

(Draft C)

**COMPETITION RULES
FOR
IRISH ORIENTEERING ASSOCIATION
TRAIL ORIENTEERING EVENTS**

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1. GENERAL

1.1. Basic Characteristics of Trail Orienteering

1.1.1. Trail Orienteering is a sport involving map and terrain interpretation. Competitors visit control points marked in the terrain in a set sequence. Using the map provided, with aid of a compass, they choose which of a number of markers represents the one in the centre of a printed circle as defined by the control description. This decision must be recorded.

1.1.2. The mode of movement may be:

- on foot
- by wheelchair, either manual or electric
- on bicycle, tricycle or handcycle
- other modes, any recognised mobility aid.

No combustion-engined vehicle, nor any battery driven vehicle designed for more than one occupant is permissible.

1.1.3. Competitors take part singly and independently, unless entered as groups in events that permit such entry.

1.2. Definition of Terms

1.2.1. "Trail-O" means "Trail Orienteering".

1.2.2. "IOF" means the "International Orienteering Federation".

1.2.3. "IOA" means the "Irish Orienteering Association".

1.2.4. "Organising body" means the club or constituent association that has accepted the responsibility for organising the event.

1.2.5. "Participant" means an individual or group undertaking a Trail-O event.

1.2.6. "Competitive" applies to a participant whose result is used to determine the final position of all competitors in the results.

1.2.7. "Non-competitive" applies to a participant whose result is not used to determine the final position of competitors in the results.

1.2.8. "TUE" refers to "Therapeutic Use Exemption".

1.2.9. "ISOM2000" means "International Specification for Orienteering Maps – IOF 2000".

1.3. Applicability

1.3.1. These rules shall apply to all Trail-O events held by IOA and all affiliated organising bodies, unless the event is organised in whole or in part under IOF rules. In the latter case these rules shall apply to that part to which IOF rules do not apply.

1.3.2. These rules shall be binding on all participants and their guests, team officials and all other persons connected with the organisation or in contact with the participants. Participants, whether or not members of IOA, who take part in events to which these rules apply shall be deemed to have accepted them.

1.3.3. A competitor who is demonstrated to have broken any rule shall be disqualified unless there are sufficient extenuating circumstances.

1.3.4. A non-competitor who is demonstrated to have broken any rule shall be liable to disciplinary action.

1.3.5. The Organiser may vary or supplement existing rules to meet particular local requirements, subject to approval from the Controller. The Organiser shall ensure that due notification is given to participants of any agreed rule variations or additions.

1.3.6. Ignorance of these rules, or of any other instructions issued by the Organiser whether with pre-event information, prominently displayed at the event or by any other reasonable means, shall not be accepted as a satisfactory explanation for any infringement.

1.4. Interpretation

1.4.1. The word "shall" is to be treated as a command in all circumstances.

1.4.2. The word “should” is a recommendation that participants and officials will endeavour to comply with.

1.4.3. Any dispute as to the interpretation of these rules shall be decided by [IOA-specific text].

1.5. Fairness

1.5.1. All participants in a Trail-O event shall behave with fairness and good fellowship, including interpretation of these rules. They shall have a sporting attitude and a spirit of friendship.

1.5.2. Competitors shall show respect for each other. Wheelchair users shall have priority to the side of the track nearest to the controls and access to decision points in front of ambulant participants.

1.5.3. Participants shall be as quiet as possible in the terrain.

1.5.4. Competitors shall not seek to obtain technical assistance from other competitors or escorts, or provide such assistance to other competitors during a competition. However, it is the duty of all competitors to help any injured participant, or anyone with physical need in the case of an accident.

1.5.5. It is forbidden for a competitor to indulge in any form of drug abuse. IOA Drug Control Rules as set out in [IOA-specific text (Doping Control)] shall be regarded as forming part of these rules. The Organiser may require information on prescribed medication and evidence of TUE (therapeutic use exemption).

1.5.6. Competitors taking part in any event under these rules are deemed to accept the testing procedures, disciplinary procedures and penalties set out in [IOA-specific text] with regard to commission of a doping offence.

1.5.7. The Organiser, with the consent of the Controller, may decide to publish the venue of the competition in advance. If the venue is not made public, all officials shall maintain strict secrecy about the competition area and terrain. In any case, strict secrecy about the courses must be kept.

