 8.3.3.

#### 3.06.02 Course Marking

*Refer Annexure B plus UCI Regulations Part IV: Mountain Bike.*

### 3.7 CROSS-COUNTRY POINT TO POINT (XCP) COURSE REQUIREMENTS

#### 3.7.1 General

- a) An XCP course must utilise a point-to-point course of between 20-60km in length.
- b) No part of the course may be repeated in either direction.
- c) Aside from differing length and a point-to-point format the course will follow the same guidelines as an XCO event course.

#### 3.07.02 Course Marking

*Refer Annexure B plus UCI Regulations Part IV: Mountain Bike.*

### 3.8 CROSS-COUNTRY STAGE RACE (XCS) COURSE REQUIREMENTS

#### 3.8.1 General

Refer individual discipline/stage requirements above.

### 3.9 PRACTICE

- 3.09.01 All riders on course during an event must be registered participants.
- 3.09.02 All riders on course during an event must have an event number plate specific to the event always attached.
- 3.09.03 No practicing is permitted on course while a race is being conducted.
- 3.09.04 Practice on the race course is only permitted (where possible) as follows:
- Cross-Country Olympic (XCO) - at least 24 hours prior to the event.
  - Cross-Country Marathon (XCM) - at least 12 hours prior to the event. For XCM events it is appropriate to offer no practice on the race course.
  - Short Course Cross-Country (XCC) and Cross-Country Eliminator (XCE) - at least one hour prior to the event.
  - Cross-Country Enduro (XCEN) and Super D (SD) - at least 4 hours before the event.
  - Cross-Country point-to-point (XCP) and Cross -Country stage race (XCS) - a practice session on these courses should be provided. For XCP and XCS it is appropriate to offer no practice on the race course.

### 3.10 RACE SEEDING / STAR GRID

- 3.10.01 Unless otherwise referenced in season guidelines, the following shall apply:

#### **Cross-Country Olympic (XCO)**

The seeding order will be calculated as follows:

1. The defending format class National Champion **in the category the rider is eligible to compete;**
2. Recognised UCI World Champion in the format;
3. Any rider ranked in the top 200 UCI World Rankings in ranking order;
4. Riders ranked in the top 30 of the current National Cup Ranking;
5. All other riders by entry sequence.

#### **Cross-Country Marathon (XCM)**

Where a seeded start is deemed appropriate, the first 40 grid spaces will be reserved for ranked riders. Riders will be called as follows:

1. The defending format class National Champion **in the category the rider is eligible to compete;**
2. Recognised UCI World Champion in the format;
3. Any rider ranked in the top 200 UCI World Rankings in the format in ranking order;
4. Riders ranked in the top 30 **in the category a rider is eligible to compete** of the current National Cup Ranking;
5. All other riders by entry sequence.

#### **Cross-Country Short Course (XCC)**

Riders will be assembled on the grid utilising a ranking from their fastest lap in the preceding XCO event. Where an XCO event is not held or where riders do not contest such an event, riders will be seeded in the same fashion as in XCO.

### 3.11 START PROCEDURE - CROSS-COUNTRY AND OTHER MASS START EVENTS

- 3.11.01 Staging of the riders must commence no later than 10 minutes before the scheduled start of the race.
- 3.11.02 A rider briefing must be given on the start line once all riders are staged. This briefing must be audible to all riders.
- 3.11.03 Start announcements will be made at 5, 4, 3, 2 minutes, 1 minute, 30 seconds and 15 seconds before the start. The Start Commissaire will then start the race between 15 seconds and 0 seconds. No countdown announcement can be given when there is less than 15 seconds remaining.
- 3.11.04 Mass start competitions will be started by an audible device such as starting gun or whistle.
- 3.11.05 All riders must have at least one foot on the ground and may not lean on fences/other infrastructure, or other competitors/bystanders.

### **3.12 THE RACE**

- 3.12.1 Riders must complete the entire distance of the race or as directed by the race officials.
- 3.12.2 Riders must finish with their bicycle at hand.
- 3.12.3 The riders finish is defined by the moment the leading edge of the front wheel crosses an imaginary plane rising vertically from the finish line drawn on the course surface.
- 3.12.4 The responsibility for following the official course lies with the rider. A rider is not permitted to take any shortcuts or to omit a circuit or take other advantage of a similar nature against opponents.
- 3.12.5 If a rider exits the intended course for any reason, they must return to the course at the same point from which he/she exited. The PCP will however, decide if any advantage was gained if the return to the course is different from the exit.
- 3.12.6 Riders must always act in a sporting manner and shall not wilfully obstruct any fellow competitor. Any walking or running of the course is carried out in deference (must give way to a rider on a bike) to any riders still riding their bicycles.
- 3.12.7 A rider may only change his/her bike between races.
- 3.12.8 Riders must respect the countryside and ride only on the official course. The rider must avoid polluting the area and must not leave any waste or litter.
- 3.12.9 No glass containers of any kind are permitted on or near the race course.

