



ORIENTEERING NSW

UPDATING NSW FOOT ORIENTEERING ISOM MAPS TO CONFORM WITH REVISED IOF MAP SPECIFICATIONS

Introduction

The International Orienteering Federation publishes [Map Specifications](#) that are used around the world to map orienteering maps. Maps made using the Specifications are legible, reflect the terrain well and are fair to orienteers from all nations. There are two specifications for foot orienteering maps and a supplement for school orienteering maps:

- International Specification for Orienteering Maps (ISOM 2017-2) which is used for forest orienteering and longer distance urban events.
- International Specification for Sprint Orienteering Maps (ISSprOM 2019).
- Symbol Set for School Orienteering Maps 2019.

There have been major changes to the foot orienteering map specifications in the past five years. Most NSW maps have not been converted to the new specifications. This document gives some guidance on how to make do a quick and simple conversion to ISOM 2017 appearance or to update by field checking it and converting it to ISOM 2017.

The change from ISOM 2000 to ISOM 2017 is almost always more complex than using a process on mapping software. The complexity occurs because:

- most mappers don't follow the Specifications to the letter - sometimes this is for good reason;
- many cartographers will use a symbol with the same specification for another symbol (eg on a sprint map they draw some distinct cultivation boundaries with the symbol for a pavement edge or canopy boundary);
- some symbols split into two symbols in the new specifications (eg slope lines in ISOM, passable walls on sprint maps);
- some symbols increase in size in the new specification, so gaps may have to be altered.

There's not much point changing a really good map of rock, complex spur gully or gold mining if we don't have to. Nor is there much point in spending weeks to update a map which is only used for local events.

Partial, full or no change

All ISOM maps - a partial change - events from 1 October 2021

The Board of Orienteering NSW wants ISOM maps converted for events from 1 October 2021 to:

1. be in line with ISOM 2017 where a symbol change is obvious and/or important. For example, a termite mound would change from a brown X to a brown triangle. This assists colour vision impaired orienteers. These changes are outlined on ONSW's Symbols to convert for events on ISOM maps.
2. follow the ONSW Guidance for Mappers on Out-Of-Bounds ISOM Map Symbols.

Additional guidance can be found in Mappers Update: Updating maps to revised IOF forest map specifications – a presentation made in March 2021.

Championship & National event maps - full changeover to ISOM 2017

This should occur for all Group A and B¹ ISOM map events in NSW.

- International events – Oceania Championships, World Cup, WOC, JWOC, WMOC.
- National events – Australian Championships, Australian 3-Days, National Orienteering League and Australian Schools Championships events.
- NSW Championships.

Some NSW maps have been made by mapping gurus. These might deliberately differ from the old ISOM – if they do, please talk to the mapper, to a mapping expert or to the ONSW Technical Director. Changing a map could take many days and result in a map that is less clear than you started with.

A full description of changes to ISOM and some ONSW comments are contained in the ISOM v ISOM 2017 and ISSOM v ISSPrOM Map Specifications webpage.

Please talk to the ONSW Mapping Advisory Group before commencing such a change or creating a new map.

Exceptions

Some NSW orienteering maps look significantly different to maps drawn using the Specification. An example is maps used for Newcastle Street Series. These maps do not need to be redrawn to comply with the Specification.

Scale, symbol size

Official OA rules

The official scale of maps for major events is changing – we are waiting for 2021 OA Rules. We think the following will apply.

- Long distance 1:15,000 (Elites) or enlarged to 1:10,000 (non-elites)
- Other distances: 1:15,000 or 1:10,000
- Very easy: 1:10,000, 1:7,500 or 1:5,000
- 2021 rules may allow 1:7,500

Acceptable for Group C events

In NSW there are terrains where it is better to map to a larger scale. For example: Sydney sandstone areas, some areas of very complex contours. Sydney sandstone has lots of short-length rock faces and whilst these can be simplified, there is little point in doing this if it's only a small area of bush.

¹ Group A, B and C events are defined in Orienteering Australia's Competition Rules for Orienteering Australia Foot Orienteering Events which are in the Technical Section of the OA [Operational Manual](#).

Apart from the scales allowed by OA, Group C events may have ISOM maps at:

- 1:15,000 or enlarged to 1:10,000 or 1:7,500; or
- 1:10,000, 1:7,500 or 1:5,000 with symbols the same size as on a 1:10,000 ISOM 2017 map. Some NSW ISOM maps are mapped at this scale, but have symbols at a smaller size. This should be rectified when the map is next updated (with a field check).

Group C events include State League (except for NSW Championships), Christmas 5 Days and minor events.

Contour interval

Contour interval for ISOM 2017 maps is 5 metres or 2.5m if the area is uniformly flat. All maps used for Group A or B events should use these contour intervals.

For Group C events, if an existing map has another contour interval and does not show the terrain well, the contour interval should be normalised when the map is updated (with a field check). For other maps, the contour interval can be normalised when the map is updated, if not too much work is involved.