1.5.8. Competitors shall not attempt to survey or train in the competition terrain. Competitors shall not attempt to gain any information related to the courses, beyond that provided by the Organiser, before and during the competition.

1.5.9. The Organiser shall bar from the competition any competitor who is so well acquainted with the terrain or the map, that the competitor would have a substantial advantage over other competitors. In case of doubt, the matter shall be decided by the Controller.

1.5.10. Team officials, competitors, media representatives and spectators shall remain in the areas assigned to them.

1.5.11. Officials and others (e.g. escorts, media representatives) in the terrain shall neither disturb nor assist competitors, other than with legitimate physical assistance over difficult sections.

1.5.12. Having crossed the finish line, a competitor shall not re-enter the competition terrain without the permission of the Organiser. A participant who retires shall announce this at the finish immediately and hand in the map and control card and shall in no way influence the competition nor help other competitors.

1.6. Respect for Property and the Public

1.6.1. Nothing shall be done to prejudice the goodwill of landowners, their tenants or agents. Participants and officials shall comply with all requests made by such persons or notified to them by the Organiser.

1.6.2. Participants and officials shall make every effort to ensure that no damage is done to the environment, and shall co-operate wherever possible with those statutorily responsible for environmental conservation.

1.6.3. The existence of an orienteering map does not in itself give the right of access to any area for orienteering or any other purpose.

1.6.4. Prior to the date of the event the Organiser shall obtain full permission for access (preferably in writing) from the landowners to any land likely to be used in the event.

- 1.6.5. Participants shall not enter “out of bounds” areas.
- 1.6.6. Participants shall take care to avoid doing any damage, and shall report to a responsible official any damage done or seen to be done.
- 1.6.7. Respect and consideration shall be shown to all members of the public in or near the competition area.
- 1.6.8. Participants and officials and participants shall comply, so far as is reasonably possible, with the guidance given in [IOA-specific (Environmental Good Practice)].
- 1.6.9. There shall be no smoking in the competition area.
- 1.6.10. Dogs shall not be permitted in the event area except where, and under what conditions, indicated by the Organiser.

1.7. Participation

- 1.7.1. All participants in any event to which these rules apply shall take part entirely at their own risk. Participants shall take into account their own ability to compete safely.
- 1.7.2. Each participant, who because of their disability requires physical assistance shall be accompanied by an able-bodied escort who, during the competition, will assist any competitor allotted by the Organiser. Additionally, the Controller may agree to participants being accompanied by their own medical attendant or, for those with restricted communication, an ‘interpreter’ familiar with their speech, such additional accompanying people having their back to the competition area at all control sites and not assisting in any way with the map reading, control site identification, analysis or selection process. The Organiser may agree to provide escorts during the competition period only. No escort shall disturb the concentration of any competitor.

1.8. Event Safety

- 1.9. All participants who start an event shall report to the finish, whether or not they have completed their course.
- 1.10. The Organiser shall ensure that reasonable first aid is easily available.
- 1.11. The Organiser shall take responsibility for deciding what action should be taken in exceptional circumstances such as adverse weather conditions, loss of car park, etc. It must be borne in mind that Trail-O participants are relatively inactive during an event but, conversely, are capable of wearing much more warm and waterproof clothing than a Foot-O competitor.
- 1.12. The Planner shall take responsibility for all safety aspects of the course planning, including wheelchair accessibility.

2. OFFICIALS

2.1. Organiser

- 2.1.1. The organising body shall appoint an Organiser who shall take responsibility for the organisation (or cancellation) of the event in accordance with these Rules.
- 2.1.2. The Organiser shall ensure that all the necessary officials are appointed.

2.2. Planner

- 2.2.1. The Planner shall plan the courses in accordance with these rules.
- 2.2.2. The Planner shall be responsible for:
 - Preparing the overprinted or master maps
 - Preparing the control description lists
 - Preparing the map corrections, if needed
 - The correct placement of the control flags and decision markers in the competition area

2.3. Controller

- 2.3.1. The Controller shall be responsible for confirming that the event is organised fairly and safely in accordance with these rules.

- 2.3.2. A Controller who becomes aware that any breach of these rules has occurred, or is likely to occur, shall take whatever action considered necessary.
- 2.3.3. The Controller may require the Organiser to cancel the event if necessary.
- 2.3.4. The Controller's decision in all matters shall be final, with the exception of those referred to a Jury.

