ALONG THE PATH OF INNOVATION to market success

Guide to Knowledge Transfer at the University of Ljubljana
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to market success

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Knowledge Transfer Office University of Ljubljana
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Foreword

The transfer of the knowledge created by staff and students is part of the University of Ljubljana’s mission, and is woven into every aspect of the way UL relates to and operates within the world around it. Knowledge transfer takes many different forms and is carried out in many different ways. It encompasses everything from research and development cooperation with companies, the transfer of innovations and other knowledge to companies via licensing agreements and IP transfer agreements, to the establishment of new companies owned by University of Ljubljana staff or students with the aim of further developing knowledge and commercialisation.

These activities require considerable expertise and effort, as well as time—time that researchers would often prefer to devote to research work and students to meeting their course requirements. Nevertheless, we are all aware of the fact that knowledge transfer success stories enhance the University of Ljubljana’s reputation and that of the individuals involved, expand the opportunity to forge connections with business partners, increase business opportunities and the possibility of acquiring even better projects, lead to academic publications in reputable journals and, not least, secure funds that can provide resources for new research. But none of the above can compare to the feeling of seeing a product or service that has been developed with the help of our knowledge reach the market.

The University of Ljubljana has committed itself to developing this field in its strategic documents to accelerate and simplify the process. It is our wish that, in the years to come, the transfer of knowledge to industry gains a value equal to UL’s scientific excellence.

The aim of this Guide is to gather in one place as much useful information as possible about the knowledge transfer at the University of Ljubljana. We would like to increase awareness of the importance of knowledge transfer and of collaboration with industry. The Guide will equip researchers with the necessary specific knowledge for collaboration with industry, legal protection of intellectual property and marketing of knowledge. We would also like to encourage researchers to put their knowledge into practice.

Prof Tanja Dmitrović, PhD
Vice-Rector for Knowledge Transfer
GLOSSARY OF TERMS
Glossary of terms

- **University of Ljubljana** means all member institutions (23 faculties and three academies) and the staff at these institutions and at the Rectorate (hereinafter also: UL).
- **Member institution** means a UL faculty or academy.
- **KTO** means the University of Ljubljana’s Knowledge Transfer Office.
- **(University) knowledge** means all the research results/foreground and other work in whatever form (invention, newly acquired knowledge, software, etc.) produced within the context of employment at UL.
- **Marketing or commercialisation of knowledge** means the transfer of knowledge to a third party (usually a company) for further development and the creation of value on the market.
- **Research results (‘foreground’)** means the items, reports, software, inventions, etc. that result from a specific piece of research.
- **Prior knowledge (‘background’)** means any data, knowledge or information regardless of form or type. It also includes intellectual property rights that exist before entering an agreement, contract or other form of cooperation. Background is a precondition for implementing a project and/or deploying the project results.
- **Rules** means the Rules on the Management of Industrial Property Rights at the University of Ljubljana, which came into force on 1 April 2016.
- **Spin-out company** means a company set up by UL staff with the aim of further developing and commercially exploiting knowledge produced within the context of employment at UL. Knowledge is transferred to a new company, either through the granting of a licence or the assignment of intellectual property rights. A spin-out company is created because the further development of a product or service is not an activity undertaken by the member institution in question.
- **Start-up company** is a newly established company with an innovative idea for a product or service and great growth potential.
The Knowledge Transfer Office (KTO) has been active at the University of Ljubljana since February 2018, when it replaced and upgraded the University Research, Development and Intellectual Property Office. In addition to formal procedures of claiming and protecting service inventions, it provides substantive support to researchers to enable them to identify and legally protect their intellectual property. It strives to market UL knowledge, foster connections with enterprises and organisations, and set up spin-out companies, all with the aim of further developing and commercialising knowledge created at UL.

The KTO’s main objective is to ease the burden for researchers in the knowledge transfer process and to thereby promote activities in the following areas:

- **Collaboration with industry**
  As well as creating opportunities to forge connections with business partners, the KTO will help you to prepare and review various types of agreement (mainly those in which an agreement on the granting of intellectual property rights arising from the collaboration is the key component).

- **Legal protection of inventions and the commercialisation of knowledge**
  The KTO manages the procedure, which is conducted in accordance with the Rules on the Management of Industrial Property Rights at the University of Ljubljana. It also provides substantive support to the process of reviewing the state of the art, evaluating the market potential of your knowledge and finding the right partnership. It is responsible for protecting intellectual property, seeking out potential partners to help you develop your knowledge further, and negotiating and concluding licensing agreements and agreements on the transfer of intellectual property rights.

- **Starting a spin-out company**
  The KTO will help you evaluate your business idea and assist you through the process of setting up a spin-out company, which includes acquiring UL consent and concluding licensing agreements if UL knowledge is used.
WHAT IS KNOWLEDGE TRANSFER?
What is knowledge transfer?

The University of Ljubljana transfers the knowledge it has, and the knowledge it acquires through its own research, in a variety of ways, thereby having an impact on the wider social environment. In the narrower sense, the transfer of knowledge/technology means the process of granting access to UL knowledge to third parties for the further development of knowledge into products and services for subsequent launch onto the market. This term is therefore most often used in connection with the establishment of spin-out companies and the granting of licences or the transfer of intellectual property rights.

Although these two areas are important, knowledge transfer also includes many wider activities, such as the employment of UL graduates and those who have completed Master’s degrees and doctorates at UL, research publications and events that foster networking between researchers and industry stakeholders, and project-based collaboration with business partners and other stakeholders.

Some forms of knowledge transfer involve more tangible and formal procedures, while others take place every day without anyone being aware of them. To illustrate this, the interconnections between all forms of knowledge transfer are shown in the flowchart on the next page.

When collaborating with industry, knowledge transfer occurs as individuals transfer their specific knowledge to the business partner when they give opinions, carry out research, organise educational events and so on. It is important to have a signed cooperation agreement, as set out in detail in this Guide, before this process takes place.
Innovation on the market

Legal protection of creation:
- Patent, industrial design, trademark
- Copyright
- Trade secret

Notice of service invention or other creation

‘Intangible’ knowledge
- Scientific publications
- Collaboration with industry
- Spin-out companies
- Transfer of staff to companies
- Networking and conferences
- Teaching

Innovation on the market

BENEFITS
- Social
- Financial
- Cultural
As one of the most commonly used knowledge transfer mechanisms, the licensing or transfer of intellectual property rights means the right to use specific knowledge protected as intellectual property.

As a method of knowledge transfer, the establishment of new companies is an appropriate way of proceeding in cases where an innovation has market or sales potential, and when there is an individual or group of individuals with particular drive and the knowledge required to further develop the innovation themselves and bring it to market.

Intellectual property rights are the common denominator in all these modalities of knowledge transfer. They safeguard university knowledge against unauthorised use by third parties, and enable us to maintain a competitive advantage on the market. Identifying knowledge with market potential and the timely legal protection of intellectual property rights are therefore vital to the success of the knowledge transfer process.
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ABC of intellectual property

Intellectual property derives from the results of human creativity in cases where those results can be protected in the form of intellectual property rights. Intellectual property rights are acquired, owned, managed and protected under a special area of law known as intellectual property law. This is divided into two sub-areas: industrial property and copyright.1

Industrial property covers the following rights: patents, trademarks, designs, geographical indications, the topography of integrated circuits, and plant varieties. These rights can be obtained by registering with the competent national (or international) office. In Slovenia, the Slovenian Intellectual Property Office, which is a body affiliated to the Ministry of Economic Development and Technology, is responsible for granting patents and registering trademarks and industrial designs. The procedure begins with an application from an interested party. It is important to note that no registration procedure is required to hold a copyright, as it is created when the copyright work itself is created.

There are some other forms of intellectual property that are also the result of innovative thinking and creation, but are not (yet) expressed in a form appropriate for protection under any of the above rights; these include trade secrets, know-how and recipes. Although every path of research and creation starts with an idea, the idea itself does not constitute intellectual property. This means that it cannot be legally protected.

In this section we will provide a basic overview of intellectual property rights. The KTO is available to provide more detailed information, although there is a lot of information already on the websites of the Slovenian Intellectual Property Office, and of various international organisations (WIPO, EPO, EUIPO) and other relevant bodies (e.g. the IPR Helpdesk) active in the field.

1 Slovenia applies two overarching laws to regulate these sub-areas: the Industrial Property Act and the Copyright and Related Rights Act.
### TYPES OF INTELLECTUAL PROPERTY RIGHTS

#### INTELLECTUAL PROPERTY

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<th>INDUSTRIAL PROPERTY</th>
<th>Duration of right</th>
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<tr>
<td>Patent</td>
<td>Up to 20 years (subject to the payment of fees to maintain the patent)</td>
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<tr>
<td>Invention – a product, procedure, functionality or technology that solves a certain technical problem.</td>
<td></td>
</tr>
<tr>
<td>Industrial design</td>
<td>5 years (protection may be extended by a maximum of 25 years)</td>
</tr>
<tr>
<td>Visual appearance of a product</td>
<td></td>
</tr>
<tr>
<td>Trademark</td>
<td>10 years (protection may be extended without limitation, each time by 10 years)</td>
</tr>
<tr>
<td>(goods or service mark)</td>
<td></td>
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<tr>
<td>A sign or combination of signs comprising words, names, pictorial or graphic elements, sound, colour, etc. that serves to distinguish the goods or service of one company from that of its competitors.</td>
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<tr>
<td>Geographical indications</td>
<td>In perpetuity</td>
</tr>
<tr>
<td>Indications that designate that goods originate from a particular geographical area (in cases where the characteristics of the goods depend heavily on their geographical origin).</td>
<td></td>
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<tr>
<td>Plant variety right</td>
<td>20–25 years</td>
</tr>
<tr>
<td>New plant varieties</td>
<td></td>
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<tr>
<td>Topography of integrated circuits</td>
<td>10–15 years</td>
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<tr>
<td>A device that performs an electronic function and that, in its final or interim form, constitutes an indivisible whole made from one or more fused layers featuring integrated circuit elements, at least one of which is active.</td>
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#### COPYRIGHT

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<tr>
<th>Examples of copyright</th>
<th>Duration of right</th>
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<tr>
<td>Works that are written, spoken or expressed through the media of the fine arts, audio-visual production, art, as well as databases, software, etc., and that are the intellectual creation of an individual</td>
<td>From creation of the copyrighted work and for 70 years after the author’s death</td>
</tr>
<tr>
<td>The essence of copyright is that it expresses the monopoly held by the author on exploiting their own work.</td>
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#### INFORMAL FORMS OF INTELLECTUAL PROPERTY

<table>
<thead>
<tr>
<th>Type of informal intellectual property</th>
<th>What does it protect?</th>
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<tr>
<td>Know-how – hidden, intangible yet definite knowledge or technology, a set of sources of information, experiences and skills</td>
<td>Recipes, procedures, technologies, and other knowledge that may not be disclosed to the public.</td>
</tr>
<tr>
<td>A trade secret is any information resulting from the activity of the entity that created it which, upon disclosure to the (general, research or corporate) public, would cause pecuniary damage</td>
<td>Information that must remain within an organisation is designated as a trade secret; this can include procedures, technologies, recipes and other knowledge that provides the company in question with a competitive advantage on the market. In addition to an adequate system of designation, keeping trade secrets requires appropriate handling of such information by anyone with knowledge of it.</td>
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Moral rights always belong to the person who created the intellectual property. These rights cannot be transferred by means of an agreement, nor can they be designated in any other way as belonging to anyone other than the person who created the intellectual property. Moral rights are inalienable.

