

IP Management by Government in Finland

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Introduction

The object of this study is to describe the knowledge base and experience of the Government of Finland, with regard to the intellectual property (IP) rights they hold, obtain or manage in their own operations as well as when investing funds in projects through procurement or investment partnerships.

This study will look into intellectual property in general, in particular copyright and patent issues including also trade secrets. The study touches also upon some trademark related aspects pertaining to cases arising from the use and management of logos and signs used by government departments and institutions and agencies. These aspects are referred to as “intellectual property” or IP. The writer¹ provides information that has been possible to collect during the timeframe of the project.

Although normal operations on the ministerial level is hardly ever considered to bring IP rights to the government, the government of Finland invests in a broad range of projects that aim to produce studies and research in different fields. Agencies and institutions, in particular public research institutions support the government in their administrative work and have often-specific tasks set by law.

The operators in the public sector all have their own practices with regard to management of intellectual property. For general acquisitions and procurement, some model provisions and common guidelines are available to streamline IP related aspects in contracts between the government and producers of different types of content. Government research institutions that support the creation of innovations and knowledge to be used in the SME (small and medium sized enterprises) sector and the society at large have developed specific IP policies. Financing for these agencies and institutions is organized from the government budget or they are companies owned entirely by the state.

The government of Finland has already some 15 years ago taken an approach to support open science and holds a positive view to clarifying IP related aspects in this field. The PSI directive of the EU aimed to open up and give access to public sector information. Later, in 2013 this directive was extended to the information produced by libraries, archives and museums and now government owned companies are envisaged to be covered as well.

Neither Finland not the European Union has any harmonized approaches to the IP questions relating to these issues. For mere transparency purposes, it would be best to have a clear standing on how

¹ The writer holds the position Government Counsellor at the Ministry of Education and Culture of Finland responsible for copyright policy on national, European Union and international levels. The views expressed are solely the writer’s own unless otherwise indicated, and does not necessarily present the views of the Ministry or the Government of Finland. The schedule of the study does not allow for an in depth presentation of the experiences.

governments manage IP assets it holds and how copyright protected content can be used within the government activities. Ideally, the use of works based on all content produced by the government with public funding, such as scientific articles or computer applications would be open and free for anyone to use including for commercial use.

Many aspects presented indicate that the issue is important and that the area would benefit from further studies. Therefore, WIPO's work on finding appropriate programs of assistance could prove useful for a coherent application and management of copyright and other IP on Government level throughout WIPO Member States.

1. Legal, regulatory or policy framework

1.1 Regulatory framework

The regulatory framework on IP in Finland contains specific provisions with regard to activities of departments and other institutions of the government. The provisions form a patchwork and do not in a clear and precise way declare the activities to be either subject to or outside the IP regime. The government is prescribed as the holder of IP rights only with regard to computer programs and databases made under civil employment. It has the right to obtain patents for inventions made by civil servants or employees on certain conditions. Below a short description of relevant legislation, that leaves space for complementary policies and guidelines.

Copyright and related rights

Carve out from copyright protection for official documents

Section 9 of the Finnish Copyright Act (1961/404) excludes from protection certain types of works such as laws and decrees, resolutions, stipulations and other documents, or treaties, conventions and other corresponding documents containing international obligations. This includes all drafts or other preparatory work to such laws or documents. All decisions and statements issued by public authorities or translations of such documents by or commissioned by public authorities or other public bodies are carved out from any copyright protection. The provision means that such works can be used freely by anyone without restrictions in the copyright act.²

² Official texts, as defined in Article 2(4) of the Berne Convention for the Protection of Literary and Artistic Works, are texts of a legislative, administrative and legal nature (e.g. statute laws, administrative regulations and court decisions) and the official translations of such texts. The Convention indicates that it shall be left to the discretion of each member country of the Berne Convention to determine the protection to be granted to such official texts in that country. Generally, member countries of the Convention include official texts in the public domain. However, the governments of the United Kingdom and some Commonwealth countries claim a Crown copyright in their works. Many republics of the Commonwealth also copyright their official works, though they have no crown copyright.

The said paragraphs do not however apply to independent works contained in the documents themselves. This means that such works that are not part of the decision texts themselves will receive copyright protection if the terms for protection are fulfilled. However, while the works are attached to a decision, copyright cannot hinder the free use of such documents in the execution of government activities.

Copyright does not limit the right to access public documents or administration of justice and works included in such documents or decisions may be used separately from the document for the administrative or other purpose to which the document relates. The law states also that a copy of the transmitted or communicated work may be made or retained for the purpose of discharging a statutory duty to record or store (N.B. legal deposit). Furthermore based on Section 25c oral or written statements made in a public representational body, before an authority or at a public consultation on a matter of public interest may be reproduced and communicated without the author's consent³. The author could be a civil servant, a politician or equivalent. However, a statement and a written or similar work presented as evidence in a case or in a matter may be reproduced and communicated only in the reporting of the case or matter and only to the extent necessary for the purposes of such reporting. In order to balance the needs for public interest, the author shall have the exclusive right to publish a compilation of his statements.

Copyright applies in Finland to government activities in general with the above exceptions and there is no over-all carve-out provision of the application in the same way as in the United States. This was acknowledged also by the European Commission in a report it had made on the Economic, social and cultural value of the Public domain.⁴

Computer programs developed within employment or government relationships

Furthermore, Section 40b of the copyright act regulates the rights to a computer program and database created in private or public employment relationship. This section is the only specific regulation with regard to copyright in the context of the creative output of personnel of public bodies. According to this section, if a computer program and a work directly associated with it has been created in the scope of duties in an employment relation, the copyright in the computer program and the work shall automatically pass to the employer. The same shall correspondingly apply to a

³ These sections are implemented according to the information society directive 29/2001/EC Art. 5.3 e) and f). The provisions require that the author's name should be indicated, except where this turns out to be impossible. Not in this particular case, but more generally, the crediting of the author could actually be impossible with regard to government texts as the name of the authors or authors are not always mentioned.

⁴ The eighth recommendation included in the report of the Communia workshop stated: "Further research to make the legal, economic and cultural case for the adoption across Europe, of the US model regarding the non-copyright status of government material" Economic and Social Impact of the Public Domain in the Information Society, 7th Communia Workshop, 1st February 2010, Mark Isherwood – Rightscom © European Commission

computer program and a work directly associated therewith, created within the scope of a civil service post. Within the government sector, including the state research institutions the initial holder of the copyright to computer programs and databases are always the employer, *i.e.* the representative of the Government department, institution or agency. According to the last paragraph, the provisions shall not apply to a computer programs created by an author independently engaged in teaching or research in an institution of higher education, with the exception of institutions of military education. In principle, a civil servant other than working for this particular area would retain his/her copyright to creations in the form of computer programs and databases protectable as works under copyright.

Copyright in the employment and government relationships

As already mentioned above, copyright is automatically transferred to the employer or the government only for works in the form of computer programs and databases created as part of a work task or official assignment. With regard to other types of works made in employment relationships all Nordic copyright laws, prepared in cooperation starting in the 1950's, are based on the same basic approach. The interpretation is that copyright in works created to fulfill a work task/ mission, can be transferred to the government even without a specific provision in the law.

When assessing the transfer of copyright, it is required to seek guidance from the purpose of the employment relationship, industry practice and other relevant circumstances. The prevailing perception has been that in order to support the purpose of the employment relationship, the employer obtains from the employee the right to use the work required for his normal activity. In practice, and where relevant the transfer of copyright to the employer is largely agreed upon in employment contracts.

Inventions

Inventions mad within employment relationships

The Finnish Act on the right in employee inventions (656/1967) dates from 1960s. This act applies correspondingly to persons employed by the government. Based on the law the employer has the right to an invention if the invention is the result of an employee's work duties or essentially of using his experiences gained in the enterprise or institution of his employer or in an enterprise (or an institution belonging to the same consolidated corporation). The employer may acquire the right in the invention, in whole or in part, if the use of the invention falls within the field of its activity. The inventor must make a notification without delay and the employer needs to decide if it takes the rights to the invention within four (4) months.

Inventions in higher education institutions (universities)

The purpose of the act on the right in inventions made at higher education institutions (369/2006) is to promote the recognition, protection and exploitation of inventions made at Finnish higher education institutions, i.e. “HEIs”, as appropriate from both the inventor's, the HEIs' and the society's perspective. The act recognizes that the inventors who are employed in HEIs (not students) covered by the scope of this Act have the same rights as other inventors, including the right to be recognized as the inventor.⁵ The employer has the right to acquire the rights in the invention for open and commissioned research.

Signs, logos, symbols, and trademarks

Third parties may not register any official signs without proper permission. Section 14 of the Trademarks Act (7/1964) states that a trademark is not registered, if without proper permission, it includes armorial bearings, a flag or other emblem or an official sign or hallmark, of the state or a municipality, that could indicate control and warranty for goods for which the mark is to be registered or for goods similar to them. The same applies to the name or abbreviation of an international intergovernmental organization or similar, if its inclusion in the trademark can cause a risk of the public confusing the trademark with said emblem, sign, hallmark, name or abbreviation. Example of this would be a law firm registering as “WIPO Legal”. The ministries have not registered their logos or signs as trademarks. The administration of state signs and logos is not centralized but a permission to use the logo could be obtained in principle from each relevant ministry, institution or agency. Different forms of management are further explained in Chapter 7.

