

International Specification for Sprint Orienteering Maps ISSprOM 2019

What has changed from previous ISSOM 2007

The IOF map commission has been working on a revision of the International Specification for Sprint Orienteering Maps for two years. The ISSprOM was approved by the Council in April 2019. In the following document, you will find some information will help you in understanding the changes that have been made.

The first visible change is in the short name of the specification which has changed from ISSOM to ISSprOM in order to clearly understand in a discussion which specification is concerned. In the past there was too often hearing confusion between ISOM and ISSOM.

Goals of the ISSprOM revision

- As started with ISOM 2017 extract all rules related text from the map specifications. This was a strong request from the Council.
- Use the same numbering scheme in ISOM and in ISSprOM, so that if an object is defined in both specifications it receives the same number. However, some elements may exist in only one of the specification. For instance, Dense boulder field exists only in ISOM 2017 (#209).
Naming similar to the one used in ISOM 2017 has also be considered for some symbols, especially in the Vegetation class
- Remove the urban and non-urban option for footpath or track and paved area as it was often difficult to define if an area was urban or non-urban.

Changes in the first part

Modification of the cover page:

The first visible change is in the short name of the specification which has changed from ISSOM to ISSprOM in order within a discussion to clearly understand in a discussion which specification is concerned. In the past there was too often confusion between ISOM and ISSOM.

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Modifications in paragraph 1:

The sentence related to the fact that uncrossable features are forbidden to cross has been removed.

To clarify the meaning of words signifying requirements (Shall, Should, May...), an explanation of terminology has been added. It is the same as the one in ISOM 2017.

Modifications in paragraph 2

All the texts related to the fact that uncrossable features are forbidden to cross have been removed. Section 17 of the competition rules shall be considered.

The paragraph related to the fact that Traffic must be kept out of sprint orienteering areas has been removed. It has been considered that a better solution would be in giving traffic information on the map.

Advice to provide additional information in the race bulletin for situations difficult to interpret has been added to the paragraph related to multilevel structure.

Modifications in paragraph 3

The only possible scale is now 1:4 000. If needed for older or younger age, enlargement is possible. This enlargement applies to all symbols including the course planning ones.

Contour interval normal values are unchanged but in special cases of steep area 5m interval is allowed.

To help mappers understand the need for legibility, more focus has been put on minimum dimensions and minimum gaps between symbols in paragraph 3.3.

The maximum format of the map is now DIN A3.

The document ISOM Appendix 1- CMYK Printing and Colour Definitions replace the 7 colour concept of ISOM 2000 as colour printing scheme. Therefore, the paragraph 4 of ISSOM 2007 related to PRINTING has been removed.

Modifications in the symbol part

Mappers are most concerned with the symbol part. So this will be treated in more details.

The way the dimensions and the colour of the symbol and spacing is to be made has been more clearly defined: Outside measure, Inside measure, Centre to centre. The type of each symbol has been defined as Line (L), Text (T), Point (P) or Area (A).

Footprint of point symbols has been added.

Compliance with the ISOM 2017 numbering scheme has been implemented.

LANDFORMS

- ISSOM 2017 slope line (104) has been deleted and the slop line is now included in the ISSprOM 2019 contour (101). Similar to ISOM 2017.
- Stairway (532) has been added to the list of symbols which cause a cut in the ISSprOM 2019 contour (101) line.
- ISSOM 2007 Contour value (105) has been deleted and the Contour value is now included in the ISSprOM 2019 Index contour (102). Similar to ISOM 2017.
- ISSprOM 2019 Form line (103): The line width and the structure of the symbol has changed from ISSOM 2017. Line width is now 0.15 mm, dash length 3mm, space length 0.3 mm
- ISSprOM 2019 Erosion gully or trench (107): Minimum length has been reduced to 2 mm.
- ISSprOM 2019 Small erosion gully (108): A three dots minimum length has been added.
- ISSprOM 2019 Small knoll (109): the minimum height has been reduced to 0.5m.
- ISSprOM 2019 Small depression (111): the minimum depth and the minimum diameter have been reduced to 0.5m and 1m. The size of the symbol has changed from 0.95 mm in length to 1.2 mm in length and 0.6 mm in height.
- ISSprOM 2019 Pit or hole (112): the minimum depth and the minimum diameter have been reduced to 0.5m and 1m. The length of the symbol has changed from 0.82 mm to 1.1 mm.
- ISSprOM 2019 Broken ground (113): a minimum of 3 dots is required. Similar to ISOM 2017.
- ISSprOM 2019 Prominent landform feature (115) : the symbol is now a triangle. Similar to ISOM 2017.

