COMPARISON OF THE CURRENT AND NEW INTERNATIONAL SPECIFICATIONS FOR ORIENTEERING MAPS

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ORIENTEERING SPORT

Introduction

ORIENTEERING MAP

SI-CARD

COMPASS

ORIENTEERING MAP
Introduction

ORIENTEERING MAP

BOIS DE LA PILE

ÉCHELLE 1:10'000
ÉQUIDISTANCE 5M

CHAMPIONNATS DU MONDE
DE COURSE D'ORIENTATION

WOC LAUSANNE
14.-21.7.2012

Col de La Givrine

La Pile dessus
Introduction

ORIENTEERING MAP
Introduction

INTERNATIONAL SPECIFICATIONS
(ISOM)

International Specification for Orienteering Maps

202 Rock pillars/cliffs
In the case of unusual features such as rock pillars or massive cliffs or gigantic boulders, the rocks shall be shown in plan shape without tags. Colour: black.

203 Passable rock face
A small vertical rock face (minimum height 1 m) may be shown without tags. If the direction of fall of the rock face is not apparent from the contours or to improve legibility, short tags should be drawn in the direction of the fall. For passable rock faces shown without tags the ends of the line may be rounded to improve legibility. Colour: black.

204 Rocky pit
Rocky pits, holes or mineshafts which may constitute a danger to the runner. Location is the centre of gravity of the symbol, which is orientated to north. Colour: black.

205 Cave
A cave is represented by the same symbol as a rocky pit. In this case the symbol should be orientated to point up the slope as indicated opposite. The centre of gravity of the symbol marks the opening. Colour: black.

206 Boulder
A small distinct boulder (minimum height 1 m). Every boulder marked on the map should be immediately identifiable on the ground. To be able to show the distinction between boulders with significant difference in size it is permitted to enlarge this symbol by 20% (diameter 0.5 mm). Colour: black.

207 Large boulder
A particularly large and distinct boulder. For gigantic boulders symbol 202 should be used. Colour: black.

208 Boulderfield
An area which is covered with so many blocks of stone that they cannot be marked individually is shown with randomly orientated solid triangles with sides of ratio 6:6:5. A minimum of two triangles should be used. The going is indicated by the density of the triangles. To be able to show the distinction between boulder fields with a significant difference in boulder size it is permitted to enlarge the triangles by 20%. Colour: black.
History overview and future development

ISOM DEVELOPMENT

ISOM 1969

OBJECTIVE
To standardize o-maps

ISOM 1975

OBJECTIVE
Introduction of concept of runability

ISOM 1982

OBJECTIVE
Adjustment and adaptation

ISOM 1990

OBJECTIVE
Digital cartography

ISOM 2000

OBJECTIVE
Adjustment and adaptation

201X

GPS / Airborne Laser Scanning use for map making
ISOM 201X project overview and plan

ISOM 201X PROJECT PLAN BY IOF

- First call to federations 29/9-2008
- Work on first draft
- Reference group 1/11-2012
- Second call to federations 22/5-2013
- Work on final draft
- Third call to federations (option)
- Final preparation and publication
MAP LEGIBILITY ISSUE

„gentle contours”
generalized vegetation
details seen by mapper

„sharp contours”
very detailed vegetation
details seen by LiDAR
ISOM 201X influence on maps in karstic area (approx. 250x150 m)

ISOM 201X IN MEDITERRANEAN AREA

Impassable stone wall

- Overlapping of symbols in detailed area

Vegetation symbol

- Required generalisation
ISOM 201X influence on maps in urban area

ISOM 201X IN URBAN AREA

Map sample; ISOM 2000

Map sample; ISOM 201X

Impassable fence
- Overlapping of symbols

Finnish proposal
- Road and vehicle tracks in urban area should be presented with brown colour (used for sprint maps)
ISOM 201X new vegetation boundary symbol

**NEW VEGETATION BOUNDARY**

*Map sample; ISOM 2000*  
*Map sample; ISOM 201X*  
*Map sample; ISOM 201X*

**Introduction of green vegetation boundary line symbol**
- *Very useful for area where black symbol occur*
ISOM 201X influence on maps in karstic area (aprox. 250x150 m)

**ISOM 201X IN KARST AREA**

Enlargement of symbols resulting with overlapping in detailed area
- Stony area field revision (30 min)
- Adjustment in CAD software (10 min)

Symbol change
- Redrawing with new symbol (5 min)

Test area 250x150m, **20h for 1 sq. km revision**
- Orienteering maps usually 1-10 sq. km
ISOM 201X SUGGESTIONS

Magenta overprint (Jarkko Ryyppö, Finland)
- *Used to imply impassable symbols*

Test print (Australian orienteering federation)
- *The stochastic pattern of symbol 214 stony ground will have greatly reduced legibility of under-lying detail (example of digital commercial printer scanned at 600dpi, 1:15000 scale)*

Symbol size issue
- *Often discussed by international federations*

Guidelines and practical examples
- *Education of mapmakers*

New symbols
- *Need to implement new symbols (especially mountain area – no symbol for glacier…)*
QUESTIONS?