1.2 Policies and guidelines

Open Science and Research Initiative

Open science has internationally become a significant way of making science more reproducible and transparent and increasing its societal impact. In Finland, the Ministry of Education and Culture promotes research information availability and open science through the Open Science and Research Initiative, which is set out for the years 2014–2017. The objective was for Finland to become one of

⁵ The researcher must disclose an invention to the HEI without delay and give all necessary data based on which the HEI can then decide to acquire the rights in the invention within a period of 6 months and notify the inventor of it. If it fails to make the notification, it is deemed to have waived its right. This is the practice for innovations within open research without or with external funding. There are no specific provisions on IP related issues in them, except for publication of research results. Furthermore, unless otherwise agreed, the inventor must not publish the outcome of the research in a manner that would jeopardize the protection or other exploitation of the invention, if the HEI is entitled to acquire the rights in the invention. If the HEI has acquired the rights, the inventor must sign the deed of transfer regarding the invention without delay. For innovations that are made in collaborative research or made under other circumstances the practice is based on priority of the HEI to negotiate, if the invention is necessary for the operation of the HEI. In this case, the HEI has the right, in addition to the priority, to obtain the right to use the invention against reasonable compensation. A contractual clause through which the inventor waives his/her right to reasonable compensation and stipulated prior to the conception of the invention, will be void.

the leading countries in openness of science and research by the year 2017 and to ensure that the possibilities of open science will be widely utilized in our society. The foundation for the open science approach was laid down by the undersecretary of the Ministry of Education some 15-20 years ago. The digital preservation solution for research data has been in use since 2017. The solution is built together with the National Digital Library that takes care of the digital preservation of cultural heritage data. A joint digital preservation solution for digital data produces high-quality services cost-efficiently and allows diverse use of digital data.

The KOTUMO project stated in its conclusions February 2018 that the opening up of public research results and materials should be the main principle in the official science policy of Finland, also by respecting privacy and intellectual property rights.⁶

Last year the Ministry of Education and Culture commissioned a study about the possibility for parallel publishing of research results in order to streamline the situation and to pave the way for amendments to the copyright act.⁷

Re-use of public sector information

In Finland, the Government Information Management Advisory Board (JUHTA) has developed guidelines to allow the use of public sector information that it owns based on Creative Commons 4.0 licensing.⁸ Finland has not implemented the PSI directive with new legislation because the obligations are met by the Act on the Openness of Government Activities (621/1999) as well as Open data projects have been considered sufficient. However, copyright related questions have not been resolved for this particular purpose and hence the government has considered it necessary to guarantee the re-use of public sector information through model provisions and licensing systems.

As a default rule, reuse has to be allowed for non-commercial and commercial purposes without the need for an individual application, without charging the reuser and without putting conditions on the reuse and without discriminating between reusers. Each of these features is subject only to limited, duly justified exceptions, which are the following. Firstly, software or documents covered by industrial property rights (such as patents, trademarks etc.), secondly, documents for which the Commission is not in a position to allow re-use in view of intellectual property rights of third parties, and thirdly, documents made accessible to a party under specific rules governing privileged access to documents.⁹

⁶ Press release of the KOTUMO project on deepened cooperation between higher education and research institutions (https://minedu.fi/artikkeli/-/asset_publisher/kotumo-loppuraportti-listaa-kehittamiskohteet-korkeakoulujen-ja-tutkimuslaitosten-yhteistyon-lisaamiseksi)

⁷ Study by Marja-Leena Mansala, IPR University Centre. 2017. <http://julkaisut.valtioneuvosto.fi/handle/10024/80050>

⁸ JUHTA - Julkisen hallinnon tietohallinnon neuvottelukunta (Government Information Management Advisory Board) JHS 189 Avoimen tietoaineiston käyttöluupa (JHS 189 The license for using open data), <http://www.jhs-suositukset.fi/suomi/jhs189>

⁹ Commission decision of 12 December 2011 on the reuse of Commission documents, <https://ec.europa.eu/digital-single-market/en/news/rules-re-use-commission-information>

2. IP management within the government

2.1 Ministries

The policy development of each ministry is based on their tasks and their historic development within the Finnish government as well as political parties holding the leading offices in the ministry at a particular moment in time. For the study, the writer was able to identify only one strategy on ministerial level that include writings on IP issues in their policy or strategic documents.

The economic rights of works created in a government or employment contract belong at the outset to the government. The government employer's rights shall apply to all works created by the officials of the government, agency or institution regardless of the field of activity. This broad interpretation is justified by state authorities due to the role of public law and the status of service. The interpretation is justified also by secondary legislation.¹⁰ Officials must also notify activities to an employer who may prohibit a secondary activity if it finds it inappropriate for the person concerned or position.¹¹

No standard terms on the transfer of copyright to the employer can be found with regard to labor law contracts, namely collective bargaining contracts and contracts between government officials and the state.

For government research, the policies are internal to each institution and vary depending on how the institution's policy focuses on the commercialization of their innovations for the benefit of the society at large. Below chapters describe these policies in more detail.

In the below rare case the government becomes the holder of IP rights.

Case: Government IP after death of author¹²

An example of more recent developments with regard to IP rights that are transferred to the Government is the case where the copyright is transferred to the Government after an author has passed

¹⁰ Section 18, subsection one of the Civil Service Act (387/2001) a civil servant must apply for a secondary occupation permit if he or she takes part in the secondary activity tasks.

¹¹ Mikko Tulokas: Tekijänoikeus työ- ja virkasuhteessa, 2008, (a study about copyright in employment and government relationships) (<http://julkaisut.valtioneuvosto.fi/handle/10024/79394>)

¹² Short description of case of Rudolf Koivu: A well-known illustrator of children's books dies without heirs already in 1946. The rights had officially become IP assets of the government in 2011. During 2012-2015, the authorities tried to assess the best agency to manage the rights. It was decided that since the rights had not been managed since the author's death, it was best to allow customary use to continue until end of the term in end of 2016. The copyright section of the Ministry of Education and Culture developed guidelines for future similar cases to be applied between the State Treasury and the Ministry.

away without relatives or a will. The government is according to law a formal successor in title. In such cases, the State Treasury conveys the information on the assets to be evaluated to the Ministry of Education and Culture.

These cases have been very few in the past but might increase as general awareness of citizens copyright protected content in the digitalized era – put for example on social media services, would be subject to use by a third party. The government should always try to avoid the existence of orphan works, i.e. works whose rightholders cannot be identified or reached.

A possibility could be allow the government to make works it owns openly accessible for the public for the rest of the term of protection, i.e. 70 years in Finland.

2.2 Model contract terms for production of content

The model provisions for acquisition of expert services are developed by each ministry, based on guidelines for the entire government level.¹³ The guidelines refer in particular to intellectual property, covering industrial and intellectual property rights and are rarely specified in the terms for each type of right. This means that the practical situation could look very different depending on what kind of IP right issue would emerge in each case.¹⁴

The Ministry of Finance have issued guidelines on the base of which it is recommended to negotiate on IP related issues in situations where the use and spread of the work is to be maximized. Model terms are recommended to be used broadly among the government institutions by those who are aware of IP related questions involved. Normally this is the case for communications departments or departments responsible for marketing and awareness raising of the government activities.

Technological development means that multipurpose results can be used to develop products for both government purposes and other target groups. For this reason, it is appropriate that, in the field of technology, intellectual property rights are, as far as technology is concerned, left with the producer/ supplier of the product or service who have developed it. The exception is critical technology that is either secret or necessary to integrate new technology into a defense system for example. Consideration must always be made on a case-by-case basis, taking into account the needs of the entire life span of the technology.

For the transfer of intellectual property rights to technology outside the government, the interests of the government must be ensured by requiring from the developer a detailed right to use and

¹³ Purchasing instruction and strategy of the Ministry of Education and Culture (Attachment 9). Model provisions for acquisition of expert services: <https://sisapiha.minedu.fi/display/TJL/Hankintaohje+ja+-strategia>

¹⁴ General Terms of Public Procurement in Service Contracts (JYSE-terms, <https://vm.fi/en/governance-policy/corporate-services-for-government/government-procurement>), JHS-Public administration guidelines for IT (JIT) as well as Ministry of Education strategy for procurement processes including a model provisions for IP for the government (<https://sisapiha.minedu.fi/display/TJL/Hankintaohje+ja+-strategia>).

train the technology in Finland and abroad. This is important or the instance that the producer ceases to deliver technology or fail to do so on reasonable terms. In a crisis, it is inevitable for the government to be able to further develop and modify the technology if this is required. It is also necessary to agree on how to act in a situation where the ownership of the company goes abroad¹⁵.

Open licensing has been taken into broad use within the government. Publishing under a Creative Commons license does not, however, imply a waiver of copyright. There are separate guidelines for instances when the ministry wants to keep all rights to the works and materials. In these cases, the publication will be accompanied by the notion "All Rights Reserved". According to the decision by the JUHTA¹⁶, the use of the Creative Commons 4.0 license (CC BY 4.0) by the local and state open source material. The license allows others to distribute, rewrite, and pave the work, and to create new works based on it, including for commercial purposes, as long as the original author is mentioned. This is the most flexible of CC licenses¹⁷.