Moral rights should be distinguished from material rights in relation to intellectual or industrial property. Material rights can belong to the person who did not create the intellectual property themselves, but who is entitled to hold the rights associated with it under the law or agreement. For example, the rights to service inventions belong to the University of Ljubljana (the employer) by law, but they may also belong to some other person if that person acquired material rights on the basis of an agreement on the transfer of rights. Material copyrights can be a right held by the author or by the organisation that funded the work subject to the copyright.

While industrial property rights differ from each other in terms of what they protect, as the table on the left shows, they do have certain basic principles in common. You should be aware of these principles during procedures to acquire rights and when managing those rights after acquisition:

a) Exclusivity of a right – The owner of the right acquires a legal ‘monopoly’ on use of the item protected by the intellectual property right. Intellectual property rights are ‘negative rights’, which means that their owners may bar any unauthorised person from making commercial use of the item.

b) Territoriality – Intellectual property rights apply only in the territory of the country in which or for which they were requested and granted.

c) Limitation of time of rights protection – With the exception of geographical indications and, under certain conditions, trademarks, intellectual property rights are limited in duration, meaning that, after a certain amount of time, the items protected can be used freely by anyone.

d) Pecuniary nature of intellectual property rights – All intellectual property rights have a pecuniary value that depends on the commercial exploitation of the item being protected and its success on the market.

Intellectual property rights are not mutually exclusive (i.e. simultaneous or double protection can be secured by means of industrial property rights and copyright) if the item or work being protected meets the conditions set down by the rules applying to protection under a specific right. For example, if a certain product constitutes a ‘novelty’ and demonstrates individuality in terms of its appearance, the industrial design and the copyright of the item may be protected, along with the designated (and protected) trademark.
Patent

»The patent system adds the fuel of interest to the fire of genius«
Abraham Lincoln

A patent is a right granted for an invention in any technical field. The invention must be new, inventive and industrially applicable. There are four basic requirements arising from this definition that must be in place in order to obtain a patent:

a) the invention comes from the field of technology

An invention is a solution to a technical problem, and may come in the form of a product or procedure. All area(s) of the technology are relevant. Discoveries, scientific theories, mathematical models and other rules, plans, methods and procedures for spiritual activities are not directly and as such regarded as inventions. This means that they cannot be protected by patent.

For moral reasons, a patent may not be granted for:
• an invention whose use is contrary to public order or morals;
• the invention of a surgical, diagnostic or therapeutic procedure used directly on living human or animal tissue. However, an invention relating to products, particularly substances and compounds, used in such procedures may be regarded as an invention and can therefore be patented.

b) the invention is novel

An invention is considered to be new if it does not form part of the state of the art. The state of the art is defined as everything made available to the public by means of a written or oral description, by use or in any other way before the date the patent application is filed. The state of the art also comprises the content of other patent applications filed before the date your or our patent application is filed. In other words, the first patent application filed is the first to be granted.

2 Article 10 of the Intellectual Property Act (ZIL-1).
c) the invention displays an inventive step
An invention is deemed to be inventive if, to a specialist, it does not clearly derive from the state of the art. This means that another specialist in the field would not be able to recreate the invention in question.

d) the invention is industrially applicable
An invention can be applied in industry if it can be produced or used in any commercial activity, including agriculture.

If all the conditions laid down by law are met, patent protection lasts 20 years from the date the application is filed.

The inventor is the person who created the invention, while the applicant or patent-holder is the person who is referred to in the patent application and who becomes the owner of the patent (rights) after the patent is granted. While the inventor may also be the patent applicant, this is not a requirement. This is particularly applicable to service inventions, where an institution such as the University of Ljubljana decides to acquire the rights to an invention, and in cases where ownership of the rights to the invention is otherwise stipulated by law or a specific agreement. A patent may be granted to a person other than the inventor if the former is entitled to enjoy the rights derived from the patent (e.g. to UL as the inventor’s employer or to another person under the terms of a special agreement).

There is also such a thing as a short-term patent, under which it is possible to protect an invention that is new, is industrially applicable and has arisen as a result of creative work, but which is not (and is not required to be) ‘inventive’. A short-term patent cannot be used to protect an invention for a procedure, a plant variety or an animal breed.

A more detailed explanation of the acquisition and granting of patents is given in the Process of claiming a service invention section.

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3 Article 16 of the ZIL-1.
Industrial design

An industrial design is the right under which a product’s appearance is protected. The industrial design must be new and demonstrate individuality.\(^4\) The law prescribes a registration procedure, with protection of the registered industrial design lasting **five years**. This period may be extended to a maximum of **25 years** from the date the industrial design application was filed.

In addition to enjoying national legal protection, a Community design may also be registered with the European Union Intellectual Property Office (EUIPO), which means that it is protected across the whole of the European Union, or protected across the countries that have signed the Hague Agreement, on the basis of a single international application (procedure conducted by the International Bureau of WIPO).

Trademark

A trademark protects a sign that distinguishes goods or services from other goods or services. Any sign or combination of signs capable of distinguishing the goods or services of one company from the goods or services of another company, and of being graphically illustrated, may be registered as a trademark.\(^5\) These are, in particular, words (including personal names), characters, numbers, figurative elements, three-dimensional images, including the form of the product or its packaging, and combinations of colours, as well as any combination of such signs.

Trademark protection **lasts for ten years**, but may be extended **without limitation** for subsequent ten-year periods.

Protection may be obtained abroad in a number of different ways:
- by using several national trademarks;
- by using a European Union trademark;
- by means of an international application made to the International Bureau of WIPO for the registration of a trademark in member countries of the Madrid Union (countries that have signed and ratified the Madrid Protocol).

\(^4\) Article 33 of the ZIL-1.

\(^5\) Article 42 of the ZIL-1.
A trademark may be acquired upon successful registration with the competent office, although you should be aware that a trademark only really 'comes to life' on the market when it is identified and recognised by consumers.

Copyright and related rights

Copyright applies to the work of an author, i.e. an individual intellectual creation from the fields of literature, science and art that is expressed in any way.\(^6\) Examples of copyright works:
- written works (articles, literary works, software, etc.);
- musical works (with and without lyrics);
- theatre works;
- choreographic works;
- works in the fields of photography, the applied arts and industrial design;
- fine art works (e.g. paintings, graphic art, sculpture).

As technology, culture and art develop, copyright works can and will arise in different forms and different areas. We have therefore listed only the more or less typical examples of such works above. It is by no means a closed system. It is also important to realise that when assessing whether a particular work is copyright work or not, the quality or artistic value of that work is not important.

The original owner of the copyright is the author of the work, who can be an individual or group of individuals (co-authors). The author may also transfer part of their right to another person. Copyright covers several entitlements: under the law, these are the author's moral, material and other rights. While moral rights, e.g. the right to recognition of authorship, are strictly connected to the person of the author, which means that they cannot be transferred to another person, an author's material rights, such as rights of reproduction, public performance and modification, as well as other rights, may be transferred (e.g. by sale).

So that we can enjoy watching or listening to copyright work in our everyday lives, the law lays down certain restrictions

\(^6\) Article 5 of the Copyright and Related Rights Act (ZASP).
on copyright and therefore enables free use of the work. A general principle applies here: that copyright works are used to an extent that is customary and that does not contravene the interests of the author, which includes respect for their authorship.

Copyright is time-limited in Slovenia as well, specifically for the duration of the author’s life and for 70 years after their death. After this period has elapsed, the work becomes free to use.

No formalised procedure is set out for the creation and existence of copyright. In order to secure proof of their creation or for other reasons, a copyright owner may enter or save the original, or a specimen of their work, in the register of protected works maintained by the Copyright Agency of Slovenia.

Related rights derive from copyright and belong to certain groups of people (e.g. performers and producers such as actors, singers, dancers, music producers, film producers, radio and TV broadcasters, publishers and database producers).

Copyright work produced within the context of employment, which is when a worker creates it in the course of discharging their work duties or under the employer’s instructions, the material copyrights and other rights of the author to that work are deemed to have been exclusively transferred to the employer for a period of ten years from completion of the work, unless otherwise determined by agreement. After this ten-year period comes to an end, the rights to the copyright work pass to the worker, although the employer may request a renewal of the exclusive transfer of rights upon payment of a suitable fee. Time limits do not apply to software developed within the context of employment. In this case, copyright is transferred to the employer exclusively and without limitation.7

7 Article 112 of the ZASP.
Know-how, which is a fairly well-established term for a certain type of specialist knowledge and experience, means the sum of practical information produced by experience and experiment. This information is confidential (it is not generally known or easily accessible), essential (important and useful to the manufacture of products under contract) and specific (described in sufficiently comprehensible terms as to make it possible to verify whether the criteria of confidentiality and ‘essentialness’ are met). Knowledge of this type contributes to the creation of other forms of intellectual property, thereby increasing the company’s competitive advantage on the market. This is not solely due to the fact that it is secret or at least confidential.

Technical improvements should be mentioned here. These are technical and other novelties, or improvements thereof, that help achieve better performance, better product or service quality, savings in terms of materials or energy, better utilisation of machinery and devices, better supervision of production, greater occupational safety, and so on.

While it is not possible, generally speaking, to protect technical improvements by means of intellectual property rights, the University of Ljubljana does encourage the creation and further development of all types of innovation that could lead to creations of greater complexity. Under the Rules, the person who creates a technical improvement may also be rewarded.