### **3.13 TECHNICAL ASSISTANCE**

- 3.13.1 Riders may receive technical assistance only in the designated technical zone/s, provided in cross country and related events.
- 3.13.2 Riders may not receive technical assistance of any kind while on the race course.
- 3.13.3 Breach of the above rule will lead to disqualification or relegation.

### **3.14 FEED AND TECHNICAL ZONE REGULATIONS**

- 3.14.1 Only one allocated feeder per rider is allowed in the feed zone. Teams may also utilise one feeder per rider.
- 3.14.2 All feeders must have an allocated feed zone pass.
- 3.14.3 Feeders must remain behind the second line until their rider is within site of the feed zone.
- 3.14.4 Riders may only travel in a forward direction in the feed/technical areas.
- 3.14.5 Feeders must remain stationary for the duration of the feed.
- 3.14.6 Contact between mechanic/feeder and the rider is only permitted in the technical zone.
- 3.14.7 The feeder may only pass items via the hand and may not throw items or place items into/onto the rider's bicycle.
- 3.14.8 Support personnel must not pour or spray water or any other liquid on riders in the tech/feed zone. Riders may be handed a bottle (optionally with the lid removed) for the purposes of tipping on themselves for cooling purposes.
- 3.14.9 No storage of technical equipment is to take place in the feed zone.
- 3.14.10 Technical assistance must take place only in the designated technical zone.
- 3.14.11 Eyewear may only be exchanged in the technical zone.
- 3.14.12 Failure to comply with the above rules may result in relegation or disqualification of the rider.

### **3.15 CROSS-COUNTRY OLYMPIC (XCO) RIDER REMOVAL**

- 3.15.1 The 80% rule is applied at the discretion of the Technical Delegate or the PCP. Riders will be informed at the rider briefing prior to the start of the race if the 80% rule is applied.
- 3.15.2 If 80% rule is enforced at National Level XCO Events. Any rider falling outside of 80% of the leading time will be removed from the course.
- 3.15.3 Lapped riders must remove themselves from the course upon the instruction of a Commissaire.
- 3.15.4 Riders that withdraw from their event prior to being verified by the Commissaires as a lapped rider or an official finisher, are classed as "Did Not Finish", and will lose all benefits, such as a placing, competition points and ranking points. Such riders presenting to the finish commissaire upon withdrawal will not lose these benefits.

- 3.15.5 Riders who pull out of the event due to injury, mechanical failure or otherwise must inform the race officials.

### **3.16 CROSS-COUNTRY SHORT COURSE (XCC)**

- 3.16.1 There should be a minimum of 4 hours of rest between an XCO and XCC event.

- 3.16.2 Race times will be:

- a) Open Men: 20 minutes + 3 laps (Maximum total time 25 minutes)
- b) Open Women: 15 minutes + 3 laps (Maximum total time 20 minutes)
- c) Junior Men/Women: 15 minutes + 3 laps (Maximum total time 20 minutes)

Alterations to these race times are permitted at the discretion of the PCP.

- 3.16.3 Lapped riders and riders who in high likelihood will soon be lapped must be removed from the course. The decision to remove these riders rests with the PCP and/or their delegate.

- 3.16.4 At the conclusion of the time part of the race the timers will blow a whistle and display a race lap board for "3" laps to go. Each lap after this will have the race board displayed with "2" laps and then "1" lap to go. The timers will also ring a bell when there is "1" lap to go.

- 3.16.5 The race ends when the race leader crosses the finish line at the end of the + 3 laps.

- 3.16.6 All riders who are still left in the race when the winner crosses the finish line will be recorded in the order they cross the finish line.

- 3.16.7 Riders who are lapped or pulled out of the race will have their lap number recorded at the time of their withdrawal.

### **3.17 GENERAL CROSS-COUNTRY EVENTS**

XCO and other general cross-country related events will be run to the standard guidelines as contained in these Technical Regulations and the AusCycling Organisers Guides.

## SECTION 4

### DOWNHILL RACING

#### 4.00 DOWNHILL CLOTHING REQUIREMENTS

- 4.00.01 Full-face helmets with a fixed non-detachable mouthpiece are mandatory at all AusCycling sanctioned events.
- 4.00.02 A jersey or shirt covering the elbows must be worn as a minimum. 3/4 length jerseys are acceptable. Knees must be covered by full-length trousers and/or self-fastening knee or knee/shin guards expressly designed for off-road competition.
- 4.00.03 For all riders who are eligible to compete in U13, U15 and U17 categories, the following equipment is mandatory at all times while on track regardless of registered category:
- Full-finger gloves must be worn;
  - Full length jersey – jersey must cover elbows at all times;
  - Knee pads and elbow pads must be worn.
- 4.00.04 The use of the following for all competitors is strongly recommended:
- Neck brace expressly designed for off-road competition;
  - Back and shoulder protection expressly designed for the purpose;
  - Full finger gloves;
  - Elbow protectors and/or long sleeve jersey to the wrist;
  - Goggles expressly designed for the purpose.