3. THE COMPETITOR

- 3.1. The choice of clothing and footwear shall be free.
- 3.2. Competitors shall wear any numbers provided, in the position and manner specified by the Organiser. The name of any sponsor shown on the number shall not be obliterated.
- 3.3. Only the map and control descriptions provided by the Organiser shall be used during the event.
- 3.4. The use of any mechanical or electronic aids, other than compass, odometer and watch, is prohibited.

4. THE MAP, COURSE MARKINGS AND CONTROL DESCRIPTIONS

- 4.1. Maps, course markings and additional overprinting should be drawn according to ISOM2000, with particular reference to Section 7 "Map Specification for Trail Orienteering".
- 4.2. The map scale should be 1:5000.
- 4.3. All maps for a competition, including those for timed controls, shall use the same scale.
- 4.4. Any deviations from ISOM2000, including any "special feature" map symbols, or map symbols that are additional to or different from those defined in ISOM2000, shall be notified and fully described in pre-event information made available to all competitors.
- 4.5. Errors on the map and changes which have occurred in the terrain since the map was printed shall be corrected on the map if they have a bearing on the event.
- 4.6. The control descriptions shall be in symbolic form in accordance with "International Specification for Control Descriptions – IOF 2004" with particular reference to the section "Specifications for Trail Orienteering".
- 4.7. The control descriptions, given in the same order as the course markings, shall be fixed to or printed on the front side of the competition map.
- 4.8. For each control, the control description shall correctly define the location represented by the centre of the corresponding control circle on the map.

5. THE EVENT

5.1. Registration

- 5.1.1. Any event to which these Rules apply shall be registered with the National Fixtures Secretary.

5.2. Financial Responsibility

- 5.2.1. For all events to which these rules apply the organising body shall take financial responsibility.
- 5.2.2. For all events to which these rules apply the Organiser or a person appointed by the organising body shall keep accounts of all income and expenditure.

5.3. Classes

- 5.3.1. All competitors, regardless of sex, age or physical ability participate on the same course.
- 5.3.2. Classes provided (e.g. open, closed, visitor, novice) shall not be based on sex, age or physical disability except as defined in §5.3.3.
- 5.3.3. Competitors who have some permanent physical disability (including hidden disabilities) that gives a significant disadvantage in Foot Orienteering competition may compete in a Paralympic Class, if provided, in addition to any other class for which they are eligible.

Such competitors may be required to provide evidence of TUE.

5.4. Eligibility

- 5.4.1. Any person may compete in any event to which these rules apply, subject to any eligibility restrictions imposed by the nature of the event.

5.5. Entry

- 5.5.1. The Organiser shall have discretion to refuse or revoke an entry.
- 5.5.2. At no event shall a competitor take part under an assumed name.
- 5.5.3. An entry to an event may only be assigned to another competitor with the agreement of the Organiser.

5.6. The Start

- 5.6.1. A minimum start interval of two minutes shall be maintained between competitors.
- 5.6.2. A competitor's start time shall be recorded on their control card.
- 5.6.3. A competitor shall not receive their map before their start time.
- 5.6.4. The competitor shall be responsible for ensuring that they have the correct map.
- 5.6.5. The point where orienteering begins shall be shown on the map. If this is not at the start point it shall be indicated in the terrain by a marker.

5.7. The Terrain

- 5.7.1. The terrain shall be suitable for setting competitive Trail-O courses of the appropriate standard.
- 5.7.2. The terrain shall be chosen so that the least mobile competitor, the person confined to and propelling a low fixed wheelchair and the person who walks slowly and with difficulty, can negotiate the course within the maximum time limit, using official assistance where provided.
- 5.7.3. All terrain off the tracks and marked routes in the competition area shall be out-of-bounds. Any additional areas or forbidden routes shall be described in the information and marked on the map and may be marked on the ground. Competitors shall not enter such areas.

5.8. The Control Site

- 5.8.1. The control point given on the map shall be clearly marked in the terrain by a cluster of markers in the vicinity of the circle.
- 5.8.2. Markers shall be three sided with each side vertical and 30cm square, divided diagonally bottom left to top right, the top left half being white and the bottom right half being orange (preferably PMS 165).
- 5.8.3. The markers in any one cluster shall be at a standard height.
- 5.8.4. Each cluster of markers shall be associated with a decision point, which shall be marked on the route and shall not be shown on the map. In the event of more than one course being in place the decision point marker shall indicate the courses to which it is relevant.
- 5.8.5. All markers in a cluster shall be visible from the associated decision point for all competitors. Visible shall be taken to mean at least one third of the marker can be seen.
- 5.8.6. Designation of markers in a cluster shall be by reference to the decision point, the leftmost being "A", next "B", etc.
- 5.8.7. The designation of the markers in a cluster shall not change when viewed from within an area of one metre square centred upon the decision point.