All knowledge and/or technology that perhaps has not yet taken tangible form and may constitute (or at least contribute to) a competitive advantage over the existing and known state of the art and, not least, lead to the creation of a new invention, a new product appearance, etc., must be protected against premature disclosure. It is important that you secure legal protection for your (potential) intellectual property, that you keep it confidential, and that you safeguard and handle it as a trade secret using the appropriate designations until you submit the application for legal protection.
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In this section, we focus on collaboration with industry, which is the most direct and effective way of transferring knowledge from academia to industry, and vice versa. In fact, the transfer of knowledge from industry to academia is extremely important, as it enables researchers to expand their knowledge, identify needs on the market and, on this basis, create more useful and relevant results in their own research.

The University of Ljubljana encourages such collaboration and, via the KTO, strives to put the necessary support in place and pass on its knowledge and experience in formulating and managing projects of this kind. When concluding agreements with industry, it is important to pay due regard to the legal restrictions and interests to which UL is subject as a public research institution whose core task is to provide the public service of education and research. One should also pay attention to the interests of companies, who are keen to use research results for market purposes and, to this end, acquire as many rights as possible to the results of a project. Sometimes we have to invest slightly more energy in finding a solution that is acceptable to both sides.

While UL member institutions are independent when performing market-based activities such as the collaboration outlined above, this collaboration often also involves the transfer of pre-existing or newly created knowledge owned by UL. It is therefore recommended that the KTO be involved in the transfer of this knowledge, and in negotiations and legal issues, as it has the necessary knowledge and experience in this area.
R&D AGREEMENTS

Main principles applying to the conclusion of R&D agreements with industry

a) Written agreement – Before any type of collaboration with a business partner, a written agreement must be signed. Among other things, an agreement will determine the owner of the intellectual property, in line with the contributions and financial investments made by the respective contracting parties.

b) Market prices – When appearing on the market, the University of Ljubljana adheres to legal provisions, good business customs and established international practice. When determining the price, it takes into account market values, is careful to avoid granting indirect state aid and does not distort competition.

c) Research standard – When carrying out their research, UL staff adhere to the ethical rules and standards that apply to a specific field of research, including the European Code of Conduct for Research Integrity.

d) Guarantee – In principle, UL does not guarantee research results, but merely undertakes to conduct research in accordance with the provisions of the agreement. UL transfers the research results as they stand at the time of transfer, without guarantees as to technical feasibility, commercial applicability or compliance with industrial standards, unless a specific case dictates otherwise.

e) Liability for damages – UL assumes no liability for loss of profits, but only for ordinary damage. The amount to which it is liable under the agreement is limited to the value of the contract itself or a multiple thereof. UL or a member institution assumes no liability for damage that a contracting party or third person suffers as a result of the use, production or sale of products and services created on the basis of UL knowledge.

f) Confidentiality – UL protects the trade secrets of business partners, and handles all the documentation and material it receives from the business partner for research purposes with the highest possible degree of care. UL is not permitted to disclose that it is working with a business partner, or in what areas, without the partner’s explicit permission.

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8 It should be noted that the amount to which liability is limited does not exceed the insured amount for general liability (according to the 2021 policy, this is EUR 200,000 for persons and EUR 50,000 for things).
g) **Invention disclosure** – UL staff must notify the KTO of any invention created on the basis of an R&D agreement even if the agreement specifies that the intellectual property rights belong to the business partner. The KTO is in charge of claiming a service invention and securing that the rights to the invention are formally transferred to the business partner.

h) **Right to publish** – The results of UL research must be accessible to the public if the research was publicly funded. While we endeavour to publish the results when we conduct research in collaboration with a business partner, we also have to take into account the obligation to protect the partner’s trade secrets. If necessary, we delay publication until the results can be properly protected by securing the intellectual property rights.

i) **Minimal transfer of intellectual property rights** – UL only transfers to a company the knowledge created at the company’s explicit request and, if possible, only in the field or industrial sector relevant to the company. In other fields, it reserves the intellectual property rights and attempts to transfer them to practical use itself. It is recommended that UL reserves the right to use the transferred knowledge in case the business partner does not commence use within a certain specified period of time (‘anti-shelving clause’).

j) **Further research** – UL may not restrict the field of research and, in the case of collaboration with business partners as well, secures the possibility of using the results of the research for basic research and education. In so doing, it adheres to the requirement to protect the business partner’s trade secrets.

k) **Prohibition on the transfer of background** – When concluding R&D agreements with business partners, member institutions may not transfer ownership of the rights connected to pre-existing knowledge or background to those business partners. A business partner may only be given the opportunity to use background under a R&D agreement for the purpose of utilising the research results. As agreements of this kind also entail the use of intellectual property, and may affect the subsequent marketing of the intellectual property, it is recommended that the KTO be involved in negotiations, particularly if the background involves an invention or patent.

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9 Article 4(3) of the Rules.
Key elements of R&D agreements

In every R&D collaboration agreement, certain elements must be defined. These include:

- the subject and aim of the research;
- a precise description of the project;
- the deadline for completion of the work;
- the amount of the payment and the payment schedule;
- access to intellectual property rights and the rules applying to the granting of those rights;
- the right to publish the results of the research;
- protection of confidentiality;
- liability and guarantees.

Types of R&D agreement

Consultancy agreement
- Short period
- Result precisely defined
- Low value for UL
- High value for company

Service agreement
- Long-term cooperation
- Result not known
- UL interest in publication
- High risk for company

Contract research agreement

Research collaboration agreement
Consultancy agreements and service agreements

a) Definition: Consultancy agreements and service agreements are agreements in which a UL member institution agrees to provide services connected with specific research equipment, expertise or knowledge (e.g. routine analyses, tools, expert opinions, consultancy, workshops or training sessions) and the business partner agrees to pay for these services.

b) Main features:
- Service costs are covered in full by the business partner, which also owns the results (in the form of reports, results of analyses and test results). The member institution may not publish these results or use them in any other way without the prior written agreement of the business partner.
- Under normal circumstances, this type of collaboration is not expected to yield new knowledge. If new analytical methods are developed or existing ones improved, this knowledge belongs to the member institution.
- It is preferable to acquire the right to refer to the business partner as a reference in order to increase the reputation of UL and acquire new partnerships.

Contract research agreements

a) Definition: A contract research agreement is an agreement in which a member institution agrees to conduct research for a business partner on an issue relevant to that partner, with the latter undertaking to pay for this service and therefore assuming all risk regarding its success.

b) Main features:
- The results belong to the business partner in their entirety if it has provided all the funding for the research (for an example of how prices are set, see p. 34).
- The partner has the right to legally protect the results of the research, and UL is obliged to provide technical and substantive assistance.
- UL endeavours to secure the right to publish the results. A business partner will occasionally delay publication until the results have been legally pro-
protected (not more than six months), or review the publication in advance and request that certain parts be removed if publication could disclose a trade secret. If the business partner does not wish the results to be published, a higher price should be charged for the research.

- UL always reserves the right to further use of the results for in-house and basic research purposes.

- Under agreements of this kind, background may not be transferred to the client. If the research is based on pre-existing knowledge or background, it is recommended that such knowledge be defined in the agreement, together with the rights to use such knowledge. This is also important to ensure that no dispute arises regarding the ownership of background, and that the agreement does not prevent you from using background in your dealings with other clients. If background consists of an invention owned by the University of Ljubljana, the KTO must be informed before any rights concerning the invention are granted.

- UL should endeavour to acquire the right to refer to the business partner as a reference in order to increase its reputation and acquire new partnerships.

If the agreement does not explicitly permit the business partner to be given as a reference, you must obtain the business partner’s consent to do so. In particular, you must be careful when referring to the content of the research, as this could lead to the disclosure of a trade secret.
c) Setting of price

Price is usually a matter of negotiation with the business partner, and always depends on the specific circumstances of the case. We will merely provide guidelines and frameworks below that should help researchers and specialist departments when setting prices.

UL should always endeavour to receive adequate payment for the services it provides. This is important not only because the member institution should receive adequate reward or compensation for its work, but also because it is part of UL’s obligation as a public research organisation financed predominantly from public funds. When doing business of this type, UL must ensure that it charges market prices for its services, does not distort competition and does not indirectly distribute unlawful state aid.

The European Commission has given more precise instructions in relation to this in the Community framework for state aid for research and development and innovation (2014/C 198/01). The Commission has taken the view that commissioned research and research services do not constitute indirect state aid if the organisation charges a market price for its services.\(^\text{10}\)

In such projects, business partners assume all of the risk regarding the success of the project, and are bound to pay full price regardless of whether the research produces results. In order to lessen the risk at least in part, it is recommended that agreement be reached on the following:

- The division of the project into phases. The business partner pays for the phase upon completion, and decides whether to enter the next phase depending on the success of the previous phases.
- The setting of the research price using a lower margin, with agreement also being reached on remuneration in the event that the research results have features of an invention and the partner decides to file a patent or a patent has been granted (this approach is also recommended because it provides additional motivation to researchers to make the project a success).
- The setting of the research price using a lower margin, or even without a specified margin, if UL retains a non-exclusive right to use the research, or an exclusive right of use in certain industrial sectors or in certain territories. Of course, this is only the case if this is in UL’s interests from the point of view of the further transfer of knowledge.

\(^{10}\) For more on this, see Section 2.2.1 of the Community framework for state aid for research and development and innovation (2014/C 198/01).
d) Example of price setting

The following items are taken into account when calculating the final price (depending on the specificities of the case):

<table>
<thead>
<tr>
<th>Type of cost</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour costs</td>
<td>The price of an ARRS (Slovenian Research Agency) research hour or the full-time equivalent for the current year may be taken as the basis. The cost includes consumables and the depreciation of equipment.</td>
</tr>
<tr>
<td>Costs of material</td>
<td>They are charged when they involve costs that are not included in the overheads (e.g. the purchase of specific material).</td>
</tr>
<tr>
<td>Other direct costs</td>
<td>Software licence purchase costs, equipment leasing costs, travel expenses, etc.</td>
</tr>
<tr>
<td>Fee for the exclusive transfer of intellectual property (if UL cedes all intellectual property rights to a company in advance)</td>
<td>10–30% of direct costs</td>
</tr>
<tr>
<td>Final amount (sum total of the above items)</td>
<td>Determined in EUR (excluding VAT).</td>
</tr>
<tr>
<td>Advance payment</td>
<td>It is recommended that advance payment be requested, particularly for the purchase of specific material for research purposes or for the engagement of outside services.</td>
</tr>
</tbody>
</table>
Research collaboration agreement

a) Definition: Under an agreement of this type, partners (two or more) with a common objective undertake to carry out a specific piece of research. To this end, partners pool pre-existing knowledge/background, staff and financial resources, and share the risk of success.

b) Main features:

- Such projects are mostly, but not necessarily, financed from public funds (Horizon 2020, Horizon Europe, applied ARRS (Slovenian Research Agency) projects, etc.).
- It is important for the agreement to provide a clear description of the background and other inputs (financial, material, human resources) that the partners are bringing to the project. An appropriate system of access to background, the granting of ownership and access to newly created knowledge is determined on this basis.
- The University of Ljubljana reserves the right to publish the results. A partner will occasionally delay publication until the results have been legally protected (not more than six months), or review the publication in advance and request that certain parts be removed if publication could disclose a trade secret.
- UL reserves the right to further use the results for in-house and basic research and education purposes regardless of how the intellectual property rights have been assigned.