Although the publication has all rights reserved, a publication in the publication series will always be available from various government sources and in the online bookstore, and its contents can be freely exploited. Images with limited copyright in the publication may not be used without the author's permission. When the ministry wishes to promote the use of the publication, it is recommended to use the CC BY NC license, which allows others to disseminate, rewrite and pave the publication and create new works based on it, but only for non-commercial purposes. The requirement is that new works are non-commercial. The original author / authors must always be mentioned¹⁸. Such derivative works need not be licensed under the same conditions.

2.3 Agencies and institutions

Case: National Land Survey of Finland

Potential copyright and other intellectual property rights relating to printed maps, map prints, extracts and certificates belong to the National Land Survey or a third party. The subscriber i.e. the user of the service, has no right to print, display, or publicly display the map, map print, grip, or certificate to the public, nor save or make copies of it without the prior permission of the Land Survey of Finland. Notwithstanding the foregoing, the subscriber has the right to print or store individual

¹⁵ Puolustusvoimien teknologiastrategia 2012 (Technology strategy of the Defense Forces), www.puolustusvoimat.fi

¹⁶ The Advisory Board for Public Administration Information Administration (JUHTA), <https://vm.fi/juhta-vahti-yhteishankkeiden-materiaalit>

¹⁷ Creative Commons is an internationally recognized, non-commercial organization that promotes the sharing and use of information with free legal tools. CC = Creative Commons; BY = Please indicate the source, provide a link to the license and make a significant note if you have made any changes; NC = Not commercial, cannot be used for commercial purposes; ND = Do not modify if you modify or create new material on the basis of the material, you should not distribute it with these terms. In this context, it is relevant to note that since these terms have their basis in US law, they do not always translate accurately to Finnish law.

¹⁸ Application of such guidelines are useful but require also practices to include the names of the authors in the images or in proximity in order for the user to have access to this information.

pieces of map prints for his or her own computer or other similar device. The subscriber also has the right, by copying, to produce individual copies of printed maps for his own use.¹⁹

Case: Center for Cultural Policy Research Cupore

CUPORE's mandate includes the production and dissemination of reliable information applicable to cultural policy decision-making and the promotion of important research and expert opinion by way of research projects and training in the field. Cupore has together with the Ministry of Education and Culture developed a methodology for the assessment of the operation of the copyright systems worldwide²⁰. The methodology on the assessment of the operation of national copyright systems is modular and designed to use by any country to assess its national copyright systems. The methodology is free for anyone to use. This means that the methodology handbook can be copied and distributed without charge and copyright restrictions.

3. Content produced at the government level

A study made on copyright aspects of works created by state officials as part of their work duties, found that they are increasingly making copyright protected materials with also of economic importance.²¹ The authorities publish material interpreting, among others, legislation (working life, social security) as well as studies and surveys in their field of activity. Numerous agencies and institutions produce works that serve different groups: statistics, financial forecasts, map data, and weather services. There are only a few cases in which the official labor market is known to publicly grant secondary occupation permits for the production of commercial works in the field of its own agency (e.g. commentary books on the taxation of tax officials).²² State research institutes produce a significant amount of publications, which also have a commercial significance (different sectors of the economy, agriculture and forestry, technology). This work can be part of official duties or independent work outside the course of official duties.

According to the report of the working group for government publications for 2015 and 2016,²³ the numbers of publications by the ministries and the state secretariat varies although the median is

¹⁹ These order and delivery terms apply to the ordering and delivery of printed maps, map prints, extracts and certificates from the National Land Survey of Finland <https://www.maanmittauslaitos.fi/asiointi/toimitus-ja-tilausehdot>

²⁰ The authors and the Center for Cultural Policy Research Cupore owns the copyright to the methodology handbook. <https://www.cupore.fi/en/information/methodology-for-assessing-the-operation-of-copyright-and-related-rights-systems>

²¹ The study is available at: <http://julkaisutilaukset.valtioneuvosto.fi/Publications>

²² Mikko Tulokas, p. 39: (translation) "With regard to those who are engaged in expert work and who are engaged in creative activities, such as written, pictorial or similar, the production of such materials is normally thought to be irrelevant off-duty activities. In these situations, it may be difficult to distinguish when the work is directly related to the task and when it is an independent work of art and when a civil servant works without time stamp expressly given for a specific task on the employer's order. The most significant financial interests are copyrighted music works by officials within the national churches."

²³ Final report of the working group on the consolidation and possible assembly of government output in 2017, source: Mäkinen / Ministry of Education and Culture.

around 45 publications per year. According to the study, ministries published up to 96 written publications in their own publication series in 2016, and up to 68 other publications including guides and other types of documents based on output by the government officials but also experts outside the government. Governments have also produced many other kinds of materials such as books, newspapers, marketing materials, and the like.

Copyright of government employees does not generally restrict the efficient use of works in the activities of the government. Employment contracts do not contain copyright related terms. Even if no specific transfer of rights contract has been made between the parties, an assumption in the legal doctrine of the Nordic countries allows for an interpretation that the employer has the full right to use works that are made in employment. Usually it is considered that if the writing of a written work/publication was a natural part of the duties of an official / civil servant, the copyright will be transferred to the employer to the extent required for the normal operation.

Image banks are often used for publications, as the use does not require any licensing activities. According to one ministry, they have an agreement for a fixed fee that allow for 200 images a year.

Another issue identified by the study was that the government should use the ISBN-identification code, but not all do. Not all of the ministries (or agencies/institutions) have registered themselves as publishers under this system. Due to this and other issues government publications are often difficult to license, and is considered out-of-commerce or never in commerce content. Non the less copyright applies to it. Some publications (there is no uniform form for publication within the government²⁴) are made available online directly or can be ordered in physical format from the government run online store. Some publications in print format are subject to a fee that depends on the number of pages etc. and do not have a commercial basis. The study suggests that the government needs a uniform approach to their publishing activities and common image and material banks. All publications must be as accessible, open and useful as possible.

After discussions with some government officials, problems were identified in the use of photographs and YouTube-materials. For companies that are partly owned by the state like the Public service broadcasting company has of course different sets of terms including collective labor agreements of actors who work permanently for the broadcasting company. During recent years, a few ministries have taken as in-house resources visual or graphic designers who take care of creation of visual design for publications and communications. The expertise and need for it has risen over the last few years, which would also need to be reflected as formal transfer of rights provisions in the employment contracts.

²⁴ The types of publications include working groups' reports and reports, preliminary reports, reports and studies commissioned by the ministries. The publications of ministries contain descriptions, drawings and tables. Electronic publications may also have links to a moving image. Publications, brochures, or magazines are generally not published.

Case: Creative project management

Finnish Government officials may organize workshops including content to them in creative ways. Just recently, a workshop was organized in one ministry for government officials to monitor their own creative work. It has already been established that officials are creative in finding new solutions but government activity could also include making of a podcast or a video, where they for example decide to use musical input by officials themselves as the background music. The synopsis to a production may be created by an official, and further developed to a script by the advertisement company. A subcontractor can then create an animation to it and the voice over from another. Currently copyright issues are included in everyday activities of also government officials.

Case: "The photographs of politicians"

A few years back there was a case where an officer worked as a photographer at the State Secretariat and had access to situations where politicians and experts of higher ranking met. The photographer had later used the photos for his artistic creative activity by super enlarging details of the photos of these people and put them up on display. The case caused discussion stemming both from IP perspective and labor right and privacy right protection.

4. Procurement

4.1. General

Government is the biggest customer of products and services and in issuing tenders sometimes for innovative solutions, there are direct IP implications in managing the ownership and future use of such products and processes. Based on the act on public procurement (1397/2016) the state and municipality entities and similar shall arrange competitive tendering of their procurements and concession contracts has had an impact on the availability of model clauses with regard to IP language in contracts. In order to take IP related issues into consideration in them, and to secure results from government investments, some model provisions have been developed for the obtaining of IP titles to these results. The Finnish law builds in this respect heavily on EU harmonization.

The Ministry of Finance negotiates on 1-3 year intervals together with the representatives of the Ministry of the Employment and the Economy and the industry on the terms for model contracts to be used for public procurement and concession contracts on the government sector.

The ownership of IP titles following the standard terms vary depending on the type of product or service. On a ministerial level, where the product could be an expert study or other kind of written content, model formulations on IP rights cover content of the actual study, background materials regardless of whether protected under IP or not as well as research data and results collected or

reached within the procurement process. The main principle is to decide the suitable licensing formula based on the needs of the procurer (government). If the procurer cannot see a reason to have exclusive rights over the content, they are considered to belong to the producer or service provider (private actor). In such cases, the procurer has an extensive right to use the material and to transfer this right to other ministries and subsidizing authorities and entities. The producer cannot publish the results of the study before the procurer does. If there is an impeding reason to “retain” the rights with the ministry the producer gets a license to copy and use the materials in his/her own work but he cannot transfer rights to use the materials even partly. For such use, written permission from the government is required.