#### 4.01 START AND FINISH

##### 4.00.01 National Events

- a) The downhill start must be at least 2 metres wide for the first 20 metres of the course.
- b) The course start must be flat or on a slight decline.
- c) A covered structure of at least 3 x 3 metres in size must be provided at the course start.
- d) The finish must be a minimum of 6 metres wide for at least 30m before and 35m after the finish line.
- e) The area after the finish line must be free from obstacles and conducive to safe slowing of riders.
- f) Barriers or a similar form of hard fencing **or double secondary marking and material banners (with a 2m wide separation) to the finish area** must be erected at least 25 metres before and 50 metres after the finish line, or greater as required by the Technical Delegate or PCP.
- g) The finish area must be hard fenced **or taped** in a 'bowl' or similar form **to** restrict general access to the area.
- h) The finish line drawn on the course surface must be placed across the entire width of the course by the shortest possible length

##### 4.00.02 Club and Regional Events

- a) The finish must be a minimum of 4 metres wide for at least 20 metres before and 20 metres after the finish line.
- b) The area after the finish line must be free from obstacles and conducive to safe slowing of riders.
- c) Course markings must be place at least 20m before and 20m after the finish line, or greater as required by the Event Commissaire.
- d) The finish line drawn on the course surface must be placed across the entire width of the course by the shortest possible length

#### 4.01 COURSE REQUIREMENTS

- 4.01.01 The course must be between two and five minutes for the winning elite male time or the fastest time of the day, whichever is lower.
- 4.01.02 A course of between 1.5-3.5km must be utilised.
- 4.01.03 The course should follow a descending route. Short uphill sections are permitted if they have a fast entry.
- 4.01.04 The course should comprise varied terrain sections: narrow and broad tracks, woodland roads and paths, field paths and rocky tracks. There should be a mixture of fast and technical sections. The emphasis of the course is to test the riders' technical skills and their physical ability.

4.01.05 The course must contain no more than 3% sealed or paved roads or paths.

## **4.02 COURSE MARKING**

4.02.01 The course must be marked on both sides over its entire length; any variations to this rule must be approved by the Technical Delegate or PCP.

4.02.02 Warning signs such as double and triple down arrows should only be used where an obstacle does not have an easier route around and/or where an obstacle has a fast and/or blind approach. Sign templates can be found at Annexure B.

4.02.03 Course marking tape/bunting should be **maximum of 1.5m and minimum of 0.5m off the ground**.

4.02.04 Stakes must not be metallic or wooden, with PVC plastic conduit (without metal inserts) being the preferred option.

4.02.05 Secondary marked 'fall zones' should be provided in areas of high spectator interest, or where there is a high likelihood of riders crashing and/or unintentionally leaving the course.

## **4.03 PRACTICE**

4.03.01 All riders on the course during an event must be registered participants.

4.03.02 All riders on course during an event must always have an event number plate specific to the event attached.

4.03.03 No practicing is permitted on a course while a race is being conducted.

4.03.04 Practice must be made available at least 24 hours prior to the event start.

4.03.05 Riders must have access to at least 4 hours of practice time **before race start**.

4.03.06 Vehicle or chairlift transport to the course start must be provided.

4.03.07 Opportunity prior to practice and competition for an on-foot inspection must be provided.

4.03.08 A compulsory practice run must be provided which all riders must complete before the qualifying run.

4.03.09 A mark or sticker is to be placed on the rider's number plate after the completion of a run during compulsory practice.

4.03.10 The course and gate placement can be adjusted during practice up until the last 30 minutes of practice.

## **4.04 SEEDING/QUALIFYING**

4.04.01 **Events with a smaller number of riders may** hold a seeding round for all downhill classes. Riders will start in number order per category. Category order will be decided by the Technical Delegate or PCP.

4.04.02 **National and large rider number events may run a qualifying format with a percentage or fixed number of riders in the U17 M/F U19 M/F and Elite M/F receiving a final race run. Series points should be allocated for both qualifying and race runs. A suggested category starting order is as follows. Series or event regulations will indicate the number or percentage of riders who receive a final run.**

- U17 Women (qualifying)
- U17 Male (qualifying)
- U19 Women (qualifying)
- Elite Women (qualifying)
- U19 Male (qualifying)
- Elite Male (qualifying)
- U13 Women
- U15 Women
- Expert Women (if we want to have this category)
- Masters Women All Categories (1 to 8)
- U13 Men
- U15 Men
- Masters Men All Categories (1 to 8)
- Expert Men
- U17 Women (final)

- U17 Male (final)
- U19 Women (final)
- Elite Women (final)
- U19 Male (final)
- Elite Male (final)

#### **4.05 START PROCEDURE**

- 4.05.01 The start procedure for Downhill and related events should include a 30 second warning followed by a ten second and five second warning.
- 4.05.02 Electronic starting and timing must be used.
- 4.05.03 There must be at least a 30 second gap between individual riders starts.
- 4.05.04 The seeding and final runs must use a single course/single run format.
- 4.05.05 A minimum of 30 seconds must be left between rider race starts.
- 4.05.06 Riders are started from slowest to fastest.
- 4.05.07 The decision to grant a re-run is solely at the discretion of the PCP.
- 4.05.08 Riders will begin at the direction of the Starter.