As a researcher, you must always consider whether the project results have commercial value on the market before publishing them, and whether it would be sensible or possible to secure the intellectual property rights before you make the findings public.

It is frequently the case that an invention is unpatentable because it has been publicly disclosed beforehand (as one of the conditions for successfully securing an invention by patent is the fact that it constitutes a novelty).
c) **Granting of intellectual property rights**

These kinds of agreement can also lead to distortion of competition and the granting of unlawful indirect state aid to a business partner, which is why the Community framework for state aid for research and development and innovation (2014/C 198/01) must be adhered to.\(^{11}\)

The business partner may become the full owner of intellectual property rights, or have the right to their exclusive use, if they pay the full costs of the research.

If each party covers its own costs, the results of the research belong to the contracting party that created them. The rights are held jointly if several partners contributed to the results. Intellectual property rights must be allocated between the individual partners so as to reflect their area of work, their contributions and their interests. UL may, under market conditions,\(^{12}\) transfer the intellectual property rights it holds to these results to the business partner, while the price can be reduced for any potential contribution by the business partner to the research.

The belief sometimes arises that research results can belong entirely to the business partner, without the appropriate compensation being paid, if UL’s work is financed or part-financed from public funds. The most typical examples of this are applied research projects (Slovenian Research Agency – ARRS), where this belief becomes even more firmly entrenched when a business partner makes a contribution to the project. We should point out here that the same applies to projects of this type as would apply had UL financed the research from its own funds. The general rule applies here as well: that every partner holds the rights to the results it produces. If partners produce the results together, the contributions, areas of work and interests of the partners in the project are taken into account when determining the shares of ownership. If a business partner wishes to hold intellectual property rights to the results that partly or wholly belong to UL, they must purchase these rights at the market price, less the financial or in-kind contributions it has made to the creation of the results.

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\(^{11}\) For more on this, see Section 2.2.2 of the Community framework for state aid for research and development and innovation (2014/C 198/01).

\(^{12}\) For more on this, see Section 2.2.2 (point 29) of the Community framework for state aid for research and development and innovation (2014/C 198/01).
Practical negotiating tips

a) **Listening and understanding**
   It is important that you converse openly with the business partner, listen to them and attempt to understand where their interests lie.

b) **Get to know who you are negotiating with**
   It is useful to get to know how the business partner operates, who its competitors on the market are, what its long- and short-term goals are, how it is organised, and so on.

c) **Your motive**
   You must know why you are seeking collaboration (revenue, academic or scientific publication, long-term partnership, etc.).

d) **Your contribution**
   You must know what you are bringing to the project and to set this out clearly (background, reputable specialists, reputation, research equipment, etc.).

e) **Intellectual property**
   The arrangements regarding access to and the granting of intellectual property rights must correspond to the areas of work, contributions (financial, human and other resources) and interests of the partners.

f) **Working with the KTO**
   To increase the chances of success in negotiations, close cooperation between the KTO and the researcher is recommended. The researcher knows the content of the project, while the KTO knows the law and has negotiating experience. Working closely with the KTO makes it easier to draw up a good agreement. The researcher must be familiar with the agreement, as they are responsible for its implementation.

g) **Protecting confidentiality**
   If the need arises in the course of negotiations for the disclosure of confidential information by the business partner or by UL staff, it is recommended that a confidentiality agreement be drawn up in advance.

The KTO is your partner in the design and review of R&D collaboration agreements with industry. It is recommended that you contact us in the early stages of negotiation so that we have as much information as possible on the project, and can protect your interests to the greatest possible extent.
EUROPEAN PROJECTS

Consortium agreements signed as part of European projects\(^\text{13}\) are by their nature research collaboration agreements to which the frameworks we have described apply. However, because of the frequency of European projects and the fact that researchers have raised a large number of questions in the course of such collaboration, we have decided to describe in detail the entire process of managing intellectual property rights in these projects.

European projects place great emphasis on managing intellectual property rights as a tool that enables research results to be exploited. The purpose of these projects, like the obligation of partners within them, is to make sure that, at the end of a project, the results are protected by intellectual property rights when this is reasonable, justified and possible. A partner must also ensure that the results can be used in further research, for standardisation activities, or for the development of new products, services or knowledge, or that they can be put to practical use through the granting of a licence, the transfer of intellectual property rights or the establishment of spin-out companies.

The successful application and implementation of a project, and the practical application of the project results, depend on careful planning and a definition of the intellectual property policy and strategy during the early preparatory stages. The various stages through which a project passes are shown on the next page through the prism of the management of intellectual property rights.

\(^{13}\) At the time of writing this Guide, the Horizon 2020 EU research and innovation programme was in force, therefore all the information is linked to that specific programme.
# Project Stages Through the Prism of the Management of Intellectual Property Rights

## Evaluating an Idea
You should check whether the idea is new, and whether the research results can be protected and marketed.

## Collecting Partners and Holding Initial Discussions
If you have uncovered an innovative idea in the course of a project, it is recommended that you sign an agreement or memorandum of understanding with your future partners at the project application stage that commits them to protecting trade secrets and taking part in the project if the application is successful.

## Writing a Project Proposal
During the application stage, you should think about the results you expect from the project, and how you will protect, apply and disseminate them. A clear and concrete plan for this is also important when the quality of the application is being judged.

## Regulating Relations Between Partners with Respect to Intellectual Property Rights
The basic relations between partners are regulated by means of a Grant Agreement, which provides, among other things that:

- The results are owned by the beneficiary that generated them (point 26.1).
- If the results are generated by several beneficiaries together, ownership of these results is shared between them (joint ownership, point 26.2).
- The beneficiary must ensure that the rights of third parties (subcontractors) are transferred to them (point 26.3). In relation to this, you must be careful to ensure that you sign an agreement with any persons not employed at UL, such as students and visiting professors, that transfer the rights to UL.

The rights of each partner are defined in more detail in the consortium agreement. The DESCA template assists you when it comes to most projects.

A consortium agreement defines in detail the pre-existing knowledge/background that each partner brings to the project, as well as the system of access to this knowledge, the granting of ownership, and access to the project results.

The table below describes the usual system of access to background and results:

<table>
<thead>
<tr>
<th></th>
<th>Background</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project implementation</td>
<td>Royalty-free</td>
<td>Royalty-free</td>
</tr>
<tr>
<td>Exploitation of own project results</td>
<td>Under fair and reasonable conditions</td>
<td>Under fair and reasonable conditions</td>
</tr>
</tbody>
</table>

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14 Define as background the knowledge created prior to the project on which you are embarking and important for implementation of the project.
After the project is completed, it is important to identify those results that are suitable for protection and further exploitation. If you believe the results to be suitable for legal protection and marketing, you should notify the KTO. The assistance that the KTO can give you to protect and market the results is set out in the next section.

It is important that you do not make the results public until you have filed a patent application or taken other appropriate steps, or until you are sure that they are not suitable for protection.

In the case of joint ownership of the results, the KTO takes care of the process of signing the joint invention agreement. You can find more details on this in the section on acquiring a service invention.
STUDENTS’ FINAL THESES

Collaboration between University of Ljubljana and business partners frequently takes the form of collaboration based on students’ final theses. One particular feature of this collaboration is that it involves a student, who has certain rights and obligations. We provide more details on these rights below, and set out how relations can be arranged so as to ensure proper compliance with the purpose of the collaboration. For the student, this is primarily the production of a written final thesis and the completion of studies in accordance with UL rules. This information may also help you with any other activities that are part of your study obligations, such as seminar papers and competitions.

Prior to any such collaboration, it is recommended that a tripartite agreement be signed by UL, the business partner and the student. The KTO can help with this. Among other things, tripartite agreements are based on the following requirements:

- **The material and moral rights to the final thesis are held by the student**
  The obligation of undergraduate, Master’s and doctoral students to produce a final thesis is set out in the University of Ljubljana Statutes.\(^\text{15}\) By producing a final written thesis, the student creates a copyright work for which they also acquire the moral and material copyright and other rights by law.\(^\text{16}\)

- **The final thesis must be published in its entirety**
  The business partner is informed in advance that a certain student has, in a specific case, produced a final thesis that will be made available in printed form in the UL member institution’s library (and in the National and University Library (NUK) in the case of doctoral and academic Master’s theses), as well as in electronic form in the UL Repository. They are also informed that permission to make the thesis temporarily inaccessible (see below) is only exceptionally granted for a limited period.

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\(^{15}\) Articles 132–135 of the Statutes of the University of Ljubljana.

\(^{16}\) In accordance with the general rule under Article 10 of the Copyright and Related Rights Act (ZASP), the author is the natural person (individual) who created the work. However, we should point out that, under Article 133 of the UL Statutes, the student transfers to UL the right to reproduce the work and make it available to the public via the UL Repository after submitting the final thesis.
period of time, and that defences of written final theses at UL are public. It is therefore not recommended that a final thesis contain any information or data that could constitute a trade secret (otherwise the student could be liable for damages, or even criminally liable, for disclosing trade secrets).

- **Ownership of the research results described in the final thesis and the person with the right to manage those rights**
  The final thesis must be separated from the research results described in the thesis, which may be subject to the protection of a variety of intellectual property rights that could belong to someone else fully or in part. For example, a final thesis may include an invention that the student, business partner (e.g. an idea, data from practical application), mentor or other member of UL staff helped to create. Moreover, any of these parties may have contributed financially (in the form of material) or made their equipment available. The parties involved assess all these contributions and agree on how ownership of the invention is to be shared. The parties agree on the right to manage and use the invention by means of a special agreement. If the research results are not legally protected and are made public, the business partner, as well as third parties, have the right to use these results without any restrictions.