ROCK AND BOULDERS

- ISSprOM 2019 Impassable cliff (201): The minimum passage between two cliffs has increased to 0.4 mm and the minimum height has been reduced to 1.5 m. The mention forbidden to cross has been removed.
- ISSprOM 2019 passable rock face (202): the line width has been reduced to 0.25 mm, the minimum height to 0.6 m.
For passable rock faces shown without tags the end of the line **must** now be rounded. Similar to ISOM 2017-2
- ISSprOM 2019 Rocky pit or cave (203): a unique symbol is now used for both Rocky pit and cave instead of two symbols in ISSOM 2007. Similar to ISOM 2017.
The length of the symbol has changed from 0.82 mm to 1.1 mm. A minimum depth has been added.
- ISSprOM 2019 Boulder (204): the minimum height has been removed.
- ISSprOM 2019 Gigantic boulder or rock pillar (206): minimum dimensions have been added.
- ISSprOM 2019 Boulder cluster (207): this symbol has been added. Similar to ISOM 2017.
- ISSprOM 2019 Boulder field (208): A minimum of two triangles shall be used. Similar to ISOM 2017.
- ISSprOM 2019 Open sandy ground (213): A minimum width and a minimum area have been added.
- ISSprOM 2019 Bare rock (214): Colour has been changed to Black 30%
A minimum width and a minimum area have been added.

WATER AND MARSH

- ISSprOM 2019 Uncrossable body of water (301): new name for ISSOM 2017 Impassable body of water. Colour has been changed to blue 100% or 70% for dominant areas. Similar to ISOM 2017.
A minimum width has been added, and the minimum area reduced to 0.5 mm².
The mention forbidden to cross has been removed.
- ISSprOM 2019 Crossable body of water (302): new name for ISSOM 2017 Passable body of water. A minimum width has been added.
- ISSprOM 2019 Water hole (303): The length of the symbol has changed from 0.82 mm to 1.1 mm.
- ISSprOM 2019 Small crossable watercourse (305): new name for ISSOM 2017 Passable small watercourse. A minimum length has been added. Similar to ISOM 2017.
- ISSprOM 2019 Minor/seasonal watercourse (306): new name for ISSOM 2017 Minor watercourse. A minimum two dashes length has been added. Similar to ISOM 2017.
- ISSprOM 2019 Uncrossable marsh (307): new name for ISSOM 2017 Impassable marsh
Similar to ISOM 2017. A minimum two lines width has been added. The mention forbidden to cross has been removed.

- ISSprOM 2019 Marsh (308): the structure of the symbol has changed. Line width is now 0.12mm and spacing 0.38. A minimum two lines width has been added.
- ISSprOM 2019 Narrow marsh (309): a minimum two dots length has been added.
- ISSprOM 2019 Indistinct marsh (310): the structure of the symbol has changed. Line width is now 0.12mm and spacing 0.38. Dash length is now 1.0 mm and dash spacing 0.35mm.
- ISSprOM 2019 Small fountain or well (311): the symbol is now a square. Similar to ISOM 2017.
- ISSprOM 2019 Spring (312): The size of the symbol has changed from 0.95 mm in length to 1.2 mm in length and 0.6 mm in height.
- ISSprOM 2019 Prominent water feature (313): the symbol is now an asterisk. Similar to ISOM 2017.

VEGETATION

- ISSprOM 2019 Open land (401): A minimum width and a minimum area have been added
- ISSprOM 2019 Open land with scattered trees (402): The structure of the symbol is the same as in ISOM 2017: yellow with holes of white or green 60%. The diameter of the holes is now 0.6 mm and the spacing 0.75 mm.
A minimum width and a minimum area have been added.
- ISSprOM 2019 Rough Open land (403): A minimum area has been added.
- ISSprOM 2019 Rough open land with scattered trees (404): The structure of the symbol is the same as in ISOM 2017: yellow 50% with holes of white or green 60%. The diameter of the holes is now 0.8 mm and the spacing 1 mm.
A minimum width and a minimum area have been added.
- ISSprOM 2019 Forest (405): new name for ISSOM 2007 Forest: easy running. Similar to ISOM 2017. A minimum width and a minimum area for openings have been added. Similar in principle to ISOM 2017.
- ISSprOM 2019 Vegetation: slow running (406): new name for the ISSOM 2007 Forest: slow running symbol. The minimum width has been increased to 0.4 mm and a minimum area has been added. The symbol includes now as an option the ISSOM 2007 Forest runnable in one direction (411) symbol.
- ISSprOM 2019 Vegetation: slow running, good visibility (407): new name for the ISSOM 2007 Undergrowth: slow running symbol. Similar to ISOM 2017. A minimum width of 2 lines has been added.
- ISSprOM 2019 Vegetation: walk (408): new name for the ISSOM 2007 Forest: difficult to run symbol. The minimum width has been increased to 0.4 mm and a minimum area has been added. The symbol includes now as an option the ISSOM 2007 Forest runnable in one direction (411) symbol.
- ISSprOM 2019 Vegetation: walk, good visibility (409): new name for the ISSOM 2017 Undergrowth: difficult to run symbol. A minimum width of 2 lines has been added.