#### **4.06 THE RACE**

- 4.06.01 Riders must complete the entire distance of the race or as directed by the race officials.
- 4.06.02 Riders must finish with their bicycle at hand.
- 4.06.03 The riders finish is defined by the moment the leading edge of the front wheel crosses an imaginary plane rising vertically from the finish line drawn on the course surface.
- 4.06.04 The responsibility for following the official course lies with the rider.
- 4.06.05 A rider is not permitted to take any shortcuts or to omit a circuit or take other advantage of a similar nature against opponents.
- 4.06.06 If a rider exits the intended course for any reason, he must return to the course at the same point from which he/she exited. The PCP will decide if any advantage was gained if the return to the course is different from the exit.
- 4.06.07 Riders must always act in a positive sporting manner and shall permit any faster rider to overtake without obstruction at the earliest opportunity.
- 4.06.08 Any walking or running of the course is carried out in deference to any riders still riding their bicycles.
- 4.06.09 A rider may only change their bike between races.
- 4.06.10 A rider must not use offensive or abusive language, act in an unsportsmanlike manner, be disrespectful to the officials or ignore the race regulations.
- 4.06.11 Riders must respect the countryside and ride only on the official course. The rider must avoid polluting the area and must not leave any waste or litter.
- 4.06.12 No glass containers of any kind are permitted on or near the racecourse.

#### **4.07 TRANSPORTATION**

- 4.07.01 Vehicle or chairlift transport must be provided.
- 4.07.02 Transportation must not interfere with the course in any way.
- 4.07.03 Transport must be capable of transporting at least 120 riders per hour.
- 4.07.04 If utilising vehicle transport all riders must have a fixed seat inside the vehicle. No transportation is to take place in the back of utes or via similar means.
- 4.07.05 **At all events transport must be capable of transporting a minimum of 50% of total riders per hour. At small club events an alternate arrangement can be utilise including riders pushing up or riding back to the start.**
- 4.07.06 Competitors must not use their own transportation to the course start.





## SECTION 5

### ENDURO RACING

#### 5.00 DESCRIPTION

Enduro mountain bike racing is designed to be the definitive test for the mountain biker, with the focus of each event on creating a great atmosphere, community, competition and adventure for the competitor, including the best riding on the best terrain available in the host region.

The racing platform detailed below outlines a format that allows riders to compete against each other, starting individually, on special stages which are designed to challenge the rider's technical ability and physical capacity.

The following rules aim to define the Enduro Mountain bike discipline while still allowing space for each event on the AusCycling Enduro calendar to add their own individual characteristics to each event.

#### 5.01 COURSE

##### 5.01.01 General

Enduro racing is about best use of the trails and terrain available to the organiser. Rider experience and enjoyment should be the focus for any course designer. It is expected that, to achieve the best riding on the best trails possible, some climbs will feature within Special Stages.

##### 5.01.02 Liaison Stages

The composition of each Liaison Stage is at the discretion of the organiser. Mechanical uplift (chairlift, truck etc), rider power (pedalling) or a combination of both is acceptable. As a guideline, at least one Liaison Stage per event should be pedal powered (not chairlift etc).

##### 5.01.03 Special Stages

All Special Stages (Abbreviated to SP in results/communications) must follow a predominantly descending route and focus on testing the rider's technical skills. Special exceptions can be made for prologue stages.

The General Classification (GC) of each race will be calculated by adding all Special Stage times together.

The start and finish of each Special Stage will be clearly marked on the map supplied by the organiser.

A Special Stage will be designed to test the rider's technical and physical abilities. There is no minimum or maximum duration for a Special Stage.

As a guideline for course designers, Special Stages should aim to contain a maximum of 20% climbing and at least 80% descending. (Example: 4 vertical meters ascent for every 20 vertical meters descent).

#### 5.02 DIRECTIONS AND COURSE MARKINGS

##### 5.02.01 Course Map

A course map must be produced by the organiser and displayed at registration and in race headquarters. This map may also be published on the event website. Riders are encouraged to study the map and understand the race route before leaving the start.

##### 5.02.02 Guidance Tape

Where two pieces of course tape, on opposite sides of the course, are installed, the riders must pass between them. In these areas, missing, crossing, or passing the course tape on the wrong side will be deemed as course cutting.

##### 5.02.03 Gates

Gates can be used to clearly mark sections of the course that a rider must pass through. Missing a gate will be deemed as course cutting (Article 5.6). See Figure 1 for an example of course taping.

##### 5.02.04 Direction Markers

In areas of open mountainside, an organiser can use a single pole to mark the direction of the route. Riders can pass either side of a single pole. On long road or single-track sections, an

organiser may place small single piece of course tape. These single pieces of tape act purely as directional markers.

### **5.03 RACE FORMAT**

- 5.03.01 A minimum of **3** Special Stages per event.
- 5.03.02 A minimum of **10** minutes total competition time for the fastest rider in the General Classification (accumulation of all Special Stages).
- 5.03.03 A minimum of **2** different courses must be used per event.
- 5.03.04 Individual start times for each Special Stage **should** be provided by the organiser.
- 5.03.05 A minimum of two Special Stages **should** be held in one day.
- 5.03.06 An identical course (Special Stage) **should** not be raced (not including training) more than two times during one race.