- **Obligation to legally protect rights before publication of the final thesis (defence)**
  It is important to ensure that the invention is legally protected prior to defence of the final thesis. In such cases, it is also recommended that you inform the KTO beforehand so that it has enough time to secure legal protection of the invention. If legal protection cannot be provided, one may, in exceptional circumstances, request that the final thesis be made temporarily unavailable, in accordance with the internal rules (see Rules on Detecting the Similarity of Content and Making Content Temporarily Unavailable).
PROTECTING CONFIDENTIAL INFORMATION AND MATERIALS

Non-disclosure agreements

A non-disclosure agreement (NDA) enables us to share our unprotected knowledge/ideas with others in order to assess their interest in working with us. An NDA prohibits the other party from using our knowledge/idea without our consent, or from disclosing it to unauthorised persons. It is recommended that a non-disclosure agreement be signed before any information is shared with a third party, the disclosure of which would cause economic damage to University of Ljubljana and its member institutions or business partners, or which could endanger the protection of intellectual property rights at a later date. It is important not to use this agreement to assign intellectual property rights relating to the disclosed information.

Practical tips for information protection

a) Information protection
   You must take the appropriate steps to protect confidential information and make it inaccessible to unauthorised persons. Do not leave confidential information on office desks, and do not remove it from the office unless this is a necessary part of the work process. Protect sensitive electronic documents with a password.

b) Non-disclosure of information
   Make sure that an NDA (Non-disclosure Agreement) is signed before any meeting at which confidential information could be disclosed. If this is not done before the meeting, try to ensure that it is done afterwards and that the NDA is given retroactive effect (i.e. from the time of the meeting on).

c) Minutes
   Minutes should be taken at the meeting that set out precisely which confidential information was provided to the other party.

d) Marking documents as ‘CONFIDENTIAL’
   If possible, confidential documents should be marked as ‘CONFIDENTIAL’ or ‘TRADE SECRET’.

e) ‘Need to know’
   Never disclose more information than is strictly necessary. For example, instead of disclosing all the details of your
invention or know-how, focus on a description of the benefits that it could bring to your business partner. If the business partner wishes to know more, ask them to sign an NDA before continuing the discussions. In the case of a group of people working together, confidential information should also be kept to the narrowest circle of people necessary for implementation of the research or project.

**Material transfer agreements**

A material transfer agreement (MTA) enables us to securely exchange material, such as cells, antibodies and chemicals, in order to carry out research, estimate the interest in collaboration, test material and create new intellectual property. An MTA allows us to prevent the use of material for other purposes without our permission, or the disclosure of material and of confidential information on the properties of such material to unauthorised persons or the public. The agreement must be signed before material or other creations developed by UL and owned by it at the time the agreement is signed are sent to the third party. Agreements of this kind are usually signed between research organisations, and occasionally with a company charged, during the knowledge transfer process, with assessing material already secured by intellectual property rights. UL should not transfer intellectual property rights under this agreement, but merely permit use of the results for research purposes or for assessing the possibility of collaboration or the transfer of intellectual property rights to the company. UL assumes no liability for damage that could arise from the use of material transferred.

**Tips on handling business partners’ material**

- **a)** As any such material could constitute a trade secret, it is imperative that it be handled appropriately.
- **b)** The recipient of the material must clearly indicate, in the appropriate place, that the material is a trade secret, and state to whom it belongs.
- **c)** The recipient may not conduct research and analyses on the material without explicit permission, or may only do so to the extent to which they have authorisation.
- **d)** Without the business partner’s explicit permission, staff may not disclose any information relating to the material to third parties or in publications.
What do I need to do . . . when working with a business partner?

✓ BEFORE COMMENCING COLLABORATION:
- I have signed a written collaboration agreement with the business partner.
- If confidential information was exchanged prior to the signing of the agreement, I signed an NDA during negotiations.
- I contacted the KTO for help in conducting negotiations and drafting a collaboration agreement.
- The collaboration agreement sets out the purpose of the collaboration, and defines both sides’ rights and obligations clearly.
- The price specified in the agreement reflects the market value of my service.
- I have detailed my background in the agreement.
- If possible, UL reserves the right to publish the results.

✓ DURING COLLABORATION:
- I ensure the agreement is implemented in line with the agreed deadlines (reports, issuing of invoices, etc.).
- I inform the partner immediately if there are any unforeseen complications or if I am unable to carry out the project.
- I protect the partner’s trade secrets and only share them with the colleagues that need such information for the purposes of the project. I frequently draw my colleagues’ attention to the need to protect trade secrets.
- I have regulated relations with external colleagues and students taking part in my project, thereby ensuring that any intellectual property rights are transferred to UL.

✓ AFTER COMPLETION OF COLLABORATION:
- I return confidential documents and material to the partner.
- I protect the partner’s trade secrets in line with the agreement, even after collaboration has come to an end.
- I state the partner as a reference only if they have agreed in writing that I may do so.
- Before the project results are published, I consider whether they have commercial value on the market and, if they do, I inform the KTO, which sees to the legal protection of intellectual property, before the results are published. I inform the partner of my intention to publish, as set out in the agreement.
- I notify the KTO of an invention created on the basis of the collaboration, even if the invention belongs to the partner.
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WHAT DO I NEED TO DO ...
... WHEN I INVENT SOMETHING NEW AT THE UNIVERSITY OF LJUBLJANA?  •  70
1 Idea

All research starts with an idea, and can often lead to discoveries and inventions. When embarking on the path to realisation of an idea, researchers must check the state of the art, and conduct market research to make sure that their idea is genuinely new and innovative.
2 Service invention disclosure
Disclosing your service invention to the KTO is the first step in the knowledge transfer process. The KTO will help evaluate the market potential of your idea, discuss the invention with you, advise on the disclosure of the service invention, and explain the legal protection process.

Present your invention in full using the Invention Disclosure Form, so that we can evaluate its potential and commercialisation possibilities. You should then submit the form to the KTO.

3 The claim of a service invention
Working from the completed Invention Disclosure Form, the KTO evaluates the invention’s potential from the aspect of legal protection under industrial property rights and that of its market potential. The invention is given an expert evaluation by the member institution, after which it is discussed by the University of Ljubljana Innovation Committee. If the invention shows potential, the Rector issues a decision on claiming the service invention.

4 Legal protection
The legal protection of intellectual property by means of a patent or other intellectual property rights is essential when it comes to transferring innovations to the market and encouraging further innovation. At the Innovation Committee’s proposal and in collaboration with the patent attorney, the KTO forms a legal protection strategy. The selected patent attorney works with the inventor to prepare a patent application, and makes sure it is submitted to the relevant patent office.

Important: Do not disclose the invention to the public before filing the patent application (i.e. do not publish an article, defend a thesis, deliver a presentation at a conference or lecture, etc.). If you do so, the invention will no longer meet the requirement of novelty, which is a precondition for obtaining a patent.

5 Prototype and proof of concept
An idea must undergo certain tests to confirm that the technology actually works. This confirmation may also be provided by means of a working prototype. Only then does the invention become truly interesting to business partners, which greatly increases the chances of the invention being marketed successfully.
Seeking a business partner

The KTO will do its very best to bring every new invention to life. For a product or technology secured by intellectual property rights, we try to find the right business partner to create adequate market leverage for the invention and added value on the market. The search for a business partner can sometimes take several months or even years, depending on the market situation and companies’ willingness to invest.

Contractual transfer or spin-out company

When we identify a business partner interested in putting the invention to practical use, we agree on a form of transfer satisfactory to both partners, either through a licensing agreement or the transfer of intellectual property rights. If your product or service represents a business opportunity and you are ready to embark on your journey as an entrepreneur, you might also consider starting a spin-out company.

Further development and commercialisation

University technologies and inventions are often in the initial stages of development. The chosen partner or newly established spin-out company will ensure that the technology is developed further, and contribute the key ingredients to success: time, money and people.

Innovation revenue

Licensing revenue or revenue from an agreement on the transfer of intellectual property rights is first used to cover the costs of intellectual property protection; the rest is distributed between the inventors, the member institution and UL. UL allocates a share of its revenue to the development and expansion of activities relating to the transfer of UL knowledge to industry.

Future research and development

There is always enough room for technological advancement, so it is not a matter of restarting the same process over and over. Successful market performance, and the financial inflows it ensures, also encourages continuing research and development of new and/or better solutions (we are talking here of technical improvements), both for new and existing technical challenges.

The active involvement of researchers in the knowledge transfer process is key to successful commercialisation. The KTO therefore works closely with you every step of the way.
EVERYTHING STARTS WITH AN IDEA

Every innovation, business idea or research project starts with a challenge and the search for a potential solution. A good idea solves a specific problem, so it is better to start from an environment you know well or the environment in which you work. By observing that environment, talking to colleagues and company representatives, studying the legislation, and reading academic and scientific publications, you can define the challenge or problem and then start creating a solution in the form of an idea or hypothesis. You then evaluate this idea by asking yourself three key questions:

1) Who are the potential users of the solution?
2) Which existing alternative solutions do we know about (‘the competition known to us’)?
3) What is the situation on the market (market growth, market readiness for the product or service)?

After you have given consideration to the key elements of your idea or research, it is time to check the ‘state of the art’. You do this by searching through patent databases, industry reports and ‘freedom to operate’ reports. This will familiarise you with the market situation and tell you whether the same or a similar solution has already been patented or secured by another type of intellectual property right. A ‘freedom to operate’ analysis involves searching patent databases to check whether your product, process or service infringes on an existing patent.

How do you do that?
You can make initial enquiries using publicly accessible and free-of-charge databases yourself or with the help of the KTO.

- **Patents:** [EspaceNet](#), How to search patent databases ([instructions](#));
- **Designs:** [DesignView](#), How to search industrial design databases ([instructions](#));
- **Trademarks:** [TMView](#), How to search trademark databases ([instructions](#));
- **Other databases:** Google Scholar, Google patents, Linknovate etc.
THE CLAIM OF A SERVICE INVENTION

The University of Ljubljana provides a stimulating environment for innovation and the generation of new knowledge, takes care of the legal protection process, and strives to be as successful as possible in transferring knowledge to industry and the wider social environment.

