

What has changed from ISSOM 2007?

The IOF Map commission has been working on a revision of the International Specification for Sprint Orienteering Maps. The IOF Council is planning to approve the revision later in the year 2017, but is now proceeding with a round of consultation regarding the specification.

In the following document, you will find some information that we hope will help you understand the changes that have been proposed. The document uses numbering of sections used in new ISSOM.

Goals of the ISSOM revision

- Extract all rules related text from the map specifications similarly as was done in ISOM2017.
- Higher unification with ISOM 2017
- Removal of obsolete and unnecessary information in introduction part
- There shall only be one ISSOM. This means that the drawing shall not depend in any way on the map scale that is used for the printed map. There will be only 1:4000 scale variant from which strict enlargement can be done. Consequently, previously scale dependent symbols (magnetic north lines, and the overprint symbols 701-713) have been modified.
- Focus on generalisation. More emphasis on minimum dimensions and distances.
- Focus on readability of selected map symbols at high speed

Changes in the introductory pages

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Modifications in section 1 INTRODUCTION

1. Removal of obsolete and unnecessary information related to the “new discipline” at that time.

1.1 To clarify the meaning of words used in the specification, an explanation of terminology (shall, should, may, ...) has been added.

Modifications in section 2 PRINCIPLES

2.1 Several unnecessary information (e.g. about test prints) were removed.

2.2 Information that it is impossible to declare an exact height when an obstacle becomes impassable added.

2.3 Subsection *Barriers that are forbidden to cross* was removed as it is rule related part. Newly under 2.3 is part about *representation of main ‘running’ level of multilevel structures*.

2.4 Subsection *Traffic must be kept out of sprint orienteering areas* was removed as it is rule related part.

2.5 Subsection *The main ‘running’ level of multilevel structures should be represented* was renumbered to 2.3.

2.6 Subsection *Collaboration between course planner and mapmaker* was removed as it is rule related part, but information about collaboration is mentioned in Introduction.

Modifications in section 3 BASIC ELEMENTS

3.1 Change to 1:4000 scale only (1:5000 removed), IOF competition rules regulate the use of strict enlargements (including overprint symbols) from 1:4000 scale. Enlargements recommendations for youngest and older age groups added.

3.3 part Minimum dimensions reworked to better meet the content and readability requirements of sprint maps.

3.4 Format of the map – recommended maximum map format changed to DIN A3.

3.5 Colour concept now refers to separate document “CMYK printing and colour definition for Orienteering maps”.

Modifications in section PRINTING

This section was completely removed as printing is solved in separate document.

Modifications in section 4 DEFINITION OF SYMBOLS

The way the dimensions of the symbol and spacing is to be made has been clearly de-fined: Outside measure, inside measure or centre to centre. This can lead to different symbol size definitions comparing to ISSOM2007 however the size of the symbol remained unchanged.

The list below mentions the main changes to the symbol part, however there can be also some other minor changes in symbol description or partial renaming of symbol, e. g. Impassable → Uncrossable.

4.1 Landforms

- 102 Index contour: Thinner line (0.35 → 0.30). Reason: reduce the impact of index contour on small vegetation features and reduce the potential problems of gap positions.
- 103 Form line: Thinner line (0.21 → 0.15). Reason: reduce the visual impact of the form line and reduce the potential problems of gap positions.
- 118 Prominent land form feature: Change to brown triangle. Reason: to help colour vision impaired runners to identify the prominent features symbols.

4.2 Rock and boulders

- 209 Boulder cluster: Insertion of new symbol. Reason: To allow better generalization of parks/forest with many rocky features.
- 212 Bare rock: Change in colour definition (black 20% → black 30%). Reason: Better distinction from canopy in complex urban areas.

4.3 Water and marsh

- 312 Small fountain or well: Change to blue square. Reason: to avoid issue with the green circle for colour vision impaired runners.
- 314 Prominent water feature: Change to blue asterisk. Reason: to avoid issue with the green cross for colour vision impaired runners.