### **5.04 PRACTICE**

- 5.04.01 On bike practice must be scheduled by the organiser on all Special Stages before timed competition begins.
- 5.04.02 The course map must be released no earlier than 5 days before each National level event starts (not including practice).

### **5.05 SHUTTLING**

- 5.05.01 The transport of riders between Special Stages by private/team transport (shuttling) is strictly limited to public, open roads during official training. A rider found using a private or team vehicle on a closed/private road or track will be disqualified.
- 5.05.02 During the race, no private/team transport can be used at any time.
- 5.05.03 Any specific details regarding shuttling will be outlined during the rider briefing.

### **5.06 SEEDING**

- 5.06.01 Rider seeding will be based on the following in descending order.
  - a) Current year National Cup ranking
  - b) Local Organiser rankings
  - c) Riders moving from Junior to Senior age categories may be seeded by the PCP for the first round of the current year.

### **5.07 START ORDER**

- 5.07.01 The start order – fastest first or fastest last will be determined by the PCP and communicated in the Race Briefing.
- 5.07.02 In races that follow a fastest first starting order, the Elite women category will be the first category to start the day and will start in order of the lowest to the highest ranking. Therefore, the highest ranked woman will start immediately before the highest rank male rider. A 10 minute interval must be given between women's and men's categories.

### **5.08 START INTERVALS**

- 5.08.01 Start intervals between riders for the top **15** Men and **10** Women must be a minimum of 30 seconds.
- 5.08.02 A 1-minute interval should be added every 10 – 20 riders to allow a clear gap to start riders who have missed their start.
- 5.08.03 All late riders must start, under instructions from the official starter, within each 1-minute gap. There is no fixed start interval between late starters as the goal is to keep late riders racing, without affecting other riders on course. Late starters will receive a fixed penalty (~~See Annexure 4, Technical Regulations – General~~).

### **5.09 RESULT**

- 5.09.01 The General Classification (GC) will be calculated by adding all Special Stage times together for each rider. In the event of unforeseen or extreme circumstances, the race organiser can decide to withdraw a Special Stage (s) from the General Classification.

5.09.02 In the case where Special Stages have had to be cancelled, an event must have a minimum of two complete Special Stages for the result to be deemed valid for the AusCycling ranking.

5.09.03 In the event of a tie in the General Classification, the highest placed rider in the final stage will be awarded the higher final placing.

## **5.10 RIDER EQUIPMENT**

5.10.01 Each rider must be self-sufficient during the entire duration of the race (food stashes are not permitted – see Section 5.14.05). Personal responsibility and self-sufficiency are a large part of the spirit of Enduro racing and riders are encouraged to carry adequate equipment for operating in mountainous environments. Each rider should remember that they are solely responsible for themselves but are urged to help other competitors on course.

5.10.02 It is strongly recommended that all competitors carry:

- Suitable backpack
- Waterproof jacket
- Emergency blanket
- Innertubes/ puncture repair kit
- Multi tool
- Basic, well maintained first aid kit
- Map
- Food and fluids
- Eye protection (glasses or goggles)
- Emergency contacts supplied by organiser

5.10.03 Riders must wear a helmet at all times during competition. In very technical terrain or on courses that feature steep mountainsides or very high-speed trails, the organiser can specify in their particular rules that competitors must wear a full-face helmet (either fixed or detachable).

5.10.04 AusCycling strongly recommends that riders wear the protections as indicated in article 4.00 of the Downhill regulations

5.10.05 For all riders who are eligible to compete in Under 13, 15 and Under 17 categories, the following equipment is mandatory during special stages regardless of registered category entered:

- Full-finger gloves must be worn;
- Full length jersey – jersey must cover elbows at all times;
- Knee pads and elbow pads must be worn.

## **5.11 EQUIPMENT MARKING STICKERS**

5.11.01 Only one frame, fork and one pair of wheels can be used by a competitor during a race. The organiser may elect to mark one or more of the below components with an official seal or marker:

- Fork Crown
- Swingarm / Rear triangle
- Front triangle
- Both wheel rims

5.11.02 Competitor's bikes may be checked for marking at the start of the race and at the finish of every Special Stage. Other random checks of stickered equipment will be carried out throughout the race.

5.11.03 A rider can use unmarked equipment during training unless otherwise stated by the organiser.

5.11.04 Only upon approval of the Commissaires, a rider may replace a frame, fork or wheel.

5.11.05 Following the repair, the rider must return to the Commissaires to have the replacement part(s) re-marked before re-joining the race.

5.11.06 A 5-minute penalty will be awarded to every rider who, having received approval by the Commissaires, replaces the equipment listed above.

5.11.07 Any rider found to have replaced a named/marked part without consent from the Commissaires will be disqualified (DSQ).

