ISOM2017 – Corrections

The map Commission have during the last year identified some mistakes or less good solutions in the ISOM 2017. Therefore we have started a work to improve the specification. As we have until now decided quite a lot of corrections, we have decided to publish this working document as it looks right now. Most of the changes listed below are minor and perhaps not so important, but other have more impact on our maps. A new revision of the actual standard document is being edited and will be published with these changes.

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Location	**Type**	**Description of problem**	**Final text after <u>correction</u>** In blue description of changes in illustration
Page 2	Suggestion for improvement	1.1 Conventions May not in Convention is unclear for some readers (they understand it as something optional). Change: substitute "May not" with "Shall not". Affects symbols: **111, 112, 115, 401, 402.**	**1.1 Conventions** Must not / Shall not ~~/ May not~~ mean that the definition is an absolute prohibition.
Page 5	suggestion for improvement	2.7 Accuracy Third paragraph delete the 's' from 'details' and 'shapes' so that it reads '...lot of detail must not disguise the overall shape.'	**2.7 Accuracy** (third paragraph) Accurate representation of shape is of great importance for the orienteer, because a correct, detailed and sometimes exaggerated picture of the landform is an essential precondition for map reading. However, the inclusion of <u>a lot of detail must not disguise the overall shape</u>. This means that form line usage must be limited to an absolute minimum (e.g. form lines with a shape that can be deduced from the neighbouring contours shall not appear on the map) and insignificant contour detail must be removed.

Page 7	addition	2.11.3 Minimum gaps Knolls and cliffs may overlap.	**2.11.3** part **Minimum gaps** (third paragraph) The minimum gap between point symbols and line symbols including outlines of area symbols should be 0.15 mm, with exceptions for gaps between contours and point symbols of other colours. Knolls and cliffs may overlap.
Page 8	suggestion for improvement	"Exclusive area symbols such as symbol 206 *(gigantic boulder)*, and 521 *(building)*. " - sentence raises many questions and is not clear. (Exclusive area means that it is an area that is NOT surrounded by an outline).	**2.11.3** part **Minimum gaps** (sixth bullet on page) Symbols consisting exclusively of an area (not surrounded by an outline), such as symbol 206 (gigantic boulder), and 521 (building).
Page 9	suggestion for improvement	2.11.4 Screens table remove the 's' from 'Open lands' & 'Rough open lands' so as to read 'Open land' and 'Rough open land'	**2.11.4 Screens** 401-402 Open land 403-404 Rough open land
Page 9	removal	Remove completely content of section 2.12 as all about colour and printing is part of " ISOM 2017 Appendix 1 – CMYK printing and colour definitions ".	**2.12 Printing and colour** See ISOM 2017 Appendix 1 – CMYK printing and colour definitions.
Page 15	change	107 Erosion gully Change of the sentence: "Contour lines shall not be broken around this symbol." → "Contour lines should not be broken around this symbol." The minimum length is too long at 24m hence suggested that it be reduced to a minimum length of 16m.	**107 Erosion gully** An erosion gully which is too small to be shown using symbol 104 (earth bank) is shown by a single line. Minimum depth: 1 m. Minimum length: 1.15 mm (footprint 17 m). Contour lines should not be broken around this symbol. Colour: brown.
Page 17	change	202 Cliff Change in line width of cliff to 0.25 mm as was used in ISOM2000. Reason: Readability issues, many complaints. Minimum length goes back 9m (0,6mm) Edges must be rounded	**202 Cliff** Illustration: Change in line width to 0.25 mm (cliff without tags). Fix min length and only rounded edges
Page 21	change	301 Uncrossable body of water Include footprints to be consistent.	**301 Uncrossable body of water** The black bank line emphasises that the feature is uncrossable. Dominant areas of water may be shown with 70% colour. Small areas of water and bodies of water that have narrow parts shall always be shown with full colour. Minimum width (inside): 0.3 mm. Minimum area (inside): 0.7 mm x 0.7 mm (footprint 10.5 m x 10.5 m). Colour: blue, black.