5.9. Timed Controls

- 5.9.1. A number of controls where the decision time is recorded should be included on the course. These may be located at any part of the course, including before the official start or after a pre-finish. A separate, specially prepared map is used for each time control.

- 5.9.2. Information as to the exact location of timed controls should not be shown on the competitor's map.
- 5.9.3. At timed controls the competitor shall be seated in a position so that all the control markers are visible and their locations confirmed. The correctly orientated section of the map showing the relevant area only, a prominent north line and the circle, with the control description, in the correct orientation for reading, above the circle shall be handed to, or placed for, the competitor as timing begins.
- 5.9.4. The competitor shall be advised when 50 seconds has elapsed.
- 5.9.5. At timed controls timing is stopped when a clear answer is indicated. This may be either by the use of a pointing board or orally using the International Phonetic Alphabet (Alpha, Bravo, Charlie, Delta, or Echo). The Planner shall not set a None/Zero answer.
- 5.9.6. At timed controls a maximum of one minute is allowed. Both time and answer are recorded.
- 5.9.7. There should be two timekeepers with the times from both recorded. The times shall be rounded down to whole seconds.

5.10. Decision Recording

- 5.10.1. Each competitor shall be issued with a means of recording their decision at each control.
- 5.10.2. Competitors shall record their decisions in the order prescribed by the control description list.
- 5.10.3. Competitors shall indicate their decision by reference to the marker designation, leftmost being "A", etc. Facility shall be provided to indicate that their decision is that none of the markers is correctly placed – the "Z" (zero) option.
- 5.10.4. A decision, once recorded, shall not be changed.
- 5.10.5. The recording of more than one decision for a control shall be deemed to be an incorrect decision.
- 5.10.6. A facility shall be provided for competitors to retain a copy of their decisions.

5.11. Finish and Timekeeping

- 5.11.1. The competition shall end for a competitor upon crossing the finish line.
- 5.11.2. The time of travel between the start and finish, within a defined maximum, is irrelevant to the competition result.
- 5.11.3. The finishing time may be measured either when the competitor crosses a pre-finish line, or at the finish line. Times shall be rounded down to whole seconds.
- 5.11.4. The exact position of the finish line shall be obvious to approaching competitors.
- 5.11.5. When a competitor has crossed the finish line, the competitor shall hand in their record of decisions and, if so required by the Organiser, the competition map.
- 5.11.6. The organiser shall set a maximum time for each course, normally 2 - 2.5 hours.
- 5.11.7. Any delays to the competitor, at any point along the route, that are not the competitor's fault shall be recorded and deducted from the competitor's finishing time.

5.12. Scoring

- 5.12.1. Each correctly identified control (including Timed Controls) scores one point.
- 5.12.2. At the Timed Controls a correct answer scores one point in 0-60 seconds, times being rounded down to whole seconds. A wrong answer scores no points and a penalty of 60 seconds which is added to the time taken to answer. No answer in the time, scores no points and 120 seconds penalty.
- 5.12.3. The average of the two recorded times at each timed control is calculated with half seconds preserved.
- 5.12.4. The recorded times for all timed controls in any one competition are cumulative. Total times should show half seconds.

- 5.12.5. If, after taking into account any recorded delay, the competitor has exceeded the time limit a penalty will be incurred. This shall be a deduction of one point for any part of each five minute unit.
- 5.12.6. Competitors are ranked according to their points scores, with competitors on equal points being ranked according to their accumulated times at the timed controls.
- 5.12.7. Two or more competitors having the same score and time at the timed controls shall be given the same placing in the results list. The position(s) following the tie shall remain vacant.
- 5.12.8. Any control that is deemed to be unfair and voided by the Controller, shall be deleted from the competition for all.
- 5.12.9. The official results shall include all competitors.

