

## APPENDIX E: MAPS AND MAP REGISTRATION

(Replaced Appendix 3: Registration of Orienteering Maps in the 2002 version of the Rules in June 2013)

### AE.1 THE ORIENTEERING MAP

#### AE.1.1 GENERAL

The quality of the competition map is very important to the overall experience and enjoyment of the sport of orienteering. It is essential therefore that all maps accurately and consistently reflect the terrain in which the orienteering competition takes place. An accurate and consistent map will afford the planner the opportunity to set challenging and fair courses and from the competitors' point of view an accurate and legible map is a reliable guide to route choice to suit their navigational skill and physical ability.

#### AE.1.2 SPECIFICATION

Any orienteering map used for a competition shall comply with the relevant International Specification for Orienteering Maps published by the International Orienteering Federation (IOF). International specifications have been produced for Foot Orienteering maps (ISOM) and for Sprint Orienteering maps (ISSOM) and are available to download from the IOF website.

The most up-to-date version of the IOF specification should be used. Some minor deviations as outlined in this Appendix may be necessary to improve the overall quality of the map. Examples of such deviation would relate to the use of special symbols, the scale of the map and the printing method used. Where symbols differ from or are additional to those specified, these shall be clearly shown on the map and notified in the pre-event details.

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### AE.1.3 MAP SCALE

The map scale should be suitable for the competition type and the terrain. Recommendations on suitable scales are contained in the ISOM and ISSOM. In general, terrain that cannot be legibly presented at a scale of 1:10,000 may not be suitable for Foot Orienteering. The ISOM recommends a scale of 1:15,000 for elite championship competitions. However a scale of 1:10,000 or 1:7,500 may be necessary on very detailed or complex terrain. Sprint Orienteering maps, by the nature of the terrain that is most suited for this type of orienteering, need to be at a scale of 1:5,000 or 1:4,000.

While the mapper (i.e. the person or persons responsible for producing the map) may decide on an optimum scale for an orienteering map, the competition planner and controller must be satisfied that the map and map scale are suitable for competition purposes. It is likely that for some competitions, a number of different maps scales may be necessary, and where 1:15,000 maps are used for a foot orienteering competition, 1:10,000 or 1:7,500 scale maps will be required for senior and junior classes.

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### AE.1.4 MAP SIZE AND LAYOUT

The area of the terrain covered, the map scale, and course configuration and length will determine the size of the finished map. However, for ease of handling by the competitor, orienteering maps should in general not exceed A3 size to International Standard (ISO) 216, and in many cases A4 size should be sufficient.

Where possible, the layout of the map should include a map legend. This is particularly desirable for junior or novice competitors who may not be fully familiar with the ISOM symbols and colours. The legend should include the principal symbols and colour screens along with a description of any special symbols used.

The orienteering map should be oriented in such a way that the competitor can easily determine the North-South direction. For this purpose the map must contain magnetic north lines at the ISOM recommended spacing. In general, the sides of the map should be parallel to the magnetic north lines. However, in some instances, it may be desirable to orient the map other than to magnetic North. The magnetic grid lines and north direction arrows shall always be clearly shown. For national and regional championships (Category C2 events) the map orientation should always coincide with the magnetic north direction.

The map layout should allow for sufficient space to show the course control descriptions, without obscuring any detail essential to the competitor in navigation or route selection and preferably without obscuring the map legend.

The scale of the map and the contour interval should be clearly indicated. The map may also include additional information such as place names, and any other relevant information. It should include the name of the map and the Club, together with the date first printed and used for an orienteering competition, and the date of the latest update. The location of the main access point should be clearly identified by reference to the Irish National Grid (Refer to Rule R7.8).

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#### AE.1.5 MAP PRINTING AND PROTECTION

Orienteering maps should be printed on good, and preferably water resistant, paper, having a weight of 100-120 g/m<sup>2</sup>. The orienteer expects the map to be reasonably durable and that it will remain intact and legible for the duration of the competition. While water resistant paper or enclosure of the map in transparent plastic will provide a good degree of protection against adverse weather conditions, the competitor is also required to take reasonable precautions to maintain the integrity and legibility of the map.

