## 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.

Last change	2018-10-18
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Document type	Approved for publication

Location	Туре	Description of problem	Final text after correction
			In blue description of changes in illustration
Page 2	Suggestion for	1.1 Conventions	1.1 Conventions
	improvement	May not in Convention is unclear for some readers (they	
		understand it as something optional). Change: substitute	Must not / Shall not / May not mean that the definition is
		"May not" with "Shall not".	an absolute prohibition.
		Affects symbols: <b>111, 112, 115, 401, 402.</b>	
Page 5	suggestion for	2.7 Accuracy Third paragraph	2.7 Accuracy (third paragraph)
	improvement	delete the 's' from 'details' and 'shapes' so that it reads 'lot	Accurate representation of shape is of great importance
		of detail must not disguise the overall shape.'	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 a lot of detail must not disguise the overall
			shape. 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	2.11.3 part Minimum gaps (third paragraph)
		Knolls and cliffs may overlap.	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	"Exclusive area symbols such as symbol 206 (gigantic boulder),	2.11.3 part Minimum gaps (sixth bullet on page)
	improvement	and 521 (building). " - sentence raises many questions and is	Symbols consisting exclusively of an area (not surrounded
		not clear. (Exclusive area means that it is an area that is NOT	by an outline), such as symbol 206 (gigantic boulder), and
		surrounded by an outline).	521 (building).
Page 9	suggestion for	2.11.4 Screens table remove the 's' from 'Open lands' &	2.11.4 Screens
	improvement	'Rough open lands' so as to read 'Open land' and 'Rough open	401-402 Open land
		land'	403-404 Rough open land
Page 9	removal	Remove completely content of section 2.12 as all about colour	2.12 Printing and colour
		and printing is part of " ISOM 2017 Appendix 1 – CMYK	See ISOM 2017 Appendix 1 – CMYK printing and colour
		printing and colour definitions ".	definitions.
Page 15	change	107 Erosion gully	107 Erosion gully
		Change of the sentence: "Contour lines shall not be broken	An erosion gully which is too small to be shown using
		around this symbol." → "Contour lines should not be broken	symbol 104 (earth bank) is shown by a single line.
		around this symbol."	Minimum depth: 1 m.
		The minimum length is too long at 24m hence suggested that	Minimum length: 1.15 mm (footprint 17 m).
		it be reduced to a minimum length of 16m.	Contour lines should not be broken around this symbol.
			Colour: brown.
Page 17	change	202 Cliff	202 Cliff
		Change in line width of cliff to 0.25 mm as was used in	Illustration: Change in line width to 0.25 mm (cliff without
		ISOM2000. Reason: Readability issues, many complaints.	tags). Fix min length and only rounded edges
		Minimum length goes back 9m (0,6mm) Edges must be	
		rounded	
Page 21	change	301 Uncrossable body of water	301 Uncrossable body of water
		Include footprints to be consistent.	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	302 Shallow body of water	302 Shallow body of water
	improvement	Definition is not very clear within minimum dimensions for	A shallow seasonal or periodic body of water may be
		50% and full color. Include footprints.	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	206 Gigantic boulder or rock pillar
		Change of name to "Gigantic boulder or rock pillar" as in	A rock pillar or gigantic boulder that is so high and steep
		ISSprOM. Renumbering?, rework of illustration, now unclear	that it is impossible to pass/climb. A gigantic boulder, rock
		with minimum size. Geometry: area (not correctly	pillar or massive cliff shall be represented in plan
		implemented in OCAD now)	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	Symbols 210, 211, 212 Stony ground	210, 211, 212 Stony ground
	improvement	Add sentence "Illustration serves as an example of density and	Add sentence: Illustration serves as an example of density
		also point symbol (single dots) can be used to draw stony	and also point symbol (single dots) can be used to draw
		ground." to clarify ways of graphic implementation.	stony ground.

Page 20	change	215 Trench	215 Trench
		Minimum length: 1 mm (footprint 15 m).	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	311 Well, fountain or water tank
		Change in symbol size to 0.8 x 0.8 mm (OM). Footprint 12 x 12	A prominent well, fountain, water tank or captive spring.
		m. Allow the fountain to be drawn parallel to a path or a	The symbol is orientated to north.
		house. The object definition should be listed in the legend of	The definition of the symbol must be given on the map.
		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	313 Prominent water feature
Page 22	change	313 Prominent water feature This symbol should be defined when used.	The symbol is orientated to north.
Page 22	change		The symbol is orientated to north.  The definition of the symbol must be given on the map.
Page 22	change		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.
-		This symbol should be defined when used.	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 22	change	This symbol should be defined when used.  401 Open land	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.  401 Open land
-		This symbol should be defined when used.  401 Open land Change minimum area to: 0.55 mm x 0.55 mm (footprint 8 m x	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.  401 Open land Open land that has a ground cover (grass, moss or similar)
-		This symbol should be defined when used.  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	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.  401 Open land Open land that has a ground cover (grass, moss or similar) which offers better runnability than typical open forest. If
-		This symbol should be defined when used.  401 Open land Change minimum area to: 0.55 mm x 0.55 mm (footprint 8 m x	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.  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%
-		This symbol should be defined when used.  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	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.  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.
-		This symbol should be defined when used.  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	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.  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
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-		This symbol should be defined when used.  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	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.  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).
-		This symbol should be defined when used.  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	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.  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).
Page 23	change	This symbol should be defined when used.  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.	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.  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).
-		This symbol should be defined when used.  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	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.  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).

Page 25 Page 26	removal	411 Vegetation, impassable – remove. Too dark, bad results on prints.  415 Distinct cultivation boundary – specify more clearly cultivated land vegetation where boundary is applied (401, 412, 413, 414)	Such change affects definitions of:  12.11.14 Screens  409 Vegetation, walk, good visibility  410 Vegetation, fight  416 Distinct vegetation boundary  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	A16 Distinct vegetation boundary Remove from description text about 411. Change in line width to 0.14 (green variant), there were complaints about readability.	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	417 Prominent large tree
		Add white mask under green circle (1.1 mm OM). To improve	White mask is used under green circle to improve
		readability in yellow and greens.	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	419 Prominent vegetation feature
		Add white mask under green cross (1.15 OM - 1.3 mm line	The symbol is orientated to north.
		length/0.38 mm line width). To improve readability in greens.	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	501.1? Stairway
		Reason: to improve representation of urban areas, sometimes	A distinct stairway through the terrain (especially with
		can be found also in terrain.	railing) which helps to climb very steep slopes or to cross
		Numbering must be aligned with ISSprOM.	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.  Green 30%: slow running. Green 60%: walk. Minimum length: two dashes (3.25 mm – footprint 48 m).
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.	Colour: black + white/green/yellow.  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	520 Area that shall not be entered
J		Change of the sentence: "Out-of-bounds areas should be	An out-of-bounds area is a feature such as a private house,
		bounded by the black boundary line or another black	a garden, a factory or another industrial area. Only
		line symbol (e.g. fence)." $\rightarrow$ "Out of bound areas with a clear	contours and prominent features such as railways and
		border shall be bounded by a black boundary line or another	large buildings shall be shown inside an out-of-bounds
		black line, if the border is unclear no black line shall occur."	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	530 Prominent man-made feature – ring
		This symbol should be defined when used.	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	531 Prominent man-made feature – x
		This symbol should be defined when used.	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	703 Control point – include footprint: 5 mm = 75 m	703 Control point
	improvement		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.