



ABSTRACTS

4. Ana VLASENCO: *Application of pan – European map projections on the territory of Republic of Moldova*

Currently in the member countries or candidate of the European Union is recommended to use a single system of reference and a single reference projection system for pan-European applications. In perspective of the integration of the Republic of Moldova into the European Union, besides the adoption of reference systems must be taken into consideration map projections compatible with those used for pan-European representations.

This paper represents a study on the main features of maps projections used in European countries and some possibilities on their application on the territory of Republic of Moldova, in terms of geographic position and the level of deformations produced by these projections. Following the study of the European Lambert Azimuthal Equal Area projection (ETRS89-LAEA) for statistical analysis and visualization, it was found that the smallest deformations are when the projection pole is taken in the center of the Republic of Moldova and the relative linear deformations vary up to ± 12 cm/km. In the Lambert Conformal Conic projection (ETRS89-LCC) designed to draw pan-European maps at scales smaller or equal than 1: 500 000, when the projection pole is taken in the center of the Republic of Moldova, and the secant parallels on the territory of our country $\phi_kS = 46^\circ$; $\phi_kN = 48^\circ$, the linear deformations range from -15.18 cm/km to 19.17 cm/km. And in the European Transversal Mercator Projection (ETRS89-TMzn) recommended for pan-European compliant maps at scales higher than 1: 500 000, the linear deformations range from -40 cm/km on the axial meridian to +32 cm/km in the eastern part of the country. The results of this study could be used by Land Relation and Cadastre Agency for spatial data infrastructure development.

Organisers



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