The government’s procurement process²⁵ aims at efficiency, transparency and coherence. It does not specifically aim to promote innovation or to provide preferential treatment for certain categories or types of actors. A deeper look into the procurement act shows that there are some specific exceptions to the procurement process in the context of artistic materials or performances. The production of program material intended for audiovisual media services or radio services made by providers of audiovisual media services or radio services is excluded from application of the Act on procurement. The same applies when the aim of the procurement is the creation or acquisition of a unique work of art or artistic performance. Art and similar content is very subjective and it is important to allow some flexibility in the acquisition of this kind of content.

4.2 Model contract terms on IP rights for procurement

The government has developed regularly updated and wide model conditions for procurement contracts. A model contract for procurement processes contains regular IP language, which normally reserves sufficient rights to use the content within government activities. Such contracts are normally offered as standard and accepted. They can be negotiated in more detail if necessary to either direction. Sometimes even in a buyout situation the right to use the content have been licensed for particular purposes outside government activities.

A standardized document used is the procurement for the government level, the so-called JYSE-conditions developed by the Ministry of Finances together with the business sector.

There are specific sets of IP conditions for procurement of both *products* and *services* (JYSE Supplies and JYSE Services²⁶). Both contain similar principles on transfer of IP rights between the parties of the procurement process. It is not clear how these terms work in practice with regard to different types of intellectual and industrial rights as some of them need to be registered and others not. The following IP related language is included in the model provisions for services²⁷.

²⁵ The Government procurement process, Ministry of Finance: <https://vm.fi/en/governance-policy/corporate-services-for-government/government-procurement>

²⁶ General Terms of Public Procurement in Supply Contracts and General Terms of Public Procurement in Service Contracts, as updated in April 2017, <https://vm.fi/en/governance-policy/corporate-services-for-government/government-procurement>

²⁷ The model provisions state also that limitations of liability specified ... do not apply if the other contracting party has

“20. Intellectual property

20.1 Unless otherwise agreed, intellectual property rights to the end-results or documentation of the service will not be transferred to the customer²⁸. All materials that the customer and service provider hand over to one another before or after the signing of the contract will remain the property of the assignor. However, the customer shall have an irrevocable right to use the end-results of the service as well other materials transferred to it by the service provider for a purpose related to the use of service in accordance with the contract. The “right of use” includes the right to use, copy and make or commission modifications of the materials. When making or commissioning modifications of the materials handed over by the service provider, the customer shall ensure that none of the service provider’s business or trade secrets are disclosed. The customer has the right to transfer the materials to a party to whom the customer’s tasks are transferred, with equal rights and obligations.

20.2 The service provider is responsible for ensuring that the services provided or the related materials will not, when used in accordance with the procurement contract, violate a third party’s patent, copyright or other intellectual property rights valid in Finland.

20.3 If any claims are presented against the customer based on intellectual property rights relating to use of the materials, the service provider is obliged to meet these claims on the customer’s behalf at its own expense. The service provider is obligated to ensure that no legal costs, damages, other compensations payable to a third party or other liabilities towards a third party are incurred by the customer through claims or obligations arising from intellectual property rights relating to the service or the related materials.”

4.3 Contracts within information technology (IT) acquisitions – open source and copyright

The third area of contracts having specific IP conditions is the information technology (IT) sector.²⁹ There are sets of general clauses as well as sets of clauses for open source, non-open and agile method procurements.

Special expertise in IP matters in this field lie mostly with single policy officers depending on their area of responsibilities. The principle is to avoid exclusive contracts (vendor lock-in) and instead focus on open transfer of data and knowledge. Delivering a tailor-made source code for further

caused the damage willfully or through gross negligence, violated the confidentiality obligations or violated intellectual property rights. In such a case, the injured party has the right to demand compensation for indirect losses as well.
²⁸ Customer means here the government. It must be noted that English translations of these terms are not coherent and to decrease confusion clarifications of terms for each context have assessed by the writer.

²⁹ These General Terms and Conditions supplement the agreement on procurement which describes the parties to the agreement, the object of the agreement, the content of the delivery or service, the requirements set for the object of the agreement, the detailed obligations and responsibilities of the parties, the schedules, prices and payment terms, as well as any other terms and conditions that deviate from or supplement these Terms and Conditions. Sections 6 (2) – 6 (7) of JIT 2015 – General Terms and Conditions. <http://www.jhs-suositukset.fi/suomi/jhs166>

development of the subscriber is considered to be better as it would promote the emergence of a new business for SME software companies. As transparency increases, the playing field opens up to new businesses and technology and service innovations. The development of new types of services is possible when private companies gain access to information and interfaces produced by the public sector.

The Government (Prime Minister's Office) has centrally negotiated procurement contracts for software that mainly transfers all rights to the "data media". The main principle is that unless otherwise agreed, copyright and intellectual property rights to the client's (government) application and the associated documentation, the client's material excluded, shall belong to the supplier or a third party.

The IT supplier shall grant the right to use the material delivered to the government without additional charges under the terms and conditions of open source code software. If the supplier does not specify any license, the supplier shall grant the client, without any additional charge, a royalty-free, permanent, irrevocable and non-exclusive right to use the content, independently or with the assistance of an external service provider and without being limited by copyrights and intellectual property rights of the supplier or any third party³⁰. Separate terms have been formed for the services based on open source code.³¹

Regardless of the open source code license selected by the supplier, the supplier shall be responsible towards the client for any part of delivery it has made itself or contracted to its subcontractor. The delivery may include platform software if such software and the terms and conditions governing it have been specified in the agreement or if the client has later approved them. The provisions do not apply to platform software, which is governed by the applicable terms and conditions of standard software. The supplier shall not be liable towards the client for breaches of intellectual property rights associated with third-party platform software, except to the extent the third party in question has committed to the same towards the supplier under the standard terms and conditions of the platform software. Sometimes – if the tender does not require open source code to be used, the terms and conditions result in the supplier providing the client with a "non-open" but otherwise extensive license to the client's application.

³⁰ The uses included in the Annex 4: Special Terms and Conditions for Projects Implemented Using Agile Methods (JIT 2015 - Agile Methods) are following: use the client's application in its own activities, ii. Modify and develop the client's application further for its own use, iii. Make copies of the client's application for its own use, iv. Use the material and know-how generated in conjunction with the production of the client's application in connection with other applications, v. Transfer the client's application to another hardware platform or operating system environment or geographic location; however, taking into account any export restrictions, vi. Transfer rights to use the client's application to third parties, if this is required for the performance or re-organisation of the client's tasks, vii. Receive the right of use and possession to the machine and source code versions of the client's application.

³¹ Special Terms and Conditions for the Procurement of Client's Application under Open Source Software Terms (JIT 2015 - Client's Applications Open Source); Terms exist also Annex 3: Special Terms and Conditions for the Procurement of Client's Application under Software Terms Other than Open Source (JIT – 2015 – Client's Applications Non-open)

The Government obtains, based on model provisions in the procurement contracts the rights to use the results of the research within government activities, without the right to transfer rights to third parties. This is the norm when the results are more of an informative than business oriented nature. The writer or the company who have developed the content normally holds the IP and may use it for further innovative work and the government retains a right to use it for its own purposes. It seems that the government does not obtain all rights, i.e. make a buyout through these contracts in order to guarantee free use by anyone based on the re-use of public sector materials and the open science initiative.

Based on the above, it seems that agreements are not normally built for government ownership of IP titles and the licenses transferred via agreements to the government are dispersed and not efficiently managed. The state does not have a department that could collect any revenue for their content or share that with anyone.

Some examples can be found where the government have given permission to use a work in another context than what it had been produced for where the entire IP title was owned by the government. This practice is outdated and newer terms favor the non-exclusive uses only. The government is subsequently not commercializing or making available for public use any materials for commercial purposes.

5. Government Funded Research

5.1 Free research and commissioned research

The Academy of Finland³² is a major supplier of funding to research in Finland. With the 444 million euro funding, the work of the Academy contributes to the renewal, diversification and increasing internationalization of Finnish research. The Academy's activities cover the full spectrum of scientific disciplines. They also support the internationalization and the utilization of research results.

The IPR Handbook³³ developed by the Academy contains specific consideration in this regard. The handbooks include both copyright aspects and aspects on industrial rights. From the point of view of the Academy of Finland, the most important IPRs are copyright (e.g., every scientific publication enjoys copyright protection) and patent rights. The Academy of Finland Board decided that inventions made within Academy-funded research projects are to be seen as having been made in commissioned research.³⁴ This decision applies on funding received from 2007 onwards. Inventions

³² The Academy of Finland's mission is to fund high-quality scientific research, provide expertise in science and science policy, and strengthen the position of science and research. We are an agency within the administrative branch of the Finnish Ministry of Education, Science and Culture.

³³ Academy of Finland IPR Handbook, 2015. <https://www.aka.fi/en/funding/how-to-apply/application-guidelines/ipr-issues/>

³⁴ Commissioned research refers both to research that is a charged service activity subject to the provisions of the Act on Criteria for Charges Payable to the State (150/1992; (Maksuperustelaki) and to research that includes at least one

made in projects before that time have been made in free research³⁵. Matters with regard to publishing of research results are dealt with below.