- ISSprOM 2019 Impassable vegetation (410): cover the use of previous both ISSOM 2007 Vegetation, very difficult to run (410) and ISSOM 2007 Impassable vegetation (421) using the ISSOM 2007 Vegetation, very difficult to run green 100% symbol (410). The minimum width has been increased to 0.4 mm and a minimum area has been added.
The previous ISSOM 2007 Impassable vegetation symbol (421) using green 100% and black 50% has been removed as it often appeared too blackish at printing.
For Impassable vegetation the mention forbidden to pass has been removed.
- ISSprOM 2019 Cultivated land (412): the mention seasonally out of bounds has been removed from the name. If the cultivated land shall not be entered it has to be combined with the symbol Out of bounds area (709) as for ISOM 2017.
A minimum area has been added.
- ISSprOM 2019 Orchard (413): the structure of the symbol has changed. Green dots are now 0.68 in diameter with a spacing of 1.2 mm.
The background can be either yellow or yellow 50%.
A minimum width and a minimum area have been added.
- ISSprOM 2019 Vineyard or similar (414): new name for ISSOM Orchard, one direction symbol. The structure of the symbol has changed with green dash line 0.3 mm in width, 1.3 mm in spacing and 2.0 mm in length.
The background can be either yellow or yellow 50%.
A minimum width and a minimum area have been added.
- ISSprOM 2019 Distinct cultivation boundary (415): the line width has been increased to 0.1mm. A minimum length has been added.
- ISSprOM 2019 Distinct vegetation boundary (416): a minimum 5 dots length has been added as in ISOM 2017 black dot implementation.
- ISSprOM 2019 Prominent large tree (417): the green circle diameter has been increased to 1.0 mm. A 1.2 mm diameter white mask is used under the green circle to improve the readability in yellow and green.
- ISSprOM 2019 Prominent bush or small tree (418): the symbol has changed to a 0.8 mm circle with a 0.2 mm white mask inside to aid the colour vision impaired.
- ISSprOM 2019 Prominent vegetation feature (419): a white mask has been added to the existing symbol

MAN-MADE FEATURES

- ISSprOM 2019 Paved area (501): the difference between urban and non-urban areas that existed in ISSOM 2007 for symbol Paved area (529) has been deleted as it was difficult to agree between mappers on what exactly was an non-urban area.
Two levels of brown still has to be considered for paved areas but based on the differences in the traffic of vehicles or pedestrians. 30% brown is used for light traffic whereas 50% brown is used for heavy traffic.
- ISSprOM 2019 Step or edge of paved area (501.1): the difference between urban and non-urban areas that existed in ISSOM 2007 for edge of paved area (529.1) has been deleted. There is now a unique width for the black border line which is 0.1mm for both step and edge
- ISSprOM 2019 Paved area in multilevel structures (501.2): this is a new symbol created in order to make more readable simple multilevel structure like a bridge over a street. Don't forget to refer to paragraph 2.3 of ISSprOM 2019 when dealing with multilevel structures.
- ISSprOM 2019 Paved area with scattered trees (501.3): this is a new symbol very similar in principle to symbols 402 or 404 Open land with scattered trees / Rough open land with scattered trees.
- ISSprOM 2019 Unpaved footpath or track (505): the difference between urban and non-urban areas that existed in ISSOM 2007 for symbol Unpaved footpath or track (506.1) has been deleted. The width of the black border line has been increased to 0.1mm as for ISSprOM symbol Step or edge of paved area (501.1).
A minimum two dashes length has been added.
- ISSprOM 2019 Small unpaved footpath or track (506): the exclusion of urban areas has been removed. The structure of the symbol has changed. Line width is now 0.27, dash length 1.5 mm and dash spacing 0.37 mm. A minimum two dashes length has been added.
- ISSprOM 2019 Less distinct small path (507): the exclusion of urban areas has been removed. The structure of the symbol has changed. Line width is now 0.27, dash length 1.5 mm and dash spacings 0.37 mm and 1.5mm. A minimum two sections of double dashes length has been added.
- ISSprOM 2019 Narrow ride (508): the exclusion of urban areas has been removed. The structure of the symbol has changed. Line width is now 0.21, dash length 4.5 mm and dash spacing 0.75mm. A minimum two dashes length has been added.
- ISSprOM 2019 Power line, cableway or skilift (510): a minimum length including two pylons has been added.
- ISSprOM 2019 Major power line (511): Both symbols Building (521) or High tower (524) can be used for representing very large carrying masts.
- ISSprOM 2019 Bridge (512.1): the line width has been increased to 0.4 and the endings at 0.6 mm. The use of symbol Crossing points (710.1) or Crossing sections (710.2) is mentioned, like in symbol Underpass or tunnel (512.2)
- ISSprOM 2019 Passable wall (513.1): new name for ISSOM 2007 Passable stone wall. A minimum length has been added.