In all cases, and as far as is reasonably practicable, the finished map should possess the colour quality, sharpness and clarity required to enable the orienteer to read and interpret the map, and thereby the terrain, at competition speed.

Printing techniques have improved considerably in recent years and it is now possible to produce high quality maps in relatively small quantities, at reasonable cost. It is now normal to professionally print the course maps for competitions. The previous practice of course overprinting is now largely redundant.

The ISOM specifies colours and colour screens (density of lines or dots) for the finished map. These can best be achieved by traditional spot printing. However it may not be practical or cost effective to use this printing method for most competitions.

Four-colour offset printing (CMYK) may be an option but it is more likely that laser printing will provide the best solution, particularly where there are a large number of courses, many with very few competitors. Inkjet printing may also be considered, particularly for club training events, but the results may be less satisfactory and the map will always need to be protected from moisture.

While it is possible to produce high quality colour prints using home equipment, it is generally advisable to use the services of a reputable commercial printer who has experience of the specific print requirements for orienteering maps. While printing waiting times have been reduced considerably, sufficient time should be allowed to enable the maps to be checked prior to the competition and for any errors to be rectified.

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#### AE.1.6 FILE MANAGEMENT

As maps are updated and printed for each orienteering competition, it is important that clubs should have a robust map file management system. In order to keep track of map changes, a central system for maintaining electronic map and event files is recommended. As many events use a combination of map sizes and scales, it is important to update a master file for the area with all the latest changes that have been made. This is particularly critical where a “partial” map file has been generated for an event and where changes were necessary; these changes are transferred to the master file for future reference.

It is recommended that a file naming convention be adopted that will facilitate tracking and it is suggested that the map file name should contain the area name along with the revision date. It is also recommended that the event planning and map files be archived separately for future reference, and that a file backup system be in place to reduce the risk of loss of data. Electronic map files may also need to be protected against unauthorised copying and any potential breaches of copyright.

## AE.2 COURSE MARKING AND CONTROL DESCRIPTIONS

### AE.2.1 COURSE MARKING

Courses shall be printed on the finished map in accordance with the requirements of the ISOM or ISSOM referred to above. The course identification shall be clearly visible on the front of the map to avoid the possibility of the competitor taking or being given the incorrect course map.

The starting point of the course shall be marked by an equilateral triangle of side 7-mm that should point to the first control. The centre of a circle of 6 mm diameter on the map shall depict the site of each control. This circle should be broken, as necessary, to avoid obscuring important detail. The control feature, as described in the control descriptions, shall correspond to the feature depicted on the map and shall be shown exactly in the centre of the circle. The position of the Finish shall be shown as the centre of two concentric circles 5 mm and 7 mm in diameter.

The start and finish locations, each control to be visited, and the control numbers shall be clearly marked on the map in purple. If the controls are to be visited in a prescribed order straight purple lines shall join the control points, and these lines should be broken as necessary to avoid obscuring important detail on the map. The lines shall also be diverted to avoid any “out-of-bounds” areas or other features that should not be crossed by the competitor, such as un-crossable fences, un-crossable water features, etc.

Any part of the course where the competitor is obliged to follow a compulsory route shall be clearly and precisely indicated on the map by a dashed line. A chain of crosses shall show any forbidden routes (e.g. busy roads). The controls shall be numbered in the prescribed sequence, if any. The numbers shall be printed on a north-south axis, with the top north, and should be positioned so that they do not obscure any important detail. Crossing points shall be clearly indicated.

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## AE.2.2 CONTROL DESCRIPTIONS

Control Descriptions shall be displayed in purple on the front of the course maps and should avoid, in as far as possible, the map legend or any map detail that is necessary for the particular course. In exceptional cases, with the approval of the event Controller, the control descriptions can be omitted from the map but the competitors shall be provided with loose copies of the descriptions.

Control descriptions shall comply with the international specification for control descriptions published by the International Orienteering Federation. Junior and novice courses may require written control descriptions, or if space allows both IOF symbol and written descriptions.

## AE.3 MAP REGISTRATION

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### AE.3.1 INTRODUCTION

The orienteering map is central to the sport of orienteering and is a highly detailed and accurate representation of the competition terrain. Orienteering clubs produce these special maps for the purpose of organising competitions and for orienteering training. It is important for the continued development of the sport and for the establishment of Mapping and Registration Rights for a club that there is a system of recording the areas that have been mapped and their current status in relation to usage, access and availability for orienteering. That is the principal purpose of the OI Map Register.