Page 21	suggestion for improvement	302 Shallow body of water Definition is not very clear within minimum dimensions for 50% and full color. Include footprints.	**302 Shallow body of water** A shallow seasonal or periodic body of water may be represented using a dashed outline. Small shallow water bodies may be represented as 100% blue (without an outline). Minimum width (inside): 0.3 mm. Minimum area (inside): 0.7 mm x 0.7 mm (footprint 10.5 m x 10.5 m). Minimum width (full colour): 0.3 mm. Minimum area (full colour): 0.55 mm x 0.55 mm (footprint 8 m x 8 m). Colour: blue (outline), blue 50%.
Page 18	change	206 Gigantic boulder Change of name to "Gigantic boulder or rock pillar" as in ISSprOM. **Renumbering?, rework of illustration**, now unclear with minimum size. Geometry: area (not correctly implemented in OCAD now)	**206 Gigantic boulder or rock pillar** ~~A rock pillar or gigantic boulder that is so high and steep that it is impossible to pass/climb.~~ A gigantic boulder, rock pillar or massive cliff shall be represented in plan shape without tags. The gap between gigantic boulders or between gigantic boulders and other impassable feature symbols must exceed 0.3 mm on the map. Minimum width: 0.8 mm (footprint 12 m). Minimum width (white inside area): 0.2 mm (footprint 3 m). Colour: black. Illustration: Improve illustration, cliffs similarly to ISSprOM.
Page 19	Suggestion for improvement	Symbols 210, 211, 212 Stony ground Add sentence "Illustration serves as an example of density and also point symbol (single dots) can be used to draw stony ground." to clarify ways of graphic implementation.	**210, 211, 212 Stony ground** Add sentence: Illustration serves as an example of density and also point symbol (single dots) can be used to draw stony ground.

Page 20	change	215 Trench Minimum length: 1 mm (footprint 15 m).	**215 Trench** Rocky or artificial trench. Minimum depth should be 1 m. Minimum length: 1 mm (footprint 15 m). Shorter trenches may be exaggerated to the minimum graphical dimension. Impassable trenches shall be represented using symbol 201 (impassable cliff). Collapsed and easily crossable trenches should be mapped as erosion gullies. Colour: black.
Page 22	change	311 Well, fountain or water tank Change in symbol size to 0.8 x 0.8 mm (OM). Footprint 12 x 12 m. Allow the fountain to be drawn parallel to a path or a house. The object definition should be listed in the legend of the map	**311 Well, fountain or water tank** A prominent well, fountain, water tank or captive spring. ~~The symbol is orientated to north.~~ The definition of the symbol must be given on the map. Footprint: 12 m x 12 m. Colour: blue. Illustration: Change in symbol size to 0.8 x 0.8 mm (OM).
Page 22	change	313 Prominent water feature This symbol should be defined when used.	**313 Prominent water feature** The symbol is orientated to north. The definition of the symbol must be given on the map. Footprint: 13.5 m x 13.5 m. Colour: blue.
Page 23	change	401 Open land Change minimum area to: 0.55 mm x 0.55 mm (footprint 8 m x 8 m), symbol is in full colour. Change from “May not” to “Shall not” in description.	**401 Open land** Open land that has a ground cover (grass, moss or similar) which offers better runnability than typical open forest. If yellow coloured areas become dominant, a screen (75% instead of full yellow) may be used. ~~May~~ Shall not be combined with other area symbols than symbol 113 (broken ground), symbol 208 (boulder field) and marsh symbols (308, 310). Minimum area: 0.55 mm x 0.55 mm (footprint 8 m x 8 m). Colour: yellow (or yellow 75%).
Page 23	change	406 Change colour shade to 30% 408 Change colour shade to 60%	

Page 25	removal	411 Vegetation, impassable – remove. Too dark, bad results on prints.	**Such change affects definitions of:** 12.11.14 Screens 409 Vegetation, walk, good visibility 410 Vegetation, fight 416 Distinct vegetation boundary
Page 26	change	415 Distinct cultivation boundary – specify more clearly cultivated land vegetation where boundary is applied (401, 412, 413, 414)	**415 Distinct cultivation boundary** A boundary of cultivated land vegetation ~~symbol 412 (cultivated land)~~ (symbols 401, 412, 413, 414) or a boundary between areas of cultivated land when not shown with other symbols (fence, wall, path, etc.). Minimum length: 2 mm (footprint 30 m). Colour: black.
Page 26	change	416 Distinct vegetation boundary Remove from description text about 411. Change in line width to 0.14 (green variant), there were complaints about readability.	**416 Distinct vegetation boundary** A distinct forest edge or vegetation boundary within the forest. Very distinct forest edges and vegetation boundaries may be represented using the cultivation boundary symbol. Only one of the vegetation boundary symbols (black dotted line or dashed green line) can be used on a map. For areas with a lot of rock features, it is recommended to use the green dashed line for vegetation boundaries. A disadvantage with a green line is that it cannot be used to show distinct vegetation boundaries around and within symbols 410 (vegetation, fight) ~~and 411 (vegetation, impassable)~~. An alternative for these situations is to use symbol 415 (distinct cultivation boundary). Minimum length, black dot implementation: 5 dots (2.5 mm – footprint 37 m). Minimum length, green line implementation: 4 dashes (1.8 mm – footprint 27 m). Colour: green and black 50% (dashed line)/ black (dotted line). Illustration: Change in line width to 0.14 mm (green variant).