The IPR Handbook guides the research team to ensure that the ownership of an IPRS are established in good time. IPR guidelines for researchers in Academy-funded research projects deal mainly with industrial rights. Academy research post holders come under either the Act on the Right in Employee Inventions or the Act on the right to inventions in higher education institutions, depending on their site of research. The latter is applied to researchers working at universities, while the former is applied to researchers working at research institutes and business companies.

5.2 Main research institutions

The primary task of state research institutes, which are the main actors in sector research, is to acquire, produce and provide information as the basis for political decision-making and development of society. In addition to research duties, the institutes have a varying number of different specialist, monitoring, training, guidance and other official functions, charged and other service activities and so on. Research institutes produce services horizontally to many different administrative sectors within the government. They also provide services to businesses and to third sector operators.

The majority of research and development activities carried out in research institutes are financed with appropriations allocated in the state budget. In addition to budget R&D activities is increasingly financed by external funding. Such funding consists of income from charged services and funding from elsewhere than the institute's own budget. External funding is granted mainly on a competitive basis from several sources both domestic public and private sectors and international sources. The share of external funding is based on the performance targets of the institutes and is thus estimated³⁶.

The government is not obtaining IP for general research results. But IP is obtained by the government institutions for the innovations in the area of government owned research, financing and marketing companies, such as the VTT³⁷ and Business Finland³⁸.

VTT Technical Research Centre of Finland Ltd

VTT is one of the leading research and technology organisations in Europe established in 1942. The

external party acting either as a performer of sub-research, a funding body or other participant and that involves responsibilities regarding the research results or the method of implementation of the research.

³⁵ Free research is research that is carried out in an employment relationship, for purposes of executing the research tasks assigned to universities, without external funding and without involving any external contracting party.

³⁶ There are currently 12 publicly financed research institutes in seven administrative sectors. Statistics Finland. https://www.stat.fi/meta/kas/valtutklait_en.html

³⁷ VTT Ltd's webpage: <https://www.vttresearch.com/impact/references1>

³⁸ Business Finland is part of the Team Finland network. <http://www.visitfinland.fi/en/>

VTT is a 100 % government owned research and technology organisation. VTT is part of Finland's innovation system and operates under the mandate of the Ministry of Employment and the Economy. The research centre develops new smart technologies, profitable solutions and innovation services and serves both private and public partners from all over the world.

VTT ensures efficient utilization of science and technology with the aid of broad international cooperation and networking. VTT's scientists develop each year an extensive amount of new knowledge, technologies and obtain intellectual property rights for it. VTT's IPR is commercialised at market price, applying terms that are required for public research and technology organizations. Based on the VTT IPR Policy and depending on the case, different agreement types are available, from the IPR options offer both licensing of right and sales of the IPR. VTT has several protected technologies that are currently available for licensing or sales.

According to Finnish Copyright Act (404/1961), VTT as an employer has the copyright to computer programs and databases that VTT's employees have created in the scope of their work duties. VTT has the ownership for other IP created in the scope of work in context of employment According based on VTT's general terms of employment contracts.

VTT has the right to acquire the right to the inventions made by its employees according to the Finnish Act on the Right to Employee Inventions (656/1967).

The decision on the rights to the invention is made within four months from receiving an invention disclosure, if the disclosure includes sufficient information for evaluation. The main alternatives are:

- 1) VTT takes the invention to its possession
- 2) The invention is taken into VTT's possession and if the concept history and terms of the contract requires so, subsequently handed over to a customer. This is mainly the case in commercial projects funded by private companies.
- 3) The rights to the invention are assigned to the inventors
- 4) The invention disclosure is rejected because it does not fulfil requirement of patentable invention or does not contain enough information for evaluation.

VTT has two types of the rewards for the inventors: i) fixed invention and patenting rewards and ii) inventor compensation for commercialized inventions. A fixed invention reward (800€) is paid for an invention taken into VTT's possession. A fixed patent application reward is paid for the first priority application based on the invention and filed by VTT. The amount of this rewards is 800-1600 € depending on the amount of inventors. A fixed patent reward (600-1200€) is paid for the first granted patent based on the invention in case that the patent is still in VTT's possession in the granting day.

The inventor is also entitled to invention compensation when the invention produces net income for VTT. The amount of the compensation is 20% of the deducted income and it is paid annually

according to the deducted income calculation up to the end of the previous calendar year. Calculation rules for the deducted income are available in a public summary of invention rewards at VTT.

The developers of commercialized software, who are employed by VTT, can be rewarded using similar approach than for compensating inventors, but reward level applied is 10 % of the deducted income.

VTT strives to maximize the impact of VTT's IPR by licensing or transferring it to companies that uses it in its business or by transferring IPR as in-kind investments to new spin-off companies. VTT also actively publishes the results in order to make them available for public use (see the web page for more details on the number of publications etc.). More about VTT's trademark management in Chapter x on Signage.

THL – The Finnish Institute for Health and Welfare

The administrative of the health and welfare sector branch includes several independent institutions and agencies. Some of the independent institutions and agencies produce research data for bill drafting and as a basis for social and health policies and decision-making. The Ministry of Health and Welfare coordinates activities in the administrative branch through a management group comprised of the top management of the ministry, agencies and institutions. Some of the government agencies act as license and supervisory authorities.

The National Institute for Health and Welfare (THL) undertakes an array of projects, most of which are carried out in close collaboration with either Finnish or international partners. Furthermore, THL issues studies, reports, guidebooks, handbooks and monographs, among other items, in its publication series. Moreover, researchers and developers at THL publish annually around 1000 articles in international and Finnish scientific journals and trade magazines. The publication repository Julkari promotes the open access to this content. Most of the statistics and data is available to anyone free of charge. Open data is the main principle but because much of the data is considered personal and confidential it must remake the data before it can make it available to the public. A government proposal (HE 159/2017) proposes to streamline the use of different sets of data and the required permissions to it to better serve the needs of research, development and innovation, teaching, information management, government control and supervision, as well as and planning and clearing tasks for authorities.

The THL's IP policy is connected to the general terms of access to register and research data which are mainly collections of personal data and samples. In other functions, THL relies on the basic terms with regard to copyright for government officials and conditions developed for procurement of supplies and services (JYSE) and the JHS-terms for IT. THL has not been actively seeking for patent or

other IPR protection for the outcomes of its activities but rather aimed for publicly available information and promoting public benefit in the area of health and welfare.

Furthermore, the THL Biobank hosts a remarkable collection of population and disease-specific samples for research purposes. The general terms of access to the biobank contains following terms on IP:

“Ownership and Intellectual property.

Ownership and Intellectual property

THL Biobank owns the Material, databases, raw analyses and assay data, and generic improvements and inventions related to THL Biobank’s laboratory, sample and information handling methods and procedures.

THL brand or logo cannot be used without a specific agreement.

THL Biobank does not claim ownership to new intellectual property invented or developed solely by the Recipient when using the Material. Actions to protect Recipients’ intellectual property rights (eg. patent application) based on the use of THL Biobank’s Material must not limit THL’s or THL Biobank’s activities, excluding time needed to withhold publication of results.

The Recipient covenants not to assert its intellectual property rights arisen from the Project and Material against THL Biobank, its owners or successors, in any court or administrative agency. This covenant applies only to THL’s own activities, research and development.

Limitation of liability

Parties shall not liable towards the other party for indirect damages. Liability for direct damages is limited to the value of the agreement and at the maximum 10.000 euros, whichever is greater. The limitations shall not apply to gross negligence or intentional misconduct of the other party.

Law and jurisdiction

Finnish laws shall apply. Any controversy or claim arising out of or in relation to this agreement that cannot be amicably solved within 60 days from the first written notice of the party shall be finally settled by arbitration in accordance with the rules of the Arbitration institution of the Finnish Chamber of Commerce. The place of arbitration is Helsinki and the language is English, unless otherwise agreed.

Controversies or claims arising out of or in relation to Finnish public sector collaboration shall be brought into Helsinki District Court, unless otherwise agreed.”

Helsinki University hospital HUH³⁹

The Hospital District of Helsinki and Uusimaa (HUS) is a joint authority formed by 24 municipalities. The purpose and aim is to offer patients in all of the member municipalities a timely and equal access to specialized medical care. Functioning as part of HUS, Helsinki University Hospital HUH is nationally responsible for treating severe and rare illnesses and ones calling for special expertise and technology. HUH has a considerable number of linked enterprises and support services.

The hospital needs to secure schooling and research for their physicians and therefore it is actively participating in research projects. Inventions are made in particular in clinical research and complementary research. Within the hospital and medical research areas, it is quite common to have persons holding double positions (university-hospital) which could have impact on IP issues.

A few studies on IPR issues of the University Hospital have been made during recent years. The newest project is the YSI project that looks for hospital-based business options for businesses. The University Hospital for Innovation Platform (YSI) coordinated by Turku Science Park Ltd develops an operating model that creates new business based on the needs of the hospital's day-to-day operations.⁴⁰

Because the University Hospital is not a university, its innovation policy is based on the above-mentioned Act on innovations in employment relationships, not innovations in higher education institutions.