6. COMPLAINTS, PROTESTS AND APPEALS

6.1. Complaints

- 6.1.1. Any competitor may lodge a “complaint” with regard to any competitor or any aspect of the organisation or planning thought to have materially contravened these rules or other instructions issued by the Organiser.
- 6.1.2. A complaint shall be made to the Organiser. It may be made orally or in writing.
- 6.1.3. There is no fee for a complaint.
- 6.1.4. The Organiser shall be the adjudicator of complaints. The Organiser may need to consult with other members of the organising team before reaching a decision.

6.2. The Jury

- 6.2.1. The jury shall be appointed to rule on protests. It shall be constituted and act in accordance with [IOA-specific text on juries].

6.3. Protests

- 6.3.1. A “protest” can only be made against the Organiser’s decision with regard to a complaint.
- 6.3.2. A protest shall be made to the Controller, in writing, [IOA-specific text on fee].
- 6.3.3. Any protest shall be made as soon as possible after the Organiser’s decision on the related complaint. If such protest concerns a matter arising from the publication of the final results, a postal protest may be made within 21 days of the results being published.
- 6.3.4. On receipt of a protest the Controller shall notify the Organiser. If they agree with the protest they shall take the appropriate action. If they do not agree with the protest they shall convene the Jury, or in the case of a postal protest, notify the Jury members of the protest together with any other relevant information.
- 6.3.5. The Jury shall deal with any protest, referred to them, in the appropriate manner.
- 6.3.6. The Jury shall meet as soon as possible after receipt of a protest except in the case of a postal protest when they should consult together as they see fit and notify the Organiser as soon as possible.

6.4. Appeals

- 6.4.1. An “appeal” can be made against the Jury’s decision with regard to a protest.
- 6.4.2. All appeals shall be made within fourteen days of the decision of the Jury being announced or communicated to the persons making the protest.
- 6.4.3. The appeal shall be made to [IOA-specific text].
- 6.4.4. The appeal shall be heard and decided by the appeal body at the earliest opportunity.
- 6.4.5. The decision of the appeal body shall be final.

6.5. Bye-Laws

- 6.5.1. If the Organiser, Controller or Jury consider that the sport has been brought into disrepute they shall bring the matter to the attention of the Chairman of the Irish Orienteering Association for consideration of action under the Bye-Laws.

APPENDIX 1: PRINCIPLES OF COURSE PLANNING FOR TRAIL ORIENTEERING

A1.1. Introduction

A1.1.1. Purpose

These principles aim to establish a common standard for the planning of TrailO courses in order to ensure fairness in competition for people with widely differing physical abilities.

A1.1.2. Application of these principles

Courses in all international trail orienteering events must be planned in accordance with these principles. They should also serve as general guidelines for the planning of other competitive TrailO events.

Developed for those unable to run in rough terrain, the need for speed is replaced by the need to relate the map to the terrain.

A1.2. Basic principles

A1.2.1. Definition of Trail Orienteering

TrailO is a sport in which competitors follow a navigable route passing a number of decision points marked on the ground, in a set sequence. At each point they interpret the map to choose which, if any, of a number of control markers in a cluster in the terrain represents the one in the centre of the printed circle as defined by the control description.

Mappers, Planners and Controllers of major Foot Orienteering competitions have, in effect, experienced TrailO in preparing for such events. TrailO takes these skills and makes them into a formal competition.

A1.2.2. Aim of good course planning

The aim of course planning is to offer competitors courses correctly designed for their expected abilities. Results must reflect the competitors' technical ability, a winner should have a minimum of 80% correct.

A1.2.3. Course planner's golden rules

The course planner must keep the following principles in mind:

- the unique character of TrailO as map interpretation
- the fairness of the competition
- competitor enjoyment
- to work closely with other officials
- to achieve integration with other orienteering disciplines
- the protection of wildlife and the environment
- the needs of the media and spectators.

A1.2.3.1. Unique character

Every sport has its own character. The unique character of TrailO is to interpret the map and relate it to unknown terrain. This demands orienteering skills: accurate map reading, compass handling, concentration under stress, quick decision making, interpretation of natural terrain, and distance judgement.

A1.2.3.2. Fairness

Fairness is a basic requirement in competitive sport. Unless the greatest care is taken at each step of course planning and course setting, luck can easily become significant in TrailO competitions. The course planner must consider all such factors to ensure that the contest is fair and that all competitors face the same conditions on every part of the course.