On account of the nature and scale of the sport in Ireland orienteering clubs usually undertake mapping projects with a high degree of voluntary effort. They also incur substantial costs by way of materials and specialist services such as photogrammetry, laser scanning (LIDAR) and Ordnance Survey maps. For major projects these voluntary efforts may need the assistance of a professional mapper.

Clubs therefore have an expectation that they obtain an exclusive Registration Right to run OI registered orienteering events in these areas for a reasonable period. The map registration system protects club interests and avoids the unnecessary duplication of effort.

The success or otherwise of the map registration system depends to a large degree on the cooperation of the OI affiliated orienteering clubs. It also depends on the administration of the system and the maintenance of comprehensive records by OI.

Rule R7.2.1 requires that all orienteering maps of an area of 0.5 square kilometres or more produced by an OI affiliated club be registered in accordance with the procedures outlined in this Appendix. Small mapped areas of 0.5 square kilometres or less intended for club (Category C4) or training events shall not be registered. Where it is the intention to use a map with an area of 0.5 sq. km or less for Category C1, C2, or C3 competitions, such as a sprint competition, then this map shall be registered.

Permission from the landowner(s) to produce a map of an area and to stage orienteering competitions on it is the responsibility of the registering club. It is important to note that registration of an area under these Rules does not imply any rights of access, or permission to produce a map for orienteering, or for any other purpose. Any such rights or permissions are matters to be agreed between the club and the relevant landowner(s).

These Rules do not preclude any non-OI persons or organisations from producing maps that could be used for orienteering competitions.

Responsibility for the copyright of an orienteering map, the map content, artwork, cartography or any other aspect related to its production, publication, or use shall rest solely with the Club, and registration of a map by OI under these Rules and procedures shall not confer or imply any such right.

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### AE.3.2 INITIAL MAP REGISTRATION

Where a club, having identified an area suitable for orienteering and having obtained permission from the landowner(s), shall register with OI their intention to map that area. If the map is not produced within three years from the date of the initial registration, the Mapping Rights attached to the initial registration will lapse. The area will then be open again for initial registration by the same club, or by any other club. The projected completion date to be specified on the Map Registration Form should not exceed a period of three years from the date of application for initial registration.

The application form for initial registration of an area shall contain the information set out in this Appendix, and is available at the end of this Appendix, or for download from the OI website. The application shall provide sufficient information to allow clear identification of the area to be mapped, and confirm that no other club has

current Mapping or Registration Rights to the same area. Where a map has previously existed but the Mapping or Registration Rights have expired, the application should indicate that the original club has indicated that it has no objection to the area being re-mapped by another club.

OI shall maintain records of all registrations of club mapping intentions, and this information shall be available in the Map Register on the OI website. An application will only be registered where it meets the specified criteria. Sufficient information shall be provided to clearly identify the area to be mapped, the date of the application, and the timescale for producing the completed map.

An OI affiliated club may lodge an objection with the Mapping Registrar to any initial map registration by another club within a period of three months from the date it is entered in the Map Register. The Mapping Registrar will consider any such objection and make a decision within three months of notification of objection. An appeal against any such decision may be made to the OI Executive within a further period of one month. However every reasonable effort should be made by the clubs involved to amicably resolve such issues.

An OI affiliated club shall not produce an orienteering map or carry out any mapping in an area that is assigned to another Club on the Initial Map Register, unless there is agreement to produce a map jointly and this has been notified to the Mapping Registrar and noted in the Map Register.

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### AE.3.3 REGISTRATION OF COMPLETED MAP

On completion of the mapping project the OI affiliated Club shall apply to the Mapping Registrar to have the area and corresponding map registered to that Club. Completion in this context means the production of a printed map for use in an orienteering competition. The registration of the completed map infers a Registration Right to the club that produced the map (see AE.3.4 below).

The application for registration of the completed map shall contain the required information as detailed on the form available at the end of this Appendix (also available for download from the OI website). An electronic (PDF format) copy of the map, along with a web address link to an electronic mapping system such as Google Maps or Open Street Map shall be submitted with the application.