The legal basis for regulating the process of claiming service inventions is the Job-Related Inventions Act. At UL, the process is regulated in detail by the Rules on the Management of Industrial Property Rights at the University of Ljubljana.

Although we focus on inventions in this section, the Rules require you to provide notice of any other work that could be protected under intellectual property rights (industrial designs, trademarks, the topography of integrated circuits, plant varieties). All the elements set out below apply to knowledge, technology, products and know-how that can be protected as intellectual property.

Service invention disclosure

Disclosing your service invention to the KTO is the first step in the knowledge transfer process. You can find the Invention Disclosure Form on the KTO’s website. The inventor completes it and sends it to the KTO. Working from the form submitted, the KTO tries to evaluate the invention’s potential, from the aspect of legal protection under industrial property rights and that of its market potential.

When do I disclose a service invention to the KTO?

When a UL employee or student develops an idea or creates a tangible product that they consider exceptional and innovative, they should immediately inform the KTO of the invention or potential innovation. If the inventor is uncertain whether their creation is a potential innovation, we encourage them to consult KTO staff, either before or after they submit the form.
Who is obliged to disclose a service invention or other intellectual property to the KTO?

The KTO must be informed of every invention to which the following have contributed:

- a person employed by UL;
- a person in a different contractual relationship with UL (a visiting teacher, project associates, etc.);
- a student, if the invention results from work undertaken to meet academic obligations at UL or if the student used UL resources in the process.

*In this case, the inventor may not protect or market the invention or potential innovation themselves. This is because it is owned by UL. It is also important that the results not be disclosed to the public (through lectures, articles or discussions) or to unauthorised persons before the results have been legally protected.*

What is a service invention?

A service invention is an invention:

- that was created by an inventor while they were employed at UL as part of the fulfilment of the terms of their employment contract, in the course of completing assignments required by UL or on the basis of a special contract entered into by the inventor and UL or a member institution (direct service invention);
- that was created in the course of performing one’s job, if the chief contribution to the creation of the invention came from the experience acquired by the inventor in their job or from the use of resources made available to them by UL (indirect service invention).

How do I disclose a service invention to the KTO?

The inventor should inform the KTO by completing the Invention Disclosure Form and:

- sending it to the KTO by registered post (Knowledge Transfer Office, University of Ljubljana, Kongresni trg 12, 1000 Ljubljana) marked with the words CONFIDENTIAL - DO NOT OPEN;
- delivering it to the KTO in person;
- sending it by email to ipr@uni-lj.si (in this case, the form must subsequently be sent by ordinary post, as it must contain the handwritten signatures of all the inventors/researchers).
After receiving a completed Invention Disclosure Form, the KTO checks to see whether it is complete and, if necessary, invites the inventor to provide additional details. The KTO then issues confirmation within five days of receiving a complete form, and invites the UL member institution to draft an expert opinion on the invention. Based on this assessment, the KTO compiles the material for discussion of the invention at the UL Innovation Committee. This material includes the opinion of experts, employed at the KTO regarding the method of legal protection to be used and the market potential of the innovation.

When drafting a proposal on whether or not the UL should claim the invention, the UL Innovation Committee refers to criteria such as novelty, inventiveness and industrial applicability, whether the invention solves an existing problem, the advantages the invention has over existing solutions to the problem, the ethical and safety dimensions of the invention, and so on. A decision by which the Committee proposes claiming the invention also includes a proposal regarding the method by which it should be protected and on the possibilities and method of commercialisation.

The final step in the service invention claiming process is the issuing of a decision to claim/not to claim the invention by the University of Ljubljana Rector. If UL claims an invention, the KTO makes sure that it is adequately legally protected, takes part in negotiations and drafts a joint invention agreement (if inventors from more than one institution were responsible for creating the invention). It also begins the search for a suitable industry partner, in line with the marketing strategy, and reaches agreement on the transfer of the invention for commercial exploitation purposes.
If UL decides not to claim an invention, the Rector issues a decision to this effect. After such a decision, the invention becomes a **free invention**, which means that all further decisions regarding the protection, management and marketing of the invention are in the hands of the inventors or researchers.

Both decisions (to claim and not to claim) are sent by registered post to all inventors/researchers involved.

**Know-how and software**

As defined above, know-how is also intellectual property with a certain economic value. It can arise in tandem with other forms of intellectual property, such as an invention or copyright, or can be a free-standing object expressed in the form of ideas, data, information, knowledge and skills. Similar to other intellectual property or intellectual property rights, know-how can also be part of knowledge transfer, whether through the purchase of a licensing agreement or by being subject to a licensing agreement. However, it is recommended that it be protected as a trade secret before transfer.

Software can also be copyright work (Article 5 of the ZASP) that is accompanied by specific know-how. In these cases, it is therefore also intellectual property. Today, with information technology being one of the most important commercial sectors, the proper management of intellectual property is vital.

The KTO must be informed when a software and know-how show industrial or market applicability. The **Software Disclosure Form** (in Slovene) and **Innovation/Know How Disclosure Form** (in Slovene) are available on the KTO's website.

**Managing joint inventions**

**Joint invention or innovation agreement**

An agreement of this type is normally signed after completion of a project in which more than one partner has contributed to the creation of results suitable for patent protection, or of results that should be protected as a trade secret and that demonstrate market value.
In the agreement, the parties lay out the following basic terms in particular:

a) ownership shares (individual shares are determined with respect to the material, financial, and innovative contributions of each partner) and the ratio of revenue shares from intellectual property rights;

b) the method and scope of legal protection (types of legal protection, geographical scope of protection);

c) nomination of a partner who will coordinate and manage legal protection procedures, and determine the sharing of costs relating to the protection and exercise of intellectual property rights;

d) the rights to exploit the invention (further development, assignment or licensing, etc.).

The partners may agree on different arrangements that take account of the interests of the companies that have participated in the project:

1. **Option:** If one of the owners wishes to have an exclusive right to use the results, they must obtain the consent of all the owners. In return, they are obliged to pay compensation to the other owners, determined under fair and reasonable conditions (this can be in the form of a one-off payment or a licence fee linked to revenue from the sale of the products/services created on the basis of the results).

2. **Option:** Each owner has the right to non-exclusive use of the results or to grant non-exclusive licences to third parties. When only one owner benefits from such use, we recommend that a specific share of this benefit be transferred to the other partners (e.g. to cover the costs incurred by legally protecting the invention).

3. **Option:** Owners may share exclusive rights to use the results by specific field of use.
LEGAL PROTECTION OF INVENTIONS

A new, inventive and industrially applicable invention may be protected by patent. The key element is the **novelty** of the invention, which is why it is vital to file a patent application with one of the patent offices before any information on the invention is made public. The defence of an undergraduate or doctoral thesis also constitutes disclosure of an invention even if no external person is present at the defence. You should therefore file a patent application with the patent office before the defence. Disclosing an invention to the KTO does not mean the filing of a patent application. Without a patent application filed with the patent office, the invention remains unprotected.

Another important element that an invention must display, in addition to novelty, is an **inventive step**, which means that the invention is not obvious to a specialist in the field covered by the invention, but relied on the inventor’s intellectual and inventive deliberation for its creation. The problems that arise in relation to this inventive step are most often the fault of the inventors themselves, who might publish articles in which they do not disclose the invention itself, but refer to the methods and procedures required to arrive at the invention, thereby removing inventiveness from consideration. It is important that researchers think long and hard before publication so as not to remove the inventive step from their otherwise undisclosed invention.

A well-written patent application is the key to successful patent protection. As the writing of patent applications differs considerably from the writing of academic papers, it is not recommended that the inventors do it themselves. After invention disclosure and acquiring an evaluation, the KTO invites the inventors to a meeting at which they discuss the invention, its market potential and the need for adequate patent protection, and agree on the appropriate form of legal protection. Prior to the decision on where and how to protect the invention by patent, the KTO looks for a suitable patent attorney in Slovenia or abroad, and connects them with the inventors. All communication and agreements with the patent attorney are managed by the KTO, which relays information to the inventors, while any technical communication relating to the invention takes place directly between the inventors and the patent attorney, with the knowledge of the KTO.

The University of Ljubljana (rather than a university member) is the applicant for patent applications for inventions acquired from its employees. The persons who created the invention
are always listed in the application as the inventors (including those not employed by UL).

There may be more than one applicant. If the inventors come from different institutions, all the institutions are, as a rule, listed as applicants. Mutual rights and obligations between the applicants in relation to the joint invention must be regulated under a special joint invention agreement.

**Legal protection strategy**

To ensure cost-effectiveness and the effective protection of an invention, a strategy to legally protect the invention is drawn up prior to the patent-application process. The KTO manages procedures for obtaining legal protection and maintaining industrial property rights. It starts by looking for a suitable patent attorney and, following the Innovation Committee's proposal, forms a legal protection strategy. The selected patent attorney works with the inventor to prepare a patent application, and makes sure it is submitted to the relevant patent office. As a patent is only valid in those countries in which it has been granted (territoriality principle), it is important to consider the countries or regions in which the innovation might achieve the greatest market success. It is in those territories that your invention should be protected first. A decision on legal protection of the invention in specific countries is therefore produced to reflect the market potential of the invention and in line with the funds available (as legal protection is quite an expensive process). While a patent is usually granted after three to five years, the invention is patent-protected from the date the application is filed.

Example of a strategy:
- definition of the subject of patent/industrial design/trademark protection (this includes a decision on the geographical scope of the protection and, accordingly, whether a national, regional or international application should be filed);
- what should be protected as know-how, how this should be done and how it should be protected as a trade secret;
- full consideration given to the available funds, the commercial exploitation plan (marketing of the invention), etc. when the strategy is being drawn up.
Industrial property rights only apply to the territory of the country in which they have been granted or registered. This means, for example, that a Slovenian patent granted by the Slovenian Intellectual Property Office is only valid in the territory of Slovenia. There are three possible approaches for an inventor or researcher to take if they wish to acquire patent protection elsewhere as well:

a) **National application**

By filing a series of individual national applications, an inventor may request patent protection in each country separately. This route is not only time-consuming (because multiple applications have to be submitted), it is financially less favourable and more complicated because of the need to use different official languages in the application. The initial costs of filing a patent application with the Slovenian Intellectual Property Office is around **EUR 1,200**. This includes the application fee, protection for the first three years, and a fee for acquiring information or an opinion for the purposes of issuing a declaratory decision. This sum does not include the costs of engaging the services of a patent attorney.

b) **European application (EPO)**

The European Patent Office (EPO), which is part of the Munich-based European Patent Organisation, is the patent office competent to receive European patent applications. The European Patent Convention (EPC), which provides the legal basis for the European patent, was adopted in 1973. By filing a European patent application, the applicant requests protection in the contracting states of the European Patent Organisation (which is not itself a European Union institution). After a European patent has been granted, it still needs to be validated (certified) and translations of the patent claims submitted in the official languages of the selected countries (if the national law of a specific country requires this). It costs around **EUR 3,500** to file a European application. This includes an application fee, a search fee and a fee for substantive examination of the application, but not the costs of engaging the services of a patent attorney.