- The ISSOM 2007 passable wall (519.1) which used a minimum 0.35 mm wide, 50% black colour line has been deleted, as it was quite difficult to read
- ISSprOM 2019 Passable retained wall (513.2): this is a new symbol for passable wall which is seen only from one side.
- ISSprOM 2019 Impassable wall (515): the mention forbidden to cross has been removed.
- ISSprOM 2019 Passable fence or railing (516): a minimum length has been added.
- ISSprOM 2019 Impassable fence or railing (518): the mention forbidden to cross has been removed. A minimum length has been added.
- ISSprOM 2019 Crossing point (519): the opening has been increased to 1.0 mm.
- ISSprOM 2019 Area that shall not be entered (520): new name for ISSOM 2007 Area with forbidden access. The mention forbidden to cross has been removed. A minimum width and a minimum area have been added. The area shall always be delineated by a boundary line.
- ISSprOM 2019 Building (521): the inline colour has been fixed to 60% black. The mention forbidden to pass through or over has been removed.
- ISSprOM 2019 Canopy (522): the outline width has been increased to 0.1mm. A minimum width and a minimum area have been added.
- ISSprOM 2019 Cairn, memorial, small monument or boundary stone (526): the circle diameter has been increased to 1.0 mm OM.
- ISSprOM 2019 Prominent line feature (528): new name for ISSOM 2007 Passable pipeline. A minimum length has been added.
- ISSprOM 2019 Prominent impassable line feature (528): new name for ISSOM 2007 Impassable pipeline. The mention forbidden to cross has been removed. A minimum length has been added.
- ISSprOM 2019 Prominent man-made feature-ring (530): the circle diameter has been increased to 1.0 mm OM.
- ISSprOM 2019 Stairway (532): this is a new symbol to be used instead of drawing multiple steps using ISSprOM 2019 symbol Step or edge of paved area (501.1).

TECHNICAL SYMBOLS

- ISSOM 2007 Registration marks (602) has been removed
- ISSOM 2007 Spot height (603) has been removed

COURSE PLANNING SYMBOLS (previously named in ISSOM 2017 OVERPRINTING SYMBOLS)

For all these symbols, the fact that the purple colour should be over or under the black one has been specified.

- ISSprOM 2019 Map Issue point (702): this is a new symbol. Similar to ISOM 2017
- ISSprOM 2019 Control number (704) the possibility to use a white border has been added.
- ISSprOM 2019 Out of bounds boundary (708): new name for ISSOM 2007 Uncrossable boundary. The mention forbidden to cross has been removed. Line width has been increased to 1.0 mm
- ISSprOM 2019 Out of bounds area (709): The structure of the symbol as changed. It is now similar to the one used in ISOM 2017. The mention forbidden to cross has been removed
- ISSprOM 2019 Crossing point (710.1): the opening has been widened to 1.0 mm IM
- ISSprOM 2019 Temporary construction or closed area (714): The mention forbidden to cross has been removed. The area is delineated by a 0.1 mm boundary line. A minimum width and a minimum area have been added.
- ISSOM 2007 First aid point (712) has been removed
- ISSOM 2007 Refreshment point (713) has been removed