The Helsinki University Hospital uses Material Transfer Agreements (MTAs) that define the transfer of materials and rights between organizations. The MTAs are used when samples are sent to HUS research facilities and especially when sending materials abroad. The MTAs cover in particular intellectual property rights of organizations participating in research as well as biological samples of research compounds.

The hospital's primary focus is on healing patients. Innovations are important but not the primary focus of the activity of the hospital. In addition, patenting and IPR protection require outside participation in order to fund the process. The hospital does not have funds for the patent application process and additional R&D in their regular budget. If the invention has great public or economic benefit and financing is available, the hospital takes the steps to obtain IP according to the act on inventions in employment. Business opportunities are evaluated by the hospital based on usual terms prescribed by the law.

³⁹ The website of HUH did not bring any hits by searching for IP related information but a search on the THL website altogether 24 search results were found.

⁴⁰ YSI (University Hospital for Innovation Platform), was based on public funding by the Ministry of Social Affairs and Health, 30.3.2017, <http://www.utu.fi/fi/Ajankohtaista/Uutiset/Sivut/YSI-hanke-etsii-yrityksille-sairaalalahtoisia-liiketoiminta-aihoita.aspx>

Furthermore, the Helsinki Biobank is a hospital based biobank founded by the Hospital District of Helsinki and Uusimaa (HUS), the University of Helsinki, Kymenlaakso Social and Health Services (Carea) and the South Karelia Social and Health Care District (Eksote). Once fully operational, the Helsinki Biobank covers 1,9 million inhabitants. A search on IP on the HUH website revealed one hit and led to terms of access and use formulated in the same manner than described above for the THL Biobank. The general principle is that the biobank owns the IP in the Biobank.⁴¹

5.3 Dealing with IP of research results

General

This chapter will draw conclusions based on which are the main systems and procedures in place for dealing with the IP of research results from government funded research.

Based on the IPR handbook by the Academy of Finland⁴², research projects include normally two distinct components. On the one hand, material protected by copyright is used in the actual research work. This may involve processing, adaptation, modification, combination or development of the protected material, which may include materials produced by parties to the project, individual researchers or outside sub-contractors. Use of such background material requires sufficiently detailed agreement on related copyright issues.

On the other hand, projects produce results. Copyright to these results must be agreed both with the original copyright holders and among the parties to the project, such as the researchers, the university, the research institute and any private business company involved.

The IPR Handbook recommends that when drawing up a research contract, it is advisable to agree with the other parties in advance on the ownership of any inventions that might emerge from the project.

A group of researchers may also seek guidance from the Foundation for Finnish Inventions⁴³; the National Board of Patents and Registration⁴⁴; Sitra⁴⁵, the Finnish National Fund for Research and Development; and Business Finland. The Internet is also a good source of information on patents and other aspects of intellectual property rights. Expert assistance is available for assessing the development of inventions, their potential and related costs, and ways of approaching their commercialization.

⁴¹ Helsinki Biobank Terms of Access: <http://www.hus.fi/en/Search/pages/Results.aspx?k=intellectual%20property>

⁴² See footnote 29.

⁴³ The foundation of Finnish Innovation, Keksintösäätiö (in Finnish only) <http://www.keksintosaatio.fi/>

⁴⁴ National Board of Patent and Registration; <https://www.prh.fi/en/index.html>

⁴⁵ The Finnish Innovation Fund Sitra, <https://www.sitra.fi/en/>

Obtaining and ownership of IP titles to research results

From the main research institutions tackled in this study, the VTT obtains actively IP titles to the research results on a regular basis and offer them for licensing by new startups and new businesses. The VTT is the owner of hundreds of patents.

The HUH is primarily relying on outside economic co-operation and do not hold many patents itself to inventions. On the other hand, it takes the benefit of different research projects in order to be able to treat its patients with the newest and most innovative solutions. The same goes for THL.

An IPR portfolio gives credibility on capability to create original and innovative solutions for technical problems. Through experience in managing an IP portfolio the institution may need to reassess if it is worth to seek a patent to the invention. The life cycle of the product is short (patent process is long and slow), the value of the invention is low compared to the cost of patenting. Infringement of the patent is impossible or difficult to identify or prove or claims of the patent are easy to design around. It is also possible that the invention can be kept in secrecy and will not need to be patented (as applying for a patent means always publishing the invention) and risks (reverse engineering, same invention by others) are low.

Sharing of revenue

VTT applies commercial terms on the use of its inventions and receives revenue from the sales and licensing. There are models as explained above, how the VTT shares revenue with the inventors in different phases of the IP process. VTT's policy is to commercialize the IP and make the technologies available.

IP issues in context of publishing research results

Academic theses are normally regarded as works protected by copyright. Before a thesis is published, its author has unrestricted control over it. After publication, the thesis is subject to limitations in the copyright act and can be quoted from as a contribution to scientific debate, for example in another thesis or in a scientific article.

The protection based on the copyright act does not extend to the research results presented in the research or the factual content as such. If the author wishes to restrict use of the research results, discoveries, etc., by the supervisor of the work or for commercial reasons for example, any restrictions must be agreed in the agreement.⁴⁶

Copyright to theses written as commissioned research should be agreed with the customer who commissioned the research. Copyright to group theses is held jointly by all members of the group,

⁴⁶ IPR Handbook, see footnote 29.

and no individual member can decide issues covered by copyright without the consent of the other members of the group.

The copyright act includes no all-encompassing provision on the use of works for research. For many years, the research sector has worked to improve the situation but the ministry of Education and culture has been much too occupied with implementation work coming from the EU level that it has been virtually impossible to develop national law in this respect. Therefore, if the research contains content protected by copyright and no limitation apply – the researcher needs to clear the rights with the author.

Open access to publicly funded scientific publications has been set as a goal in both the EU and Finland. A study⁴⁷ published recently suggests that the commercial production of open publications is not enough, because it is often based on the charging of fees, thus failing to ensure the preservation of information or its continued availability. The parallel publishing of publications in non-commercial databases independent of other publishing channels would ensure the availability and preservation of publications more effectively than is currently done. In practice, exclusive rights specified in publishing agreements would be transferred to the public consumers of these publications. The study proposed that a provision would be added to the Copyright Act, stating that the copyright holder of a scientific publication would always be entitled to non-commercial parallel publishing, would facilitate the development of parallel publishing. Such a provision would limit the rights of the copyright holder to the assignment of a given publication, whilst still preserving the assignment of all other financial rights belonging to the author. This provision would allow the copyright holder of a scientific publication to always save his or her publication in, for example, a data archive maintained by a university. Any provisions in a publishing agreement preventing parallel publishing would be rendered null and void.”

6. Big data

6.1. General

The Directive 2003/98/EC (PSI Directive) on the re-use of public sector information is a core element of the European strategy to open up government data for use in the economy and for reaching societal goals. It encourages EU member states to make as much material held by public sector bodies available for re-use as possible to foster transparency, data-bases, innovation and fair competition. Revised by Directive 2013/37/EU the principle of the re-use of public sector data was extended to cultural institutions, like museums, libraries and archives, the directive emphasizes the importance on allowing new EU-wide services to be built on public sector information but tries to avoid any area having clear restrictions related to IP. The directive is according to its recital 24 with-

⁴⁷ Abstract of the Study by Marja-Leena Mansala, IPR University Centre. 2017. <http://julkaisut.valtioneuvosto.fi/handle/10024/80050>

out prejudice to directives on copyright in the information society 2001/29/EC and database protection 96/9/EEC. It is also without prejudice to obligations according to the Berne Convention for the Protection of Literary and Artistic Works (the Berne Convention) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (the TRIPS Agreement). Public sector bodies should, however, exercise their copyright in a way that facilitates re-use. The directive spells out the conditions within which public sector bodies can exercise their intellectual property rights in the internal information market when allowing re-use of documents.

The government program of Finland for 2015-2019⁴⁸ includes numerous proposals linked with digitization of the government and the support of the digital environment. Such work includes opening up of data within the government by introducing open access policies among others. The areas included are mobility as a service, health care, learning as well as the Industrial Internet. The program aims to introduce and promote new technologies, digitalization and new business concepts also by legislative means.

The Ministry of Traffic and Communications published its Big data-strategy in 2013. It considered that with the help of open data and the better use of data resources, the government could provide favorable conditions for new business ideas to develop. The ministry noted that the use of Big data has IP implications, due to the act of reproduction needed to analyze the data through text and data mining (TDM) in an automated and efficient way. The debates around whether the use of big data is a copyright relevant issue or not has been ongoing and resulting in different conclusions in different parts of the world.

Finland generally considers it important to promote the utilization, availability, reuse and interoperability of data for the construction of the EU data industry, except by means of law. If such information is opened more widely, this will also benefit public sector bodies.

In order for the governments to be able to open up their data and license it via the creative commons, it needs to have the copyright to the works. The authority may only authorize a license for material with which it has all the necessary rights in their possession. Usually, the public administration organization has all the rights to all datasets it has produced. Instead, if the copyrighted material materials have been acquired or otherwise purchased from third parties, or the data is produced entirely or partially with outside funding, the necessary re-utilization rights must be obtained for this information. Otherwise, third party material cannot be licensed.

