## Licenses and Open Data in Cartography

Alena Vondrakova, Vit Vozenilek

Department of Geoinformatics, Faculty of Science, Palacký University Olomouc, 17. listopadu 50, 771 46 Olomouc, Czech Republic

## **Extended Abstract**

Open Data is one of the phenomena of contemporary Geoinformatics and Cartography. Development and expansion of cartography is clearly linked to the availability of spatial data that can be visualized. That is why the Open Data became a boom that approximately 15 years after the formation of "information society" begins to form "geoinformation society" – society dependent on the applications working with spatial data.

At the beginning of the 21st century, data was the main "assets" of each cartographic publishing house. However, now it is not difficult to obtain any data and it was clearly shown that free availability of the spatial data causes the development of other spatial-based applications. Open data mean that data are freely available to everyone to use and republish as they wish, without restrictions. There are various "openness level" of data - from the situation when data is available only in a particular format, and for noncommercial use only, to "really open data", which are freely available to anyone, without any restrictions from copyright, patents or other mechanisms of control. In fact, open data complement the existing range of open source, open hardware, open content and open access. Together with these other tools open data creates enormous opportunities in the field of Geoinformatics and Cartography – for any data processing, cartographic production and other applications. Open data has become an important tool for creating geoinformation policy states (Reichman, Jones, Schildhauer, 2011).

Intellectual property is very important in the time of information society (Peterson, 1999). Unfortunately, the debate over the appropriate scope of intellectual property protection for GIS and geodatabases largely ignores the role of cartography and spatial-data uniqueness in setting rights. An important part of copyright law is the definition that for each use of the work there is essentially required consent of the author. The law essentially



Published in "Proceedings of the 1st ICA European Symposium on Cartography", edited by Georg Gartner and Haosheng Huang, EuroCarto 2015, 10-12 November 2015, Vienna, Austria requires the authorization to exercise the right to use the work (license) to another person. There are also possible contracts and licensing agreement with the fact that no such authorization is needed, in other cases possible use of the work is prescribed by law (Vondrakova, 2013). In the field of information technology there are very often used pre-defined licenses. **Licenses** linked to software (including GIS) are: public domain, cardware, freeware, shareware, commercial software licensing, OEM (Original Equipment Manufacturer), open source etc. Usually in non-technological field of geographic information systems and in cartography are used licenses for no-software products – copyright as all rights reserved and Creative Commons licenses as some rights reserved.

Digital data are often under copyright protection as geodatabases. Due to the territoriality of copyright protection it very important to know the specific license terms and conditions. The uniqueness of spatial data and services deals with fact, that special data are combined together. And it is the combination of different data sources, where it is really important to follow licenses and copyright issues.

There was implemented a study on copyright issues in cartography and geoinformatics in cooperation with experts in law and in the fields of Geoinformatics and Cartography. The contribution includes specific illustrative examples in which there is a conflict with the legal protection of copyright works. Based on the definition of state matters a brief analysis of where there are gaps in the protection of copyright in the field of GIS and cartography.

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## References

Reichman, O. J., Jones, M. B., Schildhauer, M. P. *Challenges and opportunities of open data in ecology*. Science, Vol. 331 no. 6018 pp. 703-705. 2011, DOI 10.1126/science.1197962

Peterson, M. P. *The Web and Ethics in Cartography* [online]. 1999 [cit. 2011-04-15]. University of Nebraska at Omaha Available from: http://maps.unomaha.edu/mp/Articles/WebEthics/Ethics.html

Vondrakova, A. Legal Issues in Czech Cartography in Relation to the International Cooperation. In: Proceedings of International Cartographic Association, Dresden, 2013. [online]. [cit. 2015-09-15]. Available from: http://icaci.org/files/documents/ICC\_proceedings/ ICC2013/\_extendedAbstract/ 346\_proceeding.pdf