A European patent does not constitute a single legal title that is automatically valid in certain European countries after the patent has been granted. Rather, it is the standardised initial step in the process of acquiring patent protection.
c) **International application (PCT)**

The Patent Cooperation Treaty (PCT) is an international agreement under which the International Bureau (under the auspices of WIPO in Geneva) conducts a patent protection procedure on the basis of a single international application or PCT patent application. This has the same effect as an applicant filing a series of national patent applications simultaneously, but the advantage of this approach is that only one application is made in one language (the language in which the procedure is conducted) and the costs are standardised in a single currency (Swiss francs) for 150 contracting states within the PCT system.

The procedure usually starts with the filing of a patent application at a national patent office. A decision must then be taken within 12 months on any possible extension of patent protection. An international (PCT) application is usually filed at the same time. This gives the applicant a further 18 months in which to decide whether to seek protection in specific countries. A PCT application does not lead to a patent; rather, it is merely a single international application and search that makes it easier to assess whether a patent will be granted in specific individual countries. If you wish to acquire an opinion on patentability in the first year, you should first file a PCT or European application with the EPO, or an application at another foreign office that carries out a search report of an invention/application (e.g. Austria, Germany, EPO). The basic cost of an international application is around **EUR 3,000**. This includes an application fee, a search fee and a fee for intermediary services (but not the fees charged by patent attorneys).17

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17 All these costs of applying for patent protection depend on a number of factors, such as the scope of the patent application, the geographical scope of protection, the costs charged by a patent attorney, etc. This means that the actual costs differ from case to case.
Process of legally protecting an invention (patent)

**INTERNATIONAL STAGE**

1. **Priority national application**

2. **Filing of PCT or EPO application**

3. **International Search Report and Written opinion of the International Search Authority**

4. **Publication of patent**

**NATIONAL or REGIONAL STAGES**

- EP application
- US application
- CN application
- CA application
- JP application

Deadlines (in months):
- Filing of PCT or EPO application: 12
- International Search Report and Written opinion of the International Search Authority: 16
- Publication of patent: 18
- Application: 30
Drafting of the patent application

Before the patent attorney begins drafting the patent application, the inventors must provide an adequate description of the invention, most often in English (unless the services of a Slovenian patent attorney have been engaged). The description must comply with the form taken by a patent application as closely as possible (i.e. it should not be written in the form of a scientific paper). The invention may be a new product, a new part of an existing product or a procedure or device for manufacture of the product, refer to the use of the product or be a combination of the above. It is important for the invention to constitute a unified whole, even though the claims in the patent application will also address manufacture of the product, the manufacturing procedure, use and so on. If the invention is not a unified whole but involves two or more independent inventions, the application will have to be divided into several applications later on in the patent procedure.

An invention must have a concise title that should not disclose its essence. The description of the invention must be clear, unambiguous and precise, but should not contain unnecessary descriptions of matters that do not belong in a description of the invention. The same expressions must always be used for the same things (e.g. a ‘hole’ is always a ‘hole’, not a ‘hole’ on one occasion and an ‘opening’ on another). Everything must be described in words. Figures may be included in the patent application, but should only be used as a supplement or for further clarification. Figures cannot be used as part of the description of the invention if this part is not also described in words.

Start out by describing the field to which the invention belongs and what it is used for. Existing solutions must be described by citing the appropriate patent and other literature. A good description of the field and of the existing solutions shows that the inventors are fully conversant with the scientific field in question. A description of the field is followed by a description of a problem that has not been satisfactorily solved and that the proposed invention intends to solve in a better way. This is followed by the most important part of the description: the description of the invention that the inventors wish to protect by a patent. The proposed invention (product, procedure, device, use) should be described thoroughly in words. Care must be taken not to forget to describe anything and not to include existing solutions in the description (because they are not part of your invention). The description is followed by the patent claims. While the best approach is to entrust the drawing-up of the patent claims to a patent attorney, the inventor should nevertheless set out those claims they believe constitute the novelty of the invention and that they wish to protect. To ensure that patent claims are formulated...
as well as they can be, the inventor may refer for help to examples of patents granted in the same field as their invention. It is vital that the patent claims do not contain anything not set out in words in the description of the invention. The description is therefore the most important part of the patent application.

A patent application must also contain a summary and, in addition, figures. However, figures may not be used to describe the invention, but only as a further aid to understanding the textual description of the invention. The patent application must be written in the form required by the patent office to which the application is made.

Amending a patent application

After a patent application has been filed with any patent office, the invention is assigned a priority date, which is referred to in subsequent patent procedures. However the description contained in the patent application may no longer be changed. A patent application that has deficiencies in its description of the invention cannot be amended during patent acquisition procedure. During the procedure of granting a patent, patent claims may be reformulated and amended, but only in such a way that the description of the invention remains as it was when the patent application was filed. In other words, if the patent claims are deficient and the invention is sufficiently well described in the patent application, the patent claims may be reformulated as required and solid patent protection obtained for the invention at the end of the procedure (provided, of course, that the patent constitutes a novelty). On the other hand, a poor or deficient description cannot be amended, which means either that the patent will not be granted or will be granted with less effective protection in place.

MARKETING OF UL’S KNOWLEDGE

The KTO strives to bring every new invention to life. Our aim is therefore to support research and to transfer that research to the market. When research has been conducted to such an extent that a particular product or technology can be protected by intellectual property rights, it is crucial to find the right business partner to create adequate market leverage for the invention and added value on the market. Our aim is therefore to find the best possible partner for use of the invention on the market. This partner will contribute the three most important ingredients of success: time, money and people.
Business partners can be acquired by:

- preparing suitable promotional material
- identifying partners and investors
- preparing presentations and pitches for potential partners and investors
- preparing technology offers
- approaching potential business partners directly at conferences, trade fairs, and B2B and R2B meetings
- publishing research findings and inventions on our website

The cooperation of both sides is crucial here. The search for a suitable business partner is also made easier if you have good connections with the academic world and the business sector, although it is rarely a straightforward or quick process. Indeed, it can sometimes take several months or even years, depending on the market situation and companies' willingness to invest. Patience, perseverance and determination are all required.

**PATHS OF KNOWLEDGE TRANSFER**

Innovations are transferred into practice in two ways. The first is by licensing/transferring intellectual property rights, and the second is by setting up a new company. In the first (more common) case, we are talking about the right to use specific knowledge protected by intellectual property rights. You can find more details on the licensing procedure in the Licensing agreements section.

If your new product or service constitutes a complete novelty and you are ready to embark on your journey as an entrepreneur, you might also consider starting a company. Such companies are called ‘spin-off’ or ‘spin-out’ companies.

You can find more details on how to set up a spin-out company in the Spin-out companies section.
HOW KNOWLEDGE IS TRANSFERRED

FROM IDEA TO MARKET

INVENTION

RESEARCHER
Wish to set up company

LUI
Business plan and founding capital

UL
Consent to establish company

Hyphenated company

New company
(spin-out company)

KTO
Search for buyers / investors

MEMBER INSTITUTION
Production of prototype

KTO
Commercialisation

RESEARCHERS
40% participation in commercial exploitation revenue

UL GOVERNING BOARD
Consent to agreement

UL
Assignment or licensing agreement

Interested existing company

KTO
Negotiations

Member in hand with industry

ABC of intellectual property

What is knowledge transfer?

Hand in hand with industry

Spin-out companies

Examples of good practice

Useful links

Foreword

Glossary of terms

About the Knowledge Transfer Office
AGREEMENTS ON THE TRANSFER OF INTELLECTUAL PROPERTY RIGHTS

When agreements by which UL transfers knowledge or technology for exploitation by the business sector are being signed, the KTO acts as a specialist body by drafting and reviewing agreements from the legal and substantive aspects. It also coordinates those internal procedures at UL required for such agreements to be signed. These include obtaining the consent of member institutions and the UL Governing Board. The course that the coordination and approval of agreements takes is shown below.
Licensing agreements

A licence is the most general form of technology transfer. A licensing agreement entails ceding the right to use an industrial property right, knowledge or know-how without also transferring ownership. The owner of the right (the licensor) remains the owner, while the other party (the licensee) is only granted the right to use the property set out in the licensing agreement. Licensing agreements are regulated by the Obligations Code (B).

A licensing agreement confers the right to commercial exploitation of the licensed property to a third party that would otherwise not be entitled to exploit it (for more on the exclusive nature of intellectual property rights, see the Types of intellectual property rights section). The scope of authorisation is negotiated by both parties and defined in the agreement. The subject of a licensing agreement may include industrial property rights (patents, trademarks, industrial designs), the registration of these rights (patent applications), software and know-how. When a licensing agreement is being drawn up, simple language and clear wording are used in order to avoid any subsequent disagreement. The subject of the agreement must be set out very precisely, as must those things that the licensee is permitted to use and exploit for commercial purposes. Due regard should be paid to the accompanying knowledge or technology (know-how) so that the licensee is able to make full use of the property secured by means of a right (such as a patent).

We should stress that every licensing agreement presents a different case and set of circumstances, and involves a different subject or a different licensor or licensee. Other conditions also differ depending on the business objectives of each of the parties (territory of licence, limitations of time, exclusivity or non-exclusivity, etc.). Although some clauses might be similar, every agreement should be tailored to the specific circumstances of the case. That said, you should ensure that the following essential components are included in any agreement:

1. Details of the contracting parties (licensor and licensee)

2. Subject of the licence
   The subject of the licence must be precisely defined, and all accompanying knowledge and technology (know-how) included, as this generally enables the subject of the licence to be used fully and correctly.

3. Territorial restrictions and restrictions on field of use
   A licence may be restricted in terms of territory (i.e. geographically) to a specific country or region, or specific coun-

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\[18\] If know-how itself is not the subject of the licensing agreement.
tries or regions, or may be unrestricted in terms of territory (i.e. it applies worldwide). It may occasionally make sense to restrict a licence to a specific field of use or specific industry.

