

# Past and future of International Specification for Orienteering Maps

Dušan Petrovič<sup>a,\*</sup>

<sup>a</sup> University of Ljubljana - [dusan.petrovic@fgg.uni-lj.si](mailto:dusan.petrovic@fgg.uni-lj.si)

\* Corresponding author

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## Abstract:

Orienteering maps are among the most internationally unified maps in the world. While only a few types of maps require global uniformity—such as nautical charts for maritime safety—maps used in orienteering sport disciplines also demand such standardization to ensure fairness in international competitions (Petrovič, 2022).

In the earliest orienteering events - commonly recognized as beginning in Norway in 1897, although some sources suggest a bicycle orienteering event may have taken place in Austria a few years earlier - existing topographic maps were typically used. The need for map unification became evident with the advent of national championships (e.g., Sweden in 1931) and particularly with the first international competitions (e.g., Norway in 1932). Despite this early recognition, it took nearly two more decades - and the interruption of World War II - before the first international conference on orienteering rules and mapping standards was held in 1949. The first official specifications for orienteering maps were not developed until 1962, in preparation for the inaugural European Orienteering Championships. Around the same time, in 1961, ten countries founded the International Orienteering Federation (IOF), and in 1965 the IOF Map Commission was established. The Map Commission's initial guiding principles for orienteering maps were:

- Maps must represent the actual terrain conditions.
- All visible and identifiable features useful to competitors should be shown.
- Features that influence route choice must be clearly presented.
- Legibility is paramount - irrelevant or distracting elements should be omitted.
- Maps for international events must use a standardized legend applicable across all countries.

Based on these principles, the first **International Specification for Orienteering Maps (ISOM)** was published in 1969. It consisted of a two-page list of that time commonly agreed map symbols (see Figure 1).



Figure 1. International Specification for Orienteering Maps issues from 1969, 1975, 1982, 1990, 2000 and 2017.

Over time, as technology advanced and the sport evolved, more comprehensive editions followed: the first detailed version in 1975, and further updates aligned with advances in reproduction techniques and the

needs of new disciplines. The most recent full specification, ISOM 2017, spans 44 pages (Zentai, 2023). Covers of all editions from 1969 to 2017 are shown in Figure 1. In addition to the core ISOM specifications, the IOF released dedicated standards for other disciplines: International Specification for Ski Orienteering Maps (1984, 1994, 2002, 2014), International Specification for Mountain Bike Orienteering Maps (2002, 2007, 2010) and International Specification for Sprint Orienteering Maps (2007).

Over a span of 48 years, a total of 13 official specification editions were published. However, between 2017 and 2024, the pace of revisions increased dramatically. Due to requests from discipline commissions, national-specific proposals, and corrections by the Map Commission, 18 additional revisions were issued. The ease of updating digital versions contributed to this surge. This rapid update cycle led to several issues: organizers were often confused about which version to use, mappers struggled to keep maps compliant with constant changes, competitors were sometimes unaware of updates, raising concerns about fairness and software developers faced frequent updates to symbol sets. Recognizing these challenges, the IOF Map Commission decided in 2024 to halt the practice of frequent revisions. Instead, they announced a comprehensive overhaul of the specification system, with the new approach to take effect from 2030 onward, under a system of scheduled, cyclical revisions (Petrovič, 2024; see Figure 2).

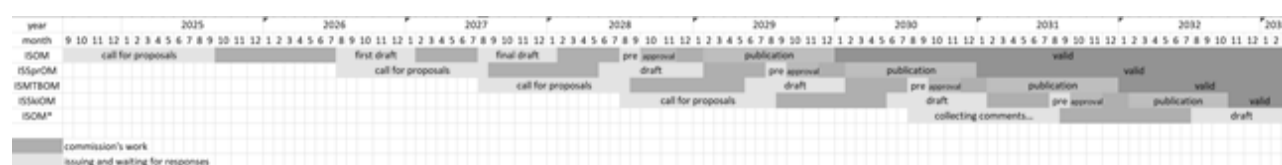


Figure 2. Proposed cycles of regular revisions of International specifications for orienteering maps.

The new initiative, known as the ISOM 2030 Project, aims to retain current symbology and content as much as possible while enhancing clarity, promote sustainability and inclusivity, support the global expansion of the sport, especially in underrepresented regions, embrace technological innovations (e.g., printing techniques), resolve recognised design issues (e.g., multi-level areas), improve usability for all stakeholders - including competitors, map makers, organizers, software developers, and individuals with colour vision deficiencies.

Through these efforts, the IOF seeks to establish a sustainable, globally relevant, and regularly updated map specification system that serves the evolving needs of orienteering.

## References

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