## 5.12 MECHANICAL FAILURES

~~Should a rider suffer a mechanical failure such as a flat tyre or broken chain during a special stage, the PCP may at their discretion permit a re-run of that stage for the affected rider. This may incur a time penalty relevant to the length of the stage. All riders granted this dispensation will incur the same time penalty for that stage.~~

A technical assistance zone can be provided by the organiser. Outside technical assistance is only allowed in this area.

Only one frame, one front fork and one pair of wheels can be used by a competitor during a competition. Frame, fork and wheels may be individually marked by the officials before the start of the race and checked at the finish. Broken parts can eventually be replaced upon approval with a 5 min penalty if approved by race official.

## 5.13 RENDERING OF ASSISTANCE

It is expected that riders participating in Enduro events will continue to participate in a way that places the safety of riders above other considerations. As such no person should ever feel penalised or discouraged from stopping to assist another injured rider.

Any rider who comes across an injured rider must stop to render assistance, unless directly indicated by the injured rider that they do not require assistance. They should instruct the next rider to pass to notify the next marshal point of the incident, location, and perceived severity.

All riders who stop to render assistance will either:

~~• Option A: be given the opportunity to re-start their timed run of that special stage or~~

~~• Option B: Be awarded a time for that special stage equal to no more than 10% more than the winning time of that stage in the category they are entered. The decision to permit a re-run, as per Option A, is at the discretion of the President of the Commissaire Panel and must be requested by the competitor. If they do not elect to take this re-run, option b will be used.~~

## 5.14 ENVIRONMENTAL RULES

Enduro mountain bike racing allows us to ride into remote, backcountry areas of natural beauty. It is of the utmost importance that all racers respect their environment and consider the impact they leave behind for the local riding community. The below rules have been put in place to protect our trails and our riding environments.

- 5.14.01 No disposable goggle tear offs can be used.
- 5.14.02 The disposal of food packaging on the trail is strictly prohibited. This will result in disqualification.
- 5.14.03 Repeat offences may warrant a license suspension.
- 5.14.04 Event organisers reserve the right to penalise any rider whose actions are deemed to seriously damage the local environment.
- 5.14.05 Riders must not store food and drinks on the trail (Food Stashes). Packaging left behind and uncontrolled food supplies may have a serious impact on local wildlife and the local environment. Any rider found to be hiding or retrieving foods from unofficial feed stations will be penalised.

## 5.15 RULE VIOLATIONS

The organisers of individual events may define more severe penalties for offences. These must be clearly published prior to the start of the event.

## 5.16 COURSE CUTTING

- 5.16.01 Taking short cuts on course to gain an advantage can both damage the environment and brings the sport and spirit of Enduro mountain biking racing into disrepute. Therefore, any rider trying to save time by choosing a line that lies outside of the defined trail will be disqualified.
- 5.16.02 The race organiser may choose, in exceptional circumstances, to apply a time penalty, not a DSQ to a rider found to have cut the course without intention. However, any rider leaving the obvious line must be aware that they risk a DSQ.

## 5.17 LIAISON STAGE DELAY/MISSED START

- 5.17.01 Riders arriving late to the start must follow the starter's orders and join the course when instructed to do so.

5.17.02 Failure to follow starter's orders will result in a time penalty (See recommended penalties Section 5.20 (PENALTIES)).

5.17.03 Any riders arriving at the start of a Special Stage later than 30 minutes after their specified start time will be disqualified from the race.

## **5.18 ILLEGAL OUTSIDE ASSISTANCE**

5.18.01 Any competitor receiving outside assistance from a non-racer without prior agreement from the Commissaires will be disqualified. This includes using team staff/outside help to carry equipment around the course or perform repairs during the race.

## **5.19 RULE VIOLATION RECORDING**

5.19.01 The PCP is responsible for the application of the rules and has the final say in any decisions.

5.19.02 The organiser can appoint special 'roving marshals' to travel around the course at their own discretion to undisclosed points. These roving marshals can report rule violations to a Commissaires.

5.19.03 Any rule violations must be registered with the Commissaires within 30 minutes of the last competitor finishing the final stage.

## 5.20 INFRINGEMENTS AND PENALTIES

Violation	Penalty
Missed Start	Up to 5 minutes late = 1 minute penalty 5+ minutes late = 5 minute penalty 30+ minutes late = DSQ
Other start violation (example: pushing into queue, delaying start, jumping start etc.)	5 seconds
Not obeying course marking/course Cutting	DSQ
Unintentional course cutting	30 seconds
Illegal Outside Assistance	DSQ
Environmental Disrespect	From 1 minute to DSQ
Illegal shuttling	DSQ
Training outside official times	DSQ
Changing a marked piece of equipment with authorisation	5 minutes
Changing a marked piece of equipment without authorisation	DSQ
Disposal of a goggle Tear Off on the trail	DSQ
Altering the course	DSQ
Missing back or helmet number (where given)	30 seconds
Food stashing / using unauthorised food supplies	5 minutes
Incorrectly wearing helmet on liaison stage	From Warning to DSQ

## **SECTION 6**

### **E-MOUNTAIN BIKE RACING**

#### **6.00 DESCRIPTION**

An E-Mountain Bike is a bike operated with two energy sources, human pedal power and an electric engine, which only provides assistance when the rider is pedalling.