The registering club of the completed map will be advised by the Mapping Registrar of its acceptance and registration.

OI shall maintain a record of all completed map registrations and this information will be published on the OI website. Sufficient information shall be provided to clearly identify the mapped area, its exact location, and the date of registration.

### [Map Registration Form](#)

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#### AE.3.4 REGISTRATION RIGHT

The registration of a completed orienteering map implies registration of both the map and the mapped area to an OI affiliated club. This means that no other club may use that map, or that area for orienteering purposes, except with the expressed permission of the club holding the Registration Right.

No single area shall be registered to two separate clubs unless both clubs agree to joint registration.

A club shall not produce an orienteering map or carry out any mapping activities in an area that is assigned to another club on the Map Register.

The Registration Right established by a club will cease to be valid after a period of five years from the date of registration of the completed map or from the time that the map was last used at an open OI registered competition, after which period the area will be open for initial map registration by another club. However, in so doing a club shall be expected to establish that the club holding the existing map no longer has an interest in the area for orienteering purposes. In practice, assuming that the registering club holds open competitions on the mapped area, the valid period for it to retain the Registration Right will be five years from the latest open competition.

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#### AE.3.5 RESERVED AND DORMANT AREAS

An OI affiliated club, having identified an area that is suitable for orienteering, may decide to hold that area in reserve for a future major event. In this instance the application for initial registration should clearly state that the area is to be reserved for a specific reason or purpose. The Mapping Registrar shall decide on the merits of such cases and decide to accept or reject the request.

Occasionally where a map exists or has previously existed an area may become unused for orienteering for various reasons such as extensive felling or restrictions imposed by the landowners. Where five years since the last registered open competition has elapsed, an affiliated Club may apply to OI to have this period extended, where it is intended to update the map and use the area within a reasonable time frame. A decision to grant such an extension will be made on the merits of the case, including consideration of any request by another club to produce

a new map that includes the same area. In these cases clubs will be expected to resolve the Registration Right issue in an amicable manner.

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#### AE.3.6 RESOLUTION OF DISPUTES

Disputes can arise in relation to duplication or overlap of mapping activities. This is generally as a result of lack of communication and can lead to conflicts that are not in the best interest of the sport of orienteering. While the registration system is designed to prevent such conflicts, difficulties have arisen in the past where registration records were incomplete or where, in the absence of local knowledge, an area may not have been precisely and accurately identified. However, as a matter of principle, clubs shall not compete unfairly with each other in relation to mapping activities. Breaches of this principle are damaging to clubs and to the sport in general, and are liable to sanctions being taken by OI against an offending Club.

Responsibility in relation to the resolution of disputes rests in the first instance with the clubs concerned. OI will assist where possible with such resolution and where a satisfactory outcome is not forthcoming will decide to take appropriate action as it sees fit.

The OI Executive may decide to appoint a Map Registration Appeals Board to assist with the resolution of disputes. The Board shall consist of not less than three members, at least one of whom are a member of the OI Executive. An Appeals Board member shall not be a member of either club involved in the dispute. The Board, having investigated the dispute and reviewed the evidence available shall make a decision and shall communicate its findings to the parties concerned. An appeal against a decision by the Map Registration Appeals Board may be made to the OI Executive within one month of notification. The OI Executive will make a decision on the appeal within a period of three months.

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#### AE.3.7 APPLICATION OF THE REGISTRATION PROVISIONS

The registration procedures outlined in this Appendix will come into effect six months after the adoption on 20 June 2013 by the OI Executive of the amended Rule R.7, Maps and Map Register, and this Appendix. OI will review registration legacy records with a view to having a definitive register of completed maps within the same timescale. Clubs are requested to cooperate with OI in clarifying any issues in relation to the precise location, map names, etc.

Any disputed areas will be omitted from the register of completed maps until the ownership issues have been resolved to the satisfaction of the parties concerned.

Dormant mapped areas, as defined in AE.3.5 above, will be identified by reference to OI competition records and clubs will be afforded the opportunity to review their plans for these areas. The provisions in relation to dormant areas being open for mapping by other clubs will come into effect 12 months after 20 June 2013.

[Form to Register Map](#)