A1.2.3.3. Competitor enjoyment

The popularity of orienteering can only be enhanced if competitors are satisfied with the courses they are given. Careful course planning is therefore necessary to ensure that courses are appropriate in terms of length, physical and technical difficulty, control siting, etc. In this respect it is particularly important that each course is suitable for the competitors doing that course, whatever their physical ability.

A1.2.3.4. Close co-operation of officials

The Planner must work closely with the Mapper and Controller. As such a degree of integration is required it is recommended that the mapping, planning and controlling is best carried out on site at the same time. Communication with the Organiser too needs to be increased due to the higher 'in the forest' involvement.

A1.2.3.5. Integration with other orienteering disciplines

The enjoyment of the competitors is greatly enhanced when the Trail O competition is associated with a Foot Orienteering event. Co-operation between the Planners of the different courses can ensure that no conflict of interest occurs and that all competitors are informed of the others' presence. Blue tapes can be added to the Trail O control markers to alert any lost foot orienteers that they are in the wrong place.

A1.2.3.6. Wildlife and the environment

The environment is sensitive: wildlife may be disturbed and the ground as well as the vegetation may suffer from overuse. The environment also includes people living in the competition area, walls, fences, cultivated land, buildings and other constructions, etc.

It is usually possible to find ways to avoid interference with the most sensitive areas without damage. Experience and research have shown that even large events can be organised in sensitive areas without permanent damage if the correct precautions are taken and the courses are well planned.

It is very important that the course planner ensures that there is access to the chosen terrain and that any sensitive areas in the terrain are discovered in advance.

A1.2.3.7. Media and spectators

The need to give a good public image of the sport of orienteering should be a permanent concern for a course planner. The course planner should endeavour to offer spectators and the press the possibility to follow as closely as possible the progress of a competition without compromising sporting fairness.

A1.3. The TrailO course

A1.3.1. Terrain

The terrain must be chosen so that the least mobile competitors, the person confined to and propelling a low fixed wheelchair and the person who walks slowly and with difficulty, can negotiate the course within the maximum time limit with ease.

Consideration must be given to the condition of the route to be followed and any route that is not accessible to all without a viable alternative must be banned to all. For example a path with steps or a fallen tree, would not be passable by the majority of wheelchair users, but if an alternative parallel route is available the competitor may be left to choose. Paths must be checked for excessive mud, sand, roots and rocks, and built up if necessary to give a reasonably free surface for all.

In general the acceptable path width is 1m, (some plants may encroach on short sections but hands could be badly scratched by thorns or stung by nettles and these plants must be removed) however, it is essential that there is space for all possible wheelchairs/handcycles. They must be able to pass and to manoeuvre at control sites and if necessary areas of up to 3m wide must be created at intervals. Any unsuitable path can be indicated as out of bounds on the map, by overprinting hatching or crosses and/or, in the terrain by indicative tapes. In either case they must be observed by all competitors.

The maximum slope for unassisted wheelchairs is 14% for no more than 20 metres. The cross slope should be no more than 8%. Any route exceeding these limits must have assistants positioned to give help. The use of ropes, pulleys and a spare wheelchair for ambulant competitors unable to negotiate steep sections should be considered.

The course planner should be fully acquainted with the terrain before he or she plans to use any control site or route.

The Planner should also be aware that on the day of the competition the conditions regarding map and terrain could be different from those which exist at the time the courses are planned.

A1.3.2. The start

The start area should be so situated and organised that:

- there is a waiting area
- waiting competitors cannot see the detail of any control clusters

The point from which orienteering begins is marked in the terrain by a control marker and on the map by a triangle.

A1.3.3. The course

The problems are the most important elements of a TrailO course and will largely determine its quality.

Good ones offer competitors interesting map-reading challenges.

Within the same course different types of problem should be offered.

It is preferable for a course to have a few (not less than 10) very good sites rather than a larger number of lesser quality ones.

A1.3.4. The Controls

Control markers are placed on features in the terrain that are marked on the map and visible from the route to be followed. The decision points must be visited by the competitors in the given order

It is particularly important that the map portrays the ground accurately in the vicinity of the controls, and that the direction and distances from all possible angles of visibility are correct, including that behind the competitor.

A1.3.4.1. Decision points

Decision points will be marked in the terrain, but not shown on the map.

No competitor must be tempted forward of this marker towards the control cluster, if deemed necessary tapes should be placed in the terrain.