E-Mountain bike events must be organised in accordance with the following bike standards:

- Engine of maximum 250 watts
- Engine assistance up to 25km/h
- Pedalling assistance only, although a start-up assistance not exceeding 6km/h without pedalling is allowed
- Wheel sizes shall be a minimum of 26 inches
- Gearing roll out distance: maximum is 9.0 m
- Bikes must be commercially available and of mid (crank) motor format only

#### **6.01 AGE CATEGORY**

E-Mountain Bike events are open to all riders aged 19 and over and include Masters categories. No separate results must be submitted for the Under 23, Elite or Masters categories.

#### **6.02 EVENTS FORMAT AND CHARACTERISTICS**

E-Mountain Bike events will be organised in the cross-country and Enduro formats only. The characteristics and format of each event will be determined in the technical guide for each event.

#### **6.03 BATTERY**

Riders can only use the battery in place on their bike and cannot carry an additional battery during the competition.

<p style="text-align: center;"><b>SECTION 7</b> <b>APPLICATION OF PENALTIES AND APPEALS</b></p>
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Refer '*AusCycling Technical Regulations – General*' for the application of penalties and appeals processes.



<p><b>SECTION 8</b></p> <p><b>FOUR CROSS RACING / PUMP TRACK / ALPINE SNOW BIKE</b></p>
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*Refer UCI regulations Part IV Mountain Bike*

## Annexure A

### Helmets

The Race Director may choose from helmet requirements from Table 1.

For all GE events riders must always wear a helmet during competition. In very technical terrain or on courses that feature steep mountainsides or very high-speed trails, the organiser can specify in their rules that competitors must wear a full-face helmet. AusCycling strongly recommends that riders wear the protections as indicated in *AusCycling Technical Regulations – General*.

**Table 1: Helmet Options**

	<b>Downhill</b>	<b>Enduro – A Standard</b>	<b>Enduro – B Standard</b>	<b>Cross Country</b>
	All Downhill Events	GE events incorporating very technical terrain OR steep mountainsides OR very high-speed trails.	All other GE events.	All Cross Country events
Special or race stages / Race Course	Full faced helmet meeting AS2063 or equivalent standard.	Full faced helmet meeting AS2063 or equivalent standard with or without detachable mouthpiece.	Any helmet meeting AS2063 will be permitted (terrain dependent).	Any helmet meeting AS2063 will be permitted.
Liaison or non-race stages	N/A	Any helmet meeting AS2063 will be permitted.	Any helmet meeting AS2063 will be permitted.	N/A

## Annexure B

### Signage

The minimum dimensions of directions arrows must be 40 cm by 20 cm and they must not be sited more than 1.5m above the ground.

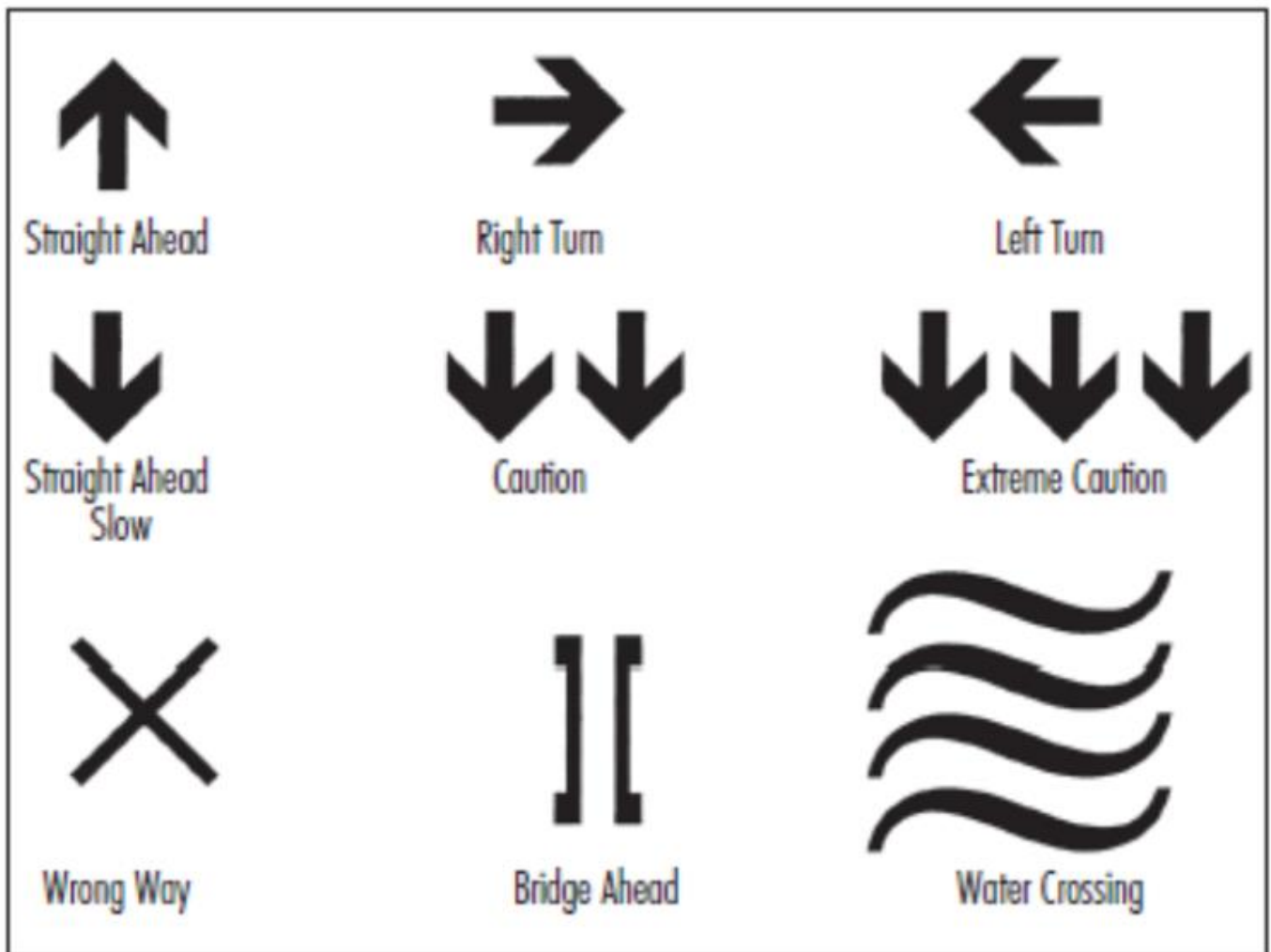
An arrow is located 10m before each junction, at the junction and 10m after the junction to confirm that the correct route has been followed.

