Quality Elements and Measures of Relief and Aesthetics on Croatian Topographic Map TK25

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Abstract: Although the quality elements recommended by the International Cartographic Association (ICA) and ISO 19113 and 19114 concern digital data, they can be applied to printed maps. State Geodetic Administration (SGA) has started drafting the first sheets of TK25 in 1996. Quality control was entrusted to the Croatian Geodetic Institute (CGI) from 2002 to 2010. All 594 sheets of TK25 were put into official use by the end of 2010.

I used many originals for quality elements, and I added another element that has not been used, aesthetics. The CGI evaluated the following criteria for TK25: margin contents, relief, trigonometric points and their compliance with the relief, settlements, buildings, pipes, hydrography and facilities on watercourses and their conformity with the relief, roads and road objects, vegetation and soil type, geographic names, relations with neighbouring sheets, sea and underwater content, depth contours, coherence of content with field situation.

In the first step, it was necessary to identify quality elements according to the aforementioned quality control elements, which were taken from CGI reports. For example, quality elements of relief are: positional accuracy, attribute accuracy, completeness, logical consistency, thematic accuracy and aesthetics. In this paper, I define quality measures and procedures applied to each quality element in order to obtain a report on quality. As an example, I cite quality measures which can be used to estimate positional accuracy and aesthetics of relief, all supported by illustrations.

Keywords: elements of quality, quality measures, relief, positional accuracy, aesthetics, topographic maps