The Copyright Act in Finland does not include a specific provision that would allow exceptions IP rights to collection, storage, analysis and use of information collected by the government. Neither does it refer specifically to a right for text and data mining (TDM). The Copyright act does include one section on the right of harvesting by the National Library based on Section 16 b of the Copyright

⁴⁸ Programme of Prime Minister Sipilä's Government. Source; <https://valtioneuvosto.fi/en/sipila/government-programme>

Act. Normally the government holds the rights to catalogues and databases it has formed in its operations in different sectors. Art 3 and 3a of the DSM directive are currently debated at European Union Level. They include provisions on an exception to the exclusive rights of rightholders for reproductions and extractions made by research organisations and cultural heritage institutions in order to carry out text and data mining of works or other subject matter to which they have lawful access, for the purposes of scientific research.⁴⁹

In its mid-term review of the Digital Internal Market Strategy (COM (2017) 228), the Commission identified the need for access to and re-use of publicly available and publicly funded information to meet the data-driven objectives and the status of public interest information held by private parties.

Case: Data map of the administrative sector of the Ministry of Transport and Communications

The open data-working group of the Ministry of Transport and Communications' administrative sector has compiled a data map⁵⁰. The aim is that the data of the Ministry of Transport and Communications' administrative sector would be effectively utilized in business operations and services in different sectors of society. The data map consists of data sets produced in the administrative sector and descriptions thereof, their more detailed data types and delivery methods as well as known challenges and possibilities concerning the utilization of the data. The structure of the data map comprises strategies, resource management, project management, transport and ⁵¹communications infrastructure, means of transport, personnel licenses, airworthiness certificates and identification, operators, condition data and primarily real-time transport and communications data. The data map will be utilized in reports that support the implementation of the key project. Once the data map is completed, the ministry provides companies and the public sector a chance to embrace the data by finding new and innovative ways of combining and utilizing the data contained therein both for the purpose of conducting business operations and service development as well as supporting decision-making. The data map can also be freely utilized in development work and hackathons, for example.

Based on experiences of the case, future transport will rely on the interoperability of information and information systems, as well as the openness of interfaces. Transport operators will cease the use of closed and local ticket systems and adopt interoperable online systems that communicate via background systems. In this way, passengers will be able to acquire a ticket for their entire travel chain from one service point. Information is seen as the "fifth form of transport". It is the greatest factor of change in transport. Digitalization and utilization of information will simplify the development and sale of travel chains that meet customer needs and interoperable mobility services. This will result in better travel experiences and savings for transport users. The digitalization of transport will

⁴⁹ Council Text of art 3 to the trilogues, Proposal for a Directive of the European Parliament and of the Council on Copyright in the Digital Single Market (COM(2016)593)

⁵⁰ Ministry of Transport and Communication - Factsheet 61-2017:
www.lvm.fi

⁵¹ Data map of the administrative sector of the Ministry of Transport and Communications, 2017 (<http://julka-isut.valtioneuvoisto.fi/handle/10024/160317>)

*open the door for new business and jobs. Law through amendments of the act on Transport Services will support the use.*⁵²

The data is offered to users for reuse but there is no active offer of a licensing service of the data published by the ministry. All authorities use the open data licenses where the data is free to be used by anyone, if the source is acknowledged. The Ministry of Communications has encouraged the access to and use of data actively, also by a data catalogue, the data charts mentioned above as well as through cooperation between institutions and agencies.⁵³ The institutions also take part in hackathons arranged on the open data-website and networks such as *avoindata.fi* and “*digiroad*” and “*digitraffic*”.

The Ministry of Communications uses procurement terms in a way that allows the procurer to acquire all the rights and can decide whether or not to open them up for further use. The conditions vary depending on the type of work for example a publication, design of a product, service or construction. To secure sufficient rights for open use the rights in JIT 2015 are sufficient, *i.e.* a broad right to use the content and transfer it further.

7. Signage

Government symbols are not often being used by other than eligible parties. According to the webpage: www.valtiolle.fi – the government and agencies have altogether 350 agencies and institutions with their signs and logos.

The lion sign by the Ministry of Education and culture has not been registered. Many other government symbols uses the lion as theme. There have been a few cases where someone has downloaded the ministry’s logo and used it unauthorized for different purposes.

Most companies have instructions about the use of their logo on the internet. There is no coherent information about the use of government symbols in Finland.

As an example of a wide use of protection for sign and management of them is the VTT. The word or letter combination “VTT” is registered trademark in Finland, the EU, Japan, USA and Brazil. VTT's logo has also sometimes been filed as an "image" -trademark but there is the problem with the continuous amendment of the logos and VTT has not yet decided if it shall apply trademark protection for the new logo published in August 2018. A few VTT trademarks with prefix letters such as VTT Group, VTT ProperTune, VTT ProperScan, VTT CityTune, have been registered as EU trademarks. VTT has a total of 80 trademarks, including registered trademarks.

Business Finland holds also several trademarks and manages them actively. Business Finland has protected its former name Tekes with trademark in its biggest “market” areas around the globe as

⁵² [Finnish Communications Regulatory Authority FICORA. https://www.viestintavirasto.fi/en/steeringandsupervision/cooperation/nationalcooperation/jointprojects/interoperabilityofticketandpaymentsystemsproject.html](https://www.viestintavirasto.fi/en/steeringandsupervision/cooperation/nationalcooperation/jointprojects/interoperabilityofticketandpaymentsystemsproject.html)

⁵³ See also <https://www.trafficlab.fi/about>

well as some very few trademarks mainly linked to the funding programs. Business Finland Oy has several registered trademarks, both domestic/EU and global. However, these trademarks are protected at the time of Finpro Oy and they are linked to the logos like Visit Finland and Invest In. These trademarks are also protected as designs. The activities of Business Finland in assisting in commercialization will be described further down.

Case: "Fraudulent letter"

The contracts at HR departments of ministries does not contain specific clauses for officials who specifically work with press releases, photographic or other materials.

However, during the spring 2018 a case of fraudulent ministerial letters came up. Someone had sent letters to stakeholders using the ministry's logo and therefore misleading the recipients in believing that the letter was authentic. Government officials could separate the fraudulent letter from a genuine one but the task was not easy for a citizen.

8. Use of innovative and creative products of others

8.1 General

Governments officials use content in different forms protected by copyright on a daily bases within different departments and institutions. This is relevant also for government run educational establishments. Finland is better equipped with licensing tools of works for the government use than many countries having a so-called extended collective licensing system to complement the use of protected materials for research allowed under limitations.

Uses within government activities can be licensed via so called extended collective licensing (ECLs) (Section 26 §)⁵⁴ of the Finnish Copyright Act. Extended collective licenses were developed in Nordic countries in the 1960's to serve situations where works cannot be licensed due to mass use situations but where the interests of the users require smooth functioning of the copyright system. The ECLs apply to an agreement made on the use of works of authors in a given field between the user and an organization, which represents, in this field, numerous authors of works used in Finland. Such an organization is approved for this purpose by the Ministry of Education and Culture. An approved organization is with regard to this agreement deemed to represent authors of other works in the same field. The agreement gets an extended effect on works by authors not directly represented by the organization.

⁵⁴ A licensee who has obtained an extended collective license by virtue of aforementioned agreement, may, under terms determined in the agreement, use all works by authors in the same field. The system is supported by supervision by the Ministry. If the agreement negotiated between the parties does not provide the right to individual remuneration for the authors represented by the organization, an author in the same field not represented by the organization shall, however, have the right to claim an individual remuneration during a period of 3 years from when the right arose. The remuneration shall be paid by the organization.

The negotiation of the ECLs does require some IP management on the government's side. The first 20 years, the administration was taken care of by the Copyright section of the Ministry of Education and Culture. The Ministry of Education and Culture is responsible for development of copyright legislation on national, European Union and international levels. As there is no intellectual property office in Finland that would cover also copyright matters it is quite often that other ministries contact the copyright team to seek advice.

Since 2016, the Finnish National Agency for Education is responsible for the negotiations of agreements with organizations that represent rightholders on the use of literary works by the government and by elementary schools. This system covers specifically reprography and compilations of press releases (13, 13 a). The latter sector specific provision on internal communications was introduced into Finnish law in 2005. Section 14 § allows to negotiate with the rightholders on the use of works and payment of remuneration according to the agreement. The agreement gets an extended effect to work by authors who are not directly represented by the collective management organization. The remuneration collected is paid to the authors of works via member organizations of Kopiosto. The current ECLs leaves some use areas outside, such as imagery needed in power point presentations, for example.⁵⁵

The uses necessary for the legal deposit regimes – like the use of works in libraries preserving cultural material including the National Audiovisual Institute are secured with limitations in 16 b and c § with the possibility to complement them through the ECL regime.

Normally governments have not noticed infringements of government owned IPs. The risks by government agencies for infringement of IP is not very high. Generally, the administration of IP rights is of very high standard and procurement is organized in a coherent manner.

Case “Methodology against bullying in schools”

The Ministry of Education and Culture developed a framework for schools against bullying through a procurement process – the so called “nice school-project” (KiVa)”. The methodology was distributed widely to schools and published on the ministry website. This framework has subsequently been used and copied word to word in South Korea.