In a potentially dangerous situation, one or more arrows pointing downward are placed 10m to 20m before the obstacle or potential danger, and also where the obstacle or potential danger is.

Two arrows pointing downwards are used for a more dangerous situation.

A serious hazard requiring great caution must be marked with three arrows pointing downwards.

*The following signs must be used:*

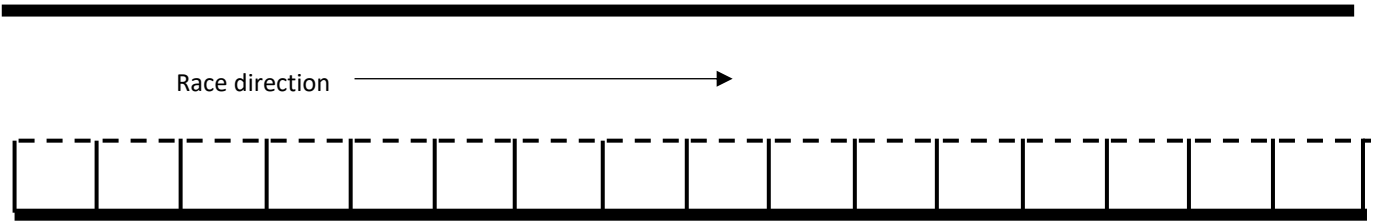


Signage templates can be downloaded from the Clubs section of the AusCycling (MTB) website.

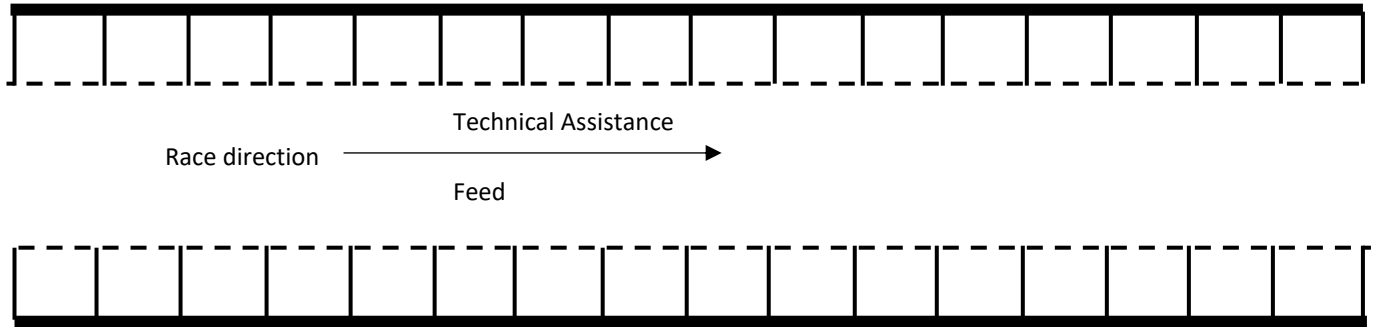
## Annexure C

### Feed and Technical Assistance Zones

**DIAGRAM 1: FEED/TECHNICAL ASSISTANCE ZONE ONE SIDE**



**DIAGRAM 2: FEED/TECHNICAL ASSISTANCE ZONE OPPOSITE SIDES**



**DIAGRAM 3: DOUBLE FEED/TECHNICAL ASSISTANCE ZONE**