Ambulant competitors must not be able to get closer to the marker than wheelchair users, nor should they be able to get a better view by climbing any feature behind the decision point. Such a feature should be taped off as out of bounds to enforce the rules.

A1.3.4.2. Timed controls

Two or three timed controls where the decision time is recorded should be included in the competition. No control circle giving information as to the location of these should be on the competitor's map. Additionally, all detail of the area in the vicinity of these controls should be removed from the map if they are located along the competition route.

Ideally for Elite level experienced competitors, this should be organised at the beginning or end of the competition, outside the maximum time allowance.

A1.3.4.3. The control marker

The control equipment must be in accordance with the rules for IOF events.

The position of all markers in the cluster must be carefully planned. It is not acceptable to choose the one in the centre of the circle and then just place the others randomly in the vicinity.

A control marker should be placed in such a manner that competitors can see at least one third of it.

In the terrain the markers must be hung at a standard height (the bottom of the marker at 0.5m is suggested) to show the ground shape as depicted on the map.

When hung, the Planner and Controller must be in complete agreement as to which of the markers is in the circle centre, and fits the control description. If there is any doubt as to which of the number of markers is correct, consensus must be obtained by moving one, or more, marker(s).

A1.3.4.4. Fairness of control sites

The control cluster must be equally visible for those sitting low on the ground (0.8m) or standing (up to 2.2m) and not obscured by vegetation. Planners should assess the site by getting down to ground level.

As a general rule the relative positions of the markers must not change when viewed from within a window, 1m x 1m, round the decision point post. The answer must remain the same when taking a step either side of the post and one pace backwards to allow for the positioning of wheelchairs.

Checks must be made on the effect on visibility of sun or rain at the same time of day as the competition is to be held. At timed controls it is essential for all the markers to be visible without movement along the track, but at others movement may be necessary to see all the markers. Indeed it may be essential to solve the problem.

A1.3.4.5. Proximity of controls

The markers for different clusters placed too close to one another can mislead competitors and should be separated by tape.

There is no defined separation distance for control markers. However control markers must be placed so that there is no possibility of two, or more, having the same description unless there are distinct parallel features in close proximity. This may occur when there are two boulders really close in the terrain but only one is big enough to be shown on the map. Also, along a linear feature when some supporting feature on the map is of equal importance in the decision making.

A1.3.4.6. The control description

The position of the control with respect to the feature shown on the map is defined by the control description.

The exact control feature on the ground, and the point marked on the map, must be indisputable. Controls which cannot be clearly and easily defined by the IOF control symbols are usually not suitable and should be avoided.

Control descriptions should not give superfluous information.

In Column B the number of control markers in any cluster will be indicated by letters (e.g. A-C for 3 markers).

An arrow in column H shall indicate the direction to view the control cluster [An arrow pointing north indicates that the competitor shall view the control cluster to their north and therefore travel on a route to the south of the circle].

A1.3.5. The finish

At least the last part of the route to the finish line should be a compulsory marked route.

A1.3.6. The degree of difficulty

For any terrain and map, a course planner can plan courses with a wide range of difficulty.

With attention to the positioning of the control markers in a cluster and the decision point, courses of differing standard can be set.

Attention should be paid to the competitors' expected skill, experience and ability to read or understand the fine detail of the map. It is particularly important to get the level of difficulty right when planning courses for novices and children.

A1.4. The course planner

The person responsible for course planning must have an understanding and appreciation of the qualities of a good course gained from personal experience. He or she must also be

familiar with the theory of course planning and appreciate the special requirements when dealing with competitors with widely differing mobility.

The course planner must be able to assess, on site, the various factors which can affect the competition, such as the conditions of the terrain, the quality of the map, the presence of participants and spectators, etc.

The course planner is responsible for the courses and the running of the competition between the start and the finish line. Because of the numerous opportunities for error which could have serious consequences with TrailO it is best that the planning, mapping and controlling are carried out on site at the same time, ideally when vegetation is low. Essential pruning for improved visibility and access can be carried out in the days prior to the competition.

The course must be incorporated into the map prior to printing. Circles should be 6mm and the centering must be to 0.2mm or better to allow for the placing of a marker to within 1m or better in the terrain. With a map scale of 1:5000 the symbol dimensions are 100% greater than for 1:15,000 foot O maps.

A1.5. Additional information and examples

Much additional information applicable to all Officials and Competitors involved in TrailO competitions can be found on the website **www.trailo.org**