4. **Duration of licence**
   A licence may last for a definite or indefinite period of time. If an agreement is signed for an indefinite period of time, it is nevertheless limited to the period of duration of the right itself (as such rights are limited in time).

5. **Scope of authorisation**
   The agreement should set out the entitlements that the licensee will receive. A licence is normally granted for use, manufacture and sale, although there are also separate licences for manufacture or sale. Again, this depends on who the licensee is, where the licensor is able to be active themselves, and so on.

6. **Exclusivity or non-exclusivity**
   A distinction is made between an exclusive and non-exclusive licence. An exclusive licence means that only the licensee is entitled to exploit the subject of the licence in the area for which the licensor has granted authorisation, and that the licensor may not grant a licence to anyone else in this area, nor may it exploit the subject of the licence in this area itself. A non-exclusive (ordinary) licence enables the licensor to continue to exploit the subject of the licence itself and to grant further licences (although territorial restrictions must again be taken into account). The law proceeds from the assumption that a non-exclusive licence has been granted, unless an agreement provides otherwise. There is also the ‘solo licence’, a type of exclusive licence, under which the licensee and licensor may both exploit the subject of the licence, although the latter is not permitted to grant any further licences.

7. **Payment (licence fee)**
   A licence fee is usually determined in the form of a pre-agreed lump-sum payment or payment by instalments. If payment is to be made by instalments, the parties agree on whether the amount is fixed or whether it changes depending on sales achieved under the licence. The payment intervals, along with any advance lump-sum payments, must be determined before the subject of the licence begins to be marketed. Agreement may also be reached on a minimum licence, i.e. the minimum sum that the licensor wishes to receive in specific years (if this sum is not achieved, it may terminate the licensing agreement). Another important element in the licensing of patents is the question of who
covers the costs of securing patent protection. These costs are usually paid by the licensee.

8. **Dispute resolution**
   If a dispute arises, the contracting parties agree on the dispute-resolution method to be used (whether the dispute is to be resolved in the courts or using an alternative dispute resolution method, such as arbitration), and the law under which the agreement is to be assessed.

**Agreements on the transfer of intellectual property rights**

In contrast to the licensing agreement described above, agreements on the transfer of intellectual property rights involve the transfer of the ownership of industrial property rights or knowledge/technology from one party to another. An assignment agreement is a typical example of a transfer agreement. The contracting parties are the transferor (e.g. the assignor) and the acquirer (e.g. the assignee), who becomes the new owner of the rights or the owner of another subject included in the transfer agreement. The parties often sign a reverse *licence agreement*, whereby the previous owner (transferor or assignor) acquires a licence to use the subject of the agreement.

UL usually opts for this type of agreement when it does not intend to market the knowledge or the right on its own using its own channels and resources. This type of transfer provides UL with an immediate financial return.

The key elements that must be defined in a transfer agreement are:

1. **Determination of the subject of the agreement**
   The industrial property right, knowledge or know-how being transferred must be clearly and precisely defined, and the accompanying rights or knowledge required for complete transfer of the subject of the agreement and its commercial exploitation must be included and taken into consideration.

2. **Payment**
   The amount, method (one-off lump-sum payment or payment by instalments) and other payment terms.

3. ** Liability of the respective parties**
   On the transferor’s side: that the subject of the agreement is not encumbered by the rights of third parties. On the
acquirer's side: assumes liability for any warranty claims relating to the subject of the agreement.

4. Dispute resolution
The law to be applied in the event of a dispute must be defined, along with the dispute-resolution method (whether through the ordinary judicial system or by using an alternative method such as arbitration).

Following the successful contractual transfer of rights or knowledge, the new owner is registered at the Intellectual Property Office, when this is required by law.

**DISTRIBUTION OF INNOVATION REVENUE**

The Rules also lay down how the ratios of revenue from the exploitation of industrial property are to be calculated. The costs connected with the protection of industrial property are covered first (fee for application and maintenance, costs of patent attorneys’ services), with the remainder being shared between the inventors or researchers, the member institution and UL. How the money is shared depends on who bore the costs of protecting the industrial property and, among the inventors (if there is more than one), on their respective contributions to the creation of the invention or other innovation. The share of revenue received by UL is allocated to the further development of activities for the transfer of UL knowledge to industry.

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19 Article 19 of the Rules.
What do I need to do ... when I invent something new at the University of Ljubljana?

**INVENTION:**

- Does my idea for the solution to a technical problem already have a concrete form (product or procedure)?

- Does my solution meet all the criteria for acquiring a patent (novelty, inventive step, industrial applicability)?

- Have I identified the industrial or commercial utility of the solution (WHERE – industrial or agricultural sector, WHO – potential users, WHY)?

- Have I researched the existing state of the art (i.e. what is already known in this field and what makes my invention distinctive)?

- Do I need to carry out a ‘freedom to operate’ analysis?

- Does competition exist on the target market? What is this competition?

- Have I already revealed my solution (or how I arrived at it) to anyone? If so, where? Am I planning to publish a description of my solution and how I arrived at it?

**DISCLOSURE:**

- Have I completed an invention/innovation/know-how/software disclosure form?

- Has the form been signed by all inventors (if there is more than one)?

- Does the form need to be supplemented (as instructed by the KTO)?
During the Process of Claiming the Service Invention:

- I am working with the KTO co-inventors from other institutions (in the case of a joint invention) and a patent attorney (preparation of a patent application).

- I am engaged in ongoing market research (national and international).

- I am identifying and searching for potential investors/business partners (see also the ‘What do I need to do ... when working with a business partner?’ section).

- Do I need to produce a prototype? Do I have sufficient funds and the right working conditions for this? If not, what can I do to acquire or create them?

After the Claim of the Service Invention:

- I am working with the KTO to prepare a legal protection strategy and a plan for the commercial exploitation/commercialisation of the invention.

- I am taking part in negotiations with interested partners from industry.

- I am taking part in the drafting and signing of agreements on the transfer of intellectual property (rights) or licensing agreements.

- I am working with a patent attorney (drafting and filing of a patent application: description of the invention, draft patent claims).

- I am preparing promotional material and presenting my invention.

- I am helping to draft a technology offer.

- Do I intend to set up a spin-out company (see the ‘What do I need to do ... before starting a spin-out company?’ section)?
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REGULATING RELATIONS BETWEEN THE UNIVERSITY OF LJUBLJANA AND A SPIN-OUT COMPANY • 88

WHAT DO I NEED TO DO ... ... BEFORE STARTING A SPIN-OUT COMPANY? • 92
Spin-out companies

The term ‘spin-out company’ is used for a company founded by one or several employees of the University of Ljubljana. A spin-out company is designed to further develop and market knowledge created within the context of employment at UL, and to transfer that knowledge to a new company, either by granting a licence or by selling the intellectual property rights.

UL encourages the setting-up of new spin-out companies as one of the forms of knowledge transfer to the business sector. The setting-up of a new company often proves to be the best (or even the only) solution for the transfer of knowledge to commercial use. The setting-up of spin-off companies as they are known abroad, with a research institution investing its intellectual property and initial capital in a start-up in the form of an ownership share, is not permitted in Slovenia, which is why the establishment of a company by an employee is the most sensible way to proceed. As we realise that this is a very risky and demanding enterprise for many employees, UL tries to ease the way using a variety of methods, and to reduce the risk and provide additional incentives to employees, mainly by presiding over a culture of innovation, openness, interconnection and willingness to take risks. Swift, clear and transparent procedures for granting consent to employees to start their own companies and signing licensing agreements or agreements on the transfer of intellectual property rights are part of these efforts.

UL provides the following support to employees who wish to set up a spin-out company:

- putting in place certain instruments that enable researchers to reduce the risk if they wish to become employed in the new company, for example by suspending employment-related rights (for more on this, see the Regulating relations between the University of Ljubljana and a spin-out company section);
• providing mentoring opportunities, premises, help in applying to calls for applications and finding investors, and support to newly established companies during the incubation phase via the Ljubljana University Incubator;
• fostering an entrepreneurial mindset and awarding small-scale initial capital via the Rector’s Award, and giving employees the chance to present their work to the general public and potential investors;
• providing help in protecting and further developing intellectual property and finding partnerships via the KTO (in the initial stages, before the company is established); ensuring swift and transparent procedures for granting consent and signing licensing agreements or agreements on the transfer of intellectual property rights;
• granting licences to use UL knowledge under market terms, with consideration given to the specific characteristics of high-tech start-ups (e.g. payment holidays);
• organising education and training in entrepreneurship, and incorporating enterprise-related subjects into the curriculum;
• enabling newly established companies to reach written agreement on the leasing of premises and the joint use of research equipment and other services in accordance with a price list that reflects the market price for the use of resources and premises, and all other service-related costs (where funds allow).
TOWARDS STARTING A COMPANY

The chart below shows the procedure of setting up a spin-out company at the University of Ljubljana:

**TEAM**
- Wish to set up company
- Disclosure to Knowledge Transfer Office

**KTO**
- Review of proposal to set up company
- Drafting of consents to set up company
- Meetings with researchers

**MEMBER INSTITUTION AND UL**
- Granting of consents to set up company

**TEAM**
- Preparation of business plan
- Establishment of company (s. p., d. o. o.)

**KTO**
- Drafting of licensing agreement
- Negotiations between company and UL

**UL**
- Granting of consent to licensing agreement (Governning Board)

**LUI**
- Mentoring assistance (pre-incubation, incubation)
- Rector’s Award, Falling Walls, etc.
TIPS ON STARTING A COMPANY

I would like to market my knowledge/invention via a spin-out company. What now?

If you are thinking of starting your own company, you should be aware that enterprise activity differs significantly from academic activity, and that it will redirect your efforts from research to commerce. To start a company, you need knowledge of the fields of enterprise and management.

It is important to note that not all research provides a suitable basis for a new business, nor are all good business ideas necessarily good business opportunities. Before beginning to put your business plan into action, you should check the feasibility and market potential of your idea. Your business idea will become a business opportunity if you have determined that:

- it could achieve long-term market success;
- it can be realised;
- the competition cannot easily imitate it.

You should invest time in developing and researching your idea so that it becomes a proper business opportunity. You can do this by conducting market research, analysing existing providers, presenting your idea to other researchers (but under conditions of confidentiality), and consulting people with expertise and an unbiased outlook (again under conditions of confidentiality).

If you have a business idea or opportunity, the next sections will give you a