Page 26	change	417 Prominent large tree Add white mask under green circle (1.1 mm OM). To improve readability in yellow and greens.	417 Prominent large tree White mask is used under green circle to improve readability in yellow and greens. Footprint: 13.5 m x 13.5 m. Colour: green. Illustration: Change in illustration, add white mask under green circle, 1.1 mm OM.
Page 26	change	419 Prominent vegetation feature Add white mask under green cross (1.15 OM - 1.3 mm line length/0.38 mm line width). To improve readability in greens.	**419 Prominent vegetation feature** The symbol is orientated to north. White mask is used under green cross to improve readability in greens. Footprint: 13.5 m x 13.5 m. Colour: green. Illustration: Change in illustration, add white mask under green circle, 1.15 mm OM.
Page 27	addition	Add new symbol 501.1? Stairway Reason: to improve representation of urban areas, sometimes can be found also in terrain. Numbering must be aligned with ISSprOM.	**501.1? Stairway** A distinct stairway through the terrain (especially with railing) which helps to climb very steep slopes or to cross over impassable objects. A stairway going through rock passages or other impassable objects may be drawn without border lines. Steps of a stairway shall be represented in a generalized manner. When the surface is bare ground, stairs can be drawn as unpaved. An easily runnable stairway or indistinct stairway should be drawn as a footpath.

Page 28	change	508 Narrow ride or linear trace through the terrain – remove the sentence "The definition of the symbol must be given on the map". Runnability is clear from used vegetation symbols. Change in minimum length: two dashes (3.25 mm – footprint 48 m).	**508 Narrow ride or linear trace through the terrain** A forest ride or a prominent trace (forestry extraction track, sandy track, ski track) through the terrain which does not have a distinct runnable path along it. ~~The definition of the symbol must be given on the map.~~ Runnability is shown using a slightly thicker line of yellow, green or white as background: Without outline: the same runnability as the surroundings. Yellow 100%: easy running. White in green: normal runnability. Green30%: slow running. Green 60%: walk. Minimum length: two dashes (3.25 mm – footprint 48 m). Colour: black + white/green/yellow.
Page 28	suggestion for improvement	511 Major power line – Very large carrying masts shall be represented in plan shape using symbol 521 (building) or with symbol 524 (high tower) - illustration does not correspond to the 521 or 524.	**511 Major power line** Major power lines should be drawn with a double line. The gap between the lines may indicate the extent of the power line. The lines may be broken to improve legibility. Very large carrying masts shall be represented in plan shape using outline of symbol 521 *(building)* or with symbol 524 *(high tower)*. Colour: black.
Page 29	change	513 Wall Minimum length (isolated): 1.4 mm (footprint 21 m).	**513 Wall** A significant wall of stone, concrete, wood or other materials. Minimum height: 1 m. Minimum length (isolated): 1.4 mm (footprint 21 m). Colour: black.

Page 29	change	520 Area that shall not be entered Change of the sentence: „Out-of-bounds areas should be bounded by the black boundary line or another black line symbol (e.g. fence).” → “Out of bound areas with a clear border shall be bounded by a black boundary line or another black line, if the border is unclear no black line shall occur.”	**520 Area that shall not be entered** An out-of-bounds area is a feature such as a private house, a garden, a factory or another industrial area. Only contours and prominent features such as railways and large buildings shall be shown inside an out-of-bounds area. Vertical black stripes may be used for areas where it is important to show a complete representation of the terrain (e.g. when a part of the forest is out-of-bounds). The area shall be discontinued where a path or track goes through. Out of bound areas with a clear border shall be bounded by a black boundary line or another black line, if the border is unclear no black line shall occur. Overprint symbol 709 can be used for temporary out-of-bounds areas. The vertical black stripes version of the symbol is orientated to north. An out-of-bounds area shall not be entered. Minimum area: 1 mm x 1 mm (footprint 15 m x 15 m). Colour: yellow + green 50%, or black (33%).
Page 31	change	530 Prominent man-made feature – ring This symbol should be defined when used.	**530 Prominent man-made feature – ring** Location is at the centre of gravity of the symbol. The definition of the symbol must be given on the map. Footprint: 12 m x 12 m. Colour: black.
Page 31	change	531 Prominent man-made feature – X This symbol should be defined when used.	**531 Prominent man-made feature – x** Location is at the centre of gravity of the symbol, and the symbol is orientated to north. The definition of the symbol must be given on the map. Footprint: 12 m x 12 m. Colour: black.

Page 33	suggestion for improvement	703 Control point – include footprint: 5 mm = 75 m	**703 Control point** For point features, the centre of the circle shall be the centre of the symbol. For line and area features, the centre of the circle shows the precise position of the control marker. Controls shall only be placed on points that are clearly identifiable on the map. Sections of the circle should be omitted to leave important detail showing. Footprint: 75 x 75 m. Colour: purple.