4.4 Vegetation

- 402 Open land with scattered trees: Inverted (white holes in yellow. Reason: Alignment with ISOM2017.
- 404 Rough open land with scattered trees: Change in colour definition (yellow 70% → yellow 50%). Reason: Alignment with ISOM2017.
- 410 Impassable vegetation: Change in semantics, now used for vegetation with running speed almost 0%. Reason: Request from Athletes Commission, competitors are avoiding both

types of vegetation (410 and 421) on sprint events. To avoid printing and readability problems definition of 421 Impassable vegetation was moved to 410 and 421 Impassable vegetation was removed.

4.5 Man-made features

- 506.1 Unpaved footpath or track: Distinction between urban and non-urban removed. Reason: Unclear definition and problematic use of such distinction by mappers.
- 507 Small unpaved footpath or track: Enlargement (150 %). Reasons: quite often the footprint was smaller than width of mapped object, to improve readability in high running speed.
- 508 Less distinct small path: Enlargement (150 %). Reasons: quite often the footprint was smaller than width of mapped object, to improve readability in high running speed.
- 509 Narrow ride: Enlargement (150 %). Reasons: quite often the footprint was smaller than width of mapped object, to improve readability in high running speed.
- 512.1 Bridge: Enlargement (120 %). Reason: to improve readability and distinction of symbol in high running speed.
- 519.1 Passable wall (black 50 % variant): Removed. Reason: problems with colour fidelity and readability in combination with other colours with use of digital printing.
- 525 Crossing point (optional): Slightly wider gap for crossing point (1.0 IM). Reason: to improve readability.
- 526.1 Building: Change of colour definition to 60% black. Reason: unification, possibility to adjust percentages of black was rarely used.
- 526.2 Canopy: Thicker outline (0.07 → 0.1). Reason: Unification, readability improvement.
- 528.1 Area that shall not be entered: Symbol renamed, specified delineation.
- 529 Paved area: Distinction between urban and non-urban removed. Reason: Unclear definition and problematic use of such distinction by mappers. Introduction of two types of brown fill-in (brown 20% for light traffic of vehicles or pedestrians, 50% for heavy traffic of vehicles or pedestrians). Reason: Option to better reflect real conditions of urban environment as most of the common events is organized with traffic present in competition area. Thicker outline (0.07 → 0.1). Reason: Unification, readability improvement.
- 529.1 Step or edge of paved area: Thicker outline (0.07 → 0.1). Reason: Unification, readability improvement.
- 530 Stairway: New symbol, hive off from 529.1. Reason: Need for standalone definition. Thicker step (0.07 → 0.1). Reason: readability improvement.

4.6 Technical symbols

- 601 Magnetic north line: Distance between magnetic north lines adjusted to 30 mm (120 m). Reason: Adjustment related to change in scales.
- 602 Registration marks: Symbol removed. Reason: Very rarely used and redundant nowadays.
- 603 Spot height: Symbol removed. Reason: Very rarely used and redundant on sprint maps.

5.7 Overprinting symbols

- Overprinting colour shall be under black 100%.
- When a map is enlarged, all lines, symbols and screens shall be enlarged proportionally and this also applies to the overprint symbols.
- 701.1 Map issue point: New symbol. Reason. To show position of map issue point on marked route, alignment with ISOM 2017.

- 703 Control number: Possibility to have a white border with 0.1 or 0.15 mm in width. Reason: to improve course readability in high running speed.
- 707 Uncrossable boundary (forbidden to cross): Thicker line (0.7 → 1.0). Reason: to improve readability in high running speed.
- 708 Crossing point: Slightly wider gap (1.0 IM). Reason: to improve readability, alignment with definition of 525 Crossing point (optional).
- 709 Out-of-bounds area (forbidden to cross): Change from single hatch to cross. Reason: Alignment with ISOM 2017.
- 712 First aid post: Symbol removed. Reason: Very rarely used and redundant on sprint maps.
- 713 Refreshment point: Symbol removed. Reason: Very rarely used and redundant on sprint maps.