

## **Abstract**

The main aim of this thesis is to present of current urban planning in the Czech Republic in connection with implementation of geoinformation technologies in this field.

The thesis consists of the author's published papers (Chapter 10) and of relatively wide introduction that combine these two parts together.

At the beginning of the thesis the issue of urbanization processes in connection with city's development is discussed. These processes, urbanization and suburbanization particularly, are discussed and comment in detail, because they have great influence to urban and strategic spatial planning.

In next part, the topic of analytical planning materials, as a completely new part of Czech urban planning, are described.

The following chapter describes difficulties of using urban plans for cartographers and geoinformatists. The most important cartographical and technical mistakes generated during the digital processing are introduced. Also the issue of seamless regional plan, which is one of the main topics of this thesis, is described in detail.

An important part of thesis is chapter describes implementation of geoinformation technologies in urban planning. General and foreign approaches are discussed at first. Second part is focused on status of this issue in the Czech Republic. The author deals with the methodologies of digital processing of local planning documents that are one of the most important topics in Czech urban planning.

In chapter 10 Spatial conflicts in spatial planning author describes the problems that may occur because of incorrect spatial data or because of not use of digital technologies.

The second part of the work contains of 8 author's or co-author's published articles. All articles are focused on urban planning issues, seamless regional plan, visualization, spatial analysis and spatial conflicts, which may occur in connection with spatial planning.

**Keywords:** urban planning, urban plan, spatial conflicts, planning analytical materials, geoinformation technologies, GIS