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Commons as a Legal Basis for a Broader Access to Remote Sensing Data

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Abstract

This paper presents peculiarities of remote sensing data and discusses the current situation regarding its protection and the framework of access to it. The aim of the paper is to provide for a legal reasoning to advocate for a broader access to remote sensing data. To do this, the option of commons is chosen. The concept of commons is introduced and its applicability to remote sensing data is analysed.

1 Commons as a phenomenon inherent to intellectual property assets, including remote sensing data

Commons, for the purpose of this analysis, are understood as materials freely available for re-use and value-adding activities due to their importance for

the achievement of the common good as the final cause of moral political and social life.¹

Commonly available factual information is essential for the creation of some works of authorship. That is why traditionally factual data and information are excluded from the realm of copyright protection: they cannot be created, but rather discovered. Therefore, to facilitate the creation of new works, a framework of protection of intellectual property assets should be set up in such a way as to guarantee as wide and unrestricted access to the existing works as possible.

The creative process is built upon the principle of the free flow of ideas, and it is recognised by all of the major instruments of intellectual property law,² despite the recent changes in copyright laws that grant more rights and infringement control mechanisms to authors. Apart from this, the existence and necessity of the commons that encompass remote sensing data is dictated by another principle of copyright protection: it is limited to allow the works to be transferred into the public domain.

The production of useful information and geographic information products from remote sensing data³ is highly dependent on previous knowledge and skills in such areas as computer science, geography, geology, climatology and many others, depending on the needs of end-users. The process also involves use of data from other sources. As the raw remote sensing data are a description of geographical reality, the access to them must be secured in order to make the value-adding activities possible. These characteristics of remote sensing data speak in favour of it being part of the commons.

The notion of commons will help in recognising the right to access remote sensing data. The need for such recognition is dictated by their technical and applied nature. Remote sensing data describe the earth, and are used to reach such goals as the sustainable use of resources, the preservation of rare habi-

1 Lewis, B.V. (2006) The Common Good in Classical Political Philosophy. 25 *Current Issues in Catholic Higher Education* 1: 25.

2 *E.g.* the Berne Convention, WIPO Copyright Treaty; national law *e.g.* §102 US, Copyright Law Circ. 92 Title 17; German Urheberrechtsgesetz in §69a(2) regarding protection of computer programmes.

3 Remote sensing data generated by special satellites that pertain to surface of the earth and its depths, oceans and other natural and human-generated objects. They merely are a description of what satellites “see” on the surface of the earth or underneath it: satellites cannot “create” something that does not already exist in reality.

tats and forests, and climate change research, thereby serving the common good of all living organisms on this planet. Information that remote sensing data can provide is needed to make geo-political and other decisions with societal impacts. This requires sustained and effective commons that would ensure broad access to the data in order to conduct their analyses for these different purposes.

Protection of remote sensing data

Across the world, two basic strategies regarding access and protection of remote sensing data have been adopted. One of them, encompassing largely European states, is based on the principle of copyright protection of remote sensing data regardless of the source of their generation and the level of processing, and is marked by a strong commercialisation trend.⁴ Another is the approach adopted by the United States of America founded on the principle of free and unrestricted access to state records and information, which includes remote sensing data generated from state resources.⁵ In the globalising world, where many transactions, including the exchange of remote sensing data from different systems, are trans-national, the existence of data distribution regimes based on opposite principles can be seen as an impediment to open data exchange and re-use.

Authority to protect remote sensing data by virtue of copyright, reinforced by contractual schemes governing its access and use, together with the modern technological means of information protection, often gives remote sensing data owners power not available under traditional regimes of information

4 See e.g. Article 23 Germany, Gesetz zum Schutz vor Gefährdung der Sicherheit der Bundesrepublik Deutschland durch das Verbreiten von hochwertigen Erdfernerkundungsdaten (Satellitendatensicherheitsgesetz) December 2007. [Hereinafter German Law on the Security of Satellite Data]. See also SPOT Image licensing conditions, online: <<http://www.spot.com/web/SICORP/456-sicorp-about-us.php>> (last accessed 01.10.2008); and European Space Agency ENVISAT data licensing schemes, online: <<http://envisat.esa.int/handbooks/aatsr/CNTR1-1.htm>> (last accessed 01.10.2008).

5 Sec. 3 US, Land Remote Sensing Policy Act: “Landsat system‘ means Landsats 1, 2, 3, 4, 5, and 6, and any follow-on land remote sensing system operated and owned by the United States Government, along with any related ground equipment, systems, and facilities owned by the United States Government” [Hereinafter Land Remote Sensing Policy Act].

protection.⁶ In Europe, the scope of access to and use of remote sensing data is even narrower, since the Directive on the legal protection of databases⁷ gives database makers the right to stop any extraction or re-utilisation of parts of protected databases, unless the conditions of the Database Directive are fulfilled.⁸

These findings emphasise the importance of a balanced approach to the regulation of access to, distribution and use of remote sensing data. Its aim should not be the protection of data producers alone, but also recognition of legitimate users' interests, as information requires an audience to become usable and useful knowledge. Whereas today there is a clash between the nature of information that presupposes a broad access to it and the dominance of the commodification philosophy⁹ that creates restrictive access policies at least in some countries. The latter are inappropriate because remote sensing data and many of its applications are of a global character, and are utilised for the common good.

2 Commons as a necessity to ensure distribution of remote sensing data

Raw remote sensing data should be part of the information commons because of its ineligibility – in a technical sense – for copyright protection. There is no or very little “creative spark” involved in the generation of raw and processed remote sensing data because it is acquired by virtue of application of computer programmes (although operated by specialists). Furthermore, data

6 *E.g.* technological protection measures and rights management information under Arts. 11, 12 WIPO Copyright Treaty.

7 EC, *European Parliament and the Council Directive 96/9/EC of 11 March 1996 on the legal protection of databases* [1996] O.J. L 77/20 at 20–28 (hereinafter Database Directive).

8 Art. 7 Database Directive. The Database Directive is of relevance to the access to remote sensing data because they are normally stored in automated databases.

9 Notion that governments support commercial interests of IPRs owners *see e.g.* in Stienstra, D./Watzke, J./Birch G.E. (2007) A Three-way Dance: The Global Public Good and Accessibility in Information Technologies. 23 *The Information Society* 149.

and factual information, together with ideas, certain processes and methods of operation are expressly excluded from the scope of copyright in virtually all international copyright protection instruments and national statutes.¹⁰ The option of the commons is, furthermore, supported by the importance of remote sensing data for decision-making in different spheres.¹¹

Taking into account importance of remote sensing data for generation of useful information and knowledge, as well as the necessity to use knowledge from other fields to be successful in it, it is logical to place at least the raw remote sensing data in the realm of commons accessible to all who need it. The right of users to access remote sensing data should be recognised. The right of access would not deny the legitimate protection that data may enjoy, but would create a fair playing field for different actors.

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10 See e.g. Art. 2 Berne Convention for the Protection of Literary and Artistic Works (September 9, 1886, last amended September 28, 1979) 331 *U.N.T.S.* 217; Arts. 2, 5 WIPO Copyright Treaty (December 20, 1996) 36 *I.L.M.* 65.

11 E.g. for the formulation and implementation” of different policies. See Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community *OJ L* 108/1-14.

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