International Specification for Sprint Orienteering Maps

Following on from Simon Errington's informative article on sprint planning Issue 6 2006, Neil Northrop (SYO) delves into the intricacies of sprint mapping.

The International Specification for Sprint Orienteering Maps (ISSOM) was first introduced in the Sprint Distance competition at the World Orienteering Championships 2001 in Tampere Finland.

Due to the varied terrain that is used for sprint orienteering, making an easy to read and most importantly a fair map, required establishing a mapping standard different from the traditional ISOM symbols.

Is it fair that a M21 can scale and jump off a 2 meter wall while a M50 takes one look and runs all the way round? The answer is simply NO. Inherent in the aims of ISSOM is the idea that ground can be mapped fairly for every competitor from mountain goat to walking-stick wielder.

The reason for writing this article is to inform people about ISSOM. In my experience over the past couple of years, it has become apparent that some still don't know the differences between traditional and sprint symbols, and maybe more importantly -the rules that are associated with them.

The principal idea to grasp is the thickness of black lines. The line weight (or width) is used to show the passability of features:

- Barriers, such as high walls, high fences and high rock faces, affect route choices and are represented unambiguously. These features are represented with a prominent thick black line.
- Obstacles which can be crossed, such as fences and small rock faces, are represented with a significantly thinner black line than the barrier features.
- Features which can be crossed very easily, such as steps and edges of paved areas, are represented with a very thin black line.



Paved Edge or Step Fence Wall Crag Impassable Wall Impassable Fence

Impassable Crag
Impassable Cliff

ISSOM Black Line Weights (blown upto 1:2500)

When the definition of a feature is Impassable, this means that the feature cannot be crossed. This is not to say that if you see a gap in the impassable fence you are allowed to squeeze through, or if you think you can hurdle the hedge you can -when the map shows an impassable feature you must not cross it. ISSOM states: It is forbidden to cross an impassable feature! Competitors violating this rule will be disqualified.

Orienteering is about navigation and physical fitness, not how lucky you are when it comes to climbing or jumping barriers.

Below is a list of ISSOM Impassable features -get to know them -you could get disqualified!!



Wall
Fence
Crag
Cliff
Water
Hedge
Vegetation
Building

ISSOM Impassable Features

Ok so we've looked at the really important point of impassability, now we can look at some of the additional symbols that allow a greater depth of detail to be shown on sprint maps.



Stone Wall Brick or Retaining Wall

The traditional ISOM symbol for a wall is used in ISSOM to represent a stone wall. In contrast to this (and the Impassable wall symbol shown above) a thick grey line represents a passable brick or retaining wall which are often found in urban areas. Personally I think the grey wall symbol is much better on sprint maps as it does not distract the eye when looking at speed for route choices -its the thick black lines that are important when deciding which routes are viable.



Passable Water Impassable Water

Next up is water -there are often times where water can be mapped as passable. Again the main difference is the black line which represents the impassibility.

Water can be and has been used effectively to add spectator interest to sprint course -why do we enjoy seeing people splash through some shallow water to get to the fountain? Maybe we're just hoping they fall over and get soaked?



Building Pass Through



Underpass -Highlighted

Tunnels, underpasses and canopies can't be show with traditional ISOM symbols. A thinner line weight is used to show the edge of canopies or building pass through's -this is infilled in a contrasting lighter grey colour.

An underpass is indicatively shown with a dashed line. Where the route is likely to be used on a course, it should also be highlighted with purple overprint.



Impassable Vegetation Impassable Hedge

Finally vegetation -ISSOM introduces an extra (darker) shade of green to represent impassable vegetation. Again it should be noted that physically it might be or seem passable, but in order to make it fair for everyone it has been mapped as impassable.

At sprint scales it is possible to show features such as hedges to scale -for reasons such as permissions or safety an easily leaped hedge may be marked as impassable.

So we've identified most of the unusual symbols and rules associated with them now lets take a preview of this years British Elite Sprint Orienteering Championships in Scarborough.



Yuri Omeltchenko (Ukraine) the men's winner making a splash in Glasgow at the Park World Tour in 1999.