The ECL system described above also contains *a system of risk management*. In the ECL agreement, the CMO representing the rightholders takes over the risk of claims of infringement by individual rightholders. These claims must normally be directed directly to the CMO within 3 years of the use of the work. The licensee does not bear the risk for such claims.

The government has also different registered accounts on social media services like Twitter and has

⁵⁵ see study “Kopiointi valtionhallinnossa” (Copying in the Government sector, in Finnish only). https://www.kopioisto.fi/kopioisto/teosten_kayttoluvat/kopiointilupa/valtio/fi_FI/valtionhallinto/

offered different platforms for citizens to take part in the public discussion and hearings.

For industrial property issues, the interests are normally much higher and therefore research institutions often rely on legal expertise from the private sector by hiring attorneys-at-law.

9. IP Commercialization

Government refrains from the main purpose of IP protection and focuses on balancing the production, access and follow on creation of works and new knowledge. Companies that are owned by governments are of course different and do manage and enforce their IP in order to commercialize it to the fullest. It must be properly acknowledged that because of the privatization of several types of government run activities to private entities, also economic interests arise for such entities. For the purpose of its operations, the company may own and manage shares, holdings, movable property and intellectual property rights, and engage in their business and lease them. The company can conduct its business directly, through subsidiaries, associates and joint ventures.⁵⁶

According to preliminary evaluations entities such as Veikkaus (a gaming company owned by the government) as well as Finnair (the national aviation company) the IP management is more developed. These firms have their own legal departments and do have their own IP policies⁵⁷.

Business Finland is the Finnish innovation funding, trade, investment, and travel promotion organization, headquartered in Helsinki. Business Finland is fully owned by the Finnish Government. Business Finland employs 600 experts in 40 offices globally and in 20 regional offices around Finland. Business Finland is assisting in particular SME and midcap-companies with a so-called innovation voucher. The innovation voucher is used specifically to map IP related potential of these businesses.⁵⁸ Innovation activities refer to all measures employed by a company to develop products, services or processes, or to acquire new knowledge and competencies required in innovation activities. The innovation voucher can be used for example when a company has a new product or service idea with potential on the international level, and wishes to quickly assess its suitability for further development, usability or marketability. Business Finland can offer an outside expert opinion among other things. Business Finland also supports in the development of reports and searches related to patents, designs and trademarks, including novelty searches, patentability reports and “freedom to operate” -reviews, or assistance with the application process of the company.

Business Finland provides funding for company R&D&I –projects and projects of research organizations. In both cases, the ownership of all the results and IP linked to the results will stay by the

⁵⁶ The Government of Finland has a number of companies operating on commercial terms. They are listed on Ministry of Finances as follows: <https://vm.fi/en/state-owned-companies-and-unincorporated-state-enterprises>

⁵⁷ Such policies might be in place but could not be explored further within the scope of this study.

⁵⁸ <https://www.businessfinland.fi/en/for-finnish-customers/services/funding/sme/innovation-voucher/>

beneficiary of the funding. Business Finland is not claiming any kind of rights to the results. For the funded projects, the general funding terms and conditions include the provisions how the beneficiaries may act with the ownership, access rights, knowledge and technology transfer and publicity.

In funded projects, the rights will always stay by the funded organization, not the individual researcher or the research team. The beneficiary of the funding is always the research organization as a legal entity. It is the same with the companies. Business Finland does not hold patents.

Business Finland uses JYSE model contract IP terms for contract procurement with slight modification. The financing agreements ensure that the ownership, title and intellectual property rights to the results generated by its employees in the project are transferred to the beneficiary, based either on legislation or by separate transfer agreements. The rights are not transferred automatically. For copyright, in particular relevant databases and software rights must be transferred. Public research financing agreements include provisions about the transfer of IP rights for all projects. The Act on innovations within HEI concerns patentable inventions but other IPs need to be agreed specifically.

Other sources of assistance in this respect are Centre for Economic Development, Transport and the Environment and the Patent and Registration Office (PRH).

Case: Defense Forces

The technology investments of the Defense Forces is restored by the use of IP and collection of royalties. The IP must be agreed upon in cases of sale of the products outside the state administration. IP is used on the one hand to support the development of the nascent business, but on the other hand, government investment is recovered when the business is productive. Examples of technologies whose development projects typically include intellectual property rights in the Defense Forces are encryption algorithms and their implementation solutions, and intelligence, control, management tools and the like, unless they are open access. In this respect, the use of technologies for export purposes will be agreed with suppliers on a case-by-case basis.

10. General reflections

Based on this rather superficial description of the current situation in Finland with regard to IP matters in the government sector I would assess that the government sector in Finland is potentially very well equipped with knowledge to IP matters.

Finland has an overall general framework of guidelines about the importance of intellectual property when making acquisitions of expert studies, and in public procurement of supplies and services or information technology products. The Ministry of Finance is responsible for the general guidance and development of state administration and has developed the government's policies in this regard for some years. This JYSE terms for supplies and services were first published in 2009 and included

virtually the same language as in the most recently updated version from April 2017. The reasons behind guidelines for IP language added was the need to ensure effectiveness and transparency of procurement contracts.

IP management of the government differs of course somewhat from the objectives of the private sector, as there is normally no objective to incur remuneration to the government itself. The motive of the government holding IP is normally the support it can give to new businesses for further growth of the IP assets on a national and European level. For procurement of innovative or creative output by third parties, copyrights are not transferred to the government but the right to use works are ensured through IP terms in procurement contracts. For content made as part of the tasks of a government official the government holds the right to use the works based on the interpretation rule on employment and civil servant contracts. The government does not use this content for its commercial benefit. If publications are offered against a fee, it is to recoup the printing etc. costs of it.

The methodology for the assessment of the national copyright systems developed in Finland includes also good governance issues that by nature also covers the application of IP legislation within the government as well as in its activities. The EU commission has launched some queries to Member States, as part of enforcement policy, to check the chain of application of IT products also on government level.

With guidelines encompassing also IPs that are transferred to the government due to death of authors without relatives such a measure the IP system would be clarified and its application could be supported through transparent and clear mechanism.

The copyright system already suffers severely from the fact that identification information on works and authors and other rightholders (metadata) is not properly included in digital copies of the works, or that it is removed for one or another reason. Identification codes provided for certain types of works are not completely interoperable, making the discovery of the rightholders very difficult and hence inefficient, and blockchain or AI enabled, automated licensing and revenue sharing services sadly unreachable for rightholders and users alike. Finland considers that all of these subjects require attention in the future discussions on copyright on an international level.

The government policy in Finland for IP is that even though the use of government produced and financed content needs to be freely available and used for the benefit of the society, copyright law protects everything that fulfil criteria that is not specifically carved out from it. In practice, officials feel that the activities of the government are more broadly covered by IP than they in fact are.

Finland has already since the 1980's included the government activities in the agreements based on ECLs and thereby clearly indicated that also use of works by the government should be compensated to the rightholders. Therefore, Finland believes that clear ECL and other types of solutions would

help the application and distributions of public funded content to the benefit of all. If the use of works by government or agencies is based on false perceptions of, what is allowed or irrespective of infringement, the government is not supportive of the operation of the IP system.

Patents are rarely sought to serve the governments' own purposes. The exception is some research institutions that have decided to actively build their IP assets for the benefit of the society at large. It seems that the practices of these institutions and companies are detailed and efficient. Trademarks are registered for institutions that seek funding from external sources. Trademark protection for a sign or a logo is linked with structured view on intellectual property issues and characterize the institution in a positive manner and attract funding especially in a competitive environment.

Recommendations

The focus of the IP system seems nowadays to lie mostly on bringing economic benefits to the holders of IP than on the initial goal of the copyright system namely encouragement to creative and innovative activities within the society. Finland is probably one of the few countries putting effort into trying to apply IP rights also within government activities. From the digital revolution beginning from late 1980's to the age where artificial intelligence is already taking over many parts of the creative and innovative processes, the copyright system has developed slowly.

After looking into these questions, it can be said that there is a definite need for WIPO guidelines in this area. Guidelines are needed in order to stop the generalization of IP application to spread into the government sector. Please find some recommendations below:

- IP rights form a coherent framework in the legislation but in order to manage IP assets of very different kinds properly, governments and agencies need much more education in understanding these rights, their purpose and their efficient use.
- For government funded research the aim should be the support for the technology to empower startups and scaling up, not the institution itself. In these cases, it would be wise to include terms into funding contracts directly. All results from government funding should be openly accessible and copyright should not restrict the use of the results for further on research.
- Whenever the government makes its operations "private" it loses the right to manage them in a way that allows broad benefit for the public over the rights of shareholders. The IP policies of the public sector and that of private companies are very different in both management and enforcement of rights.

Models for IP governance would of course have to be very flexible. They could include general and overall guidelines how to ensure the necessary carve outs from the application of the copyright law

where the government and no one else either could hold any exclusive rights to the content. Furthermore, there could be specific models on transfer of rights from the civil servant to the employer, when this would be practical and unless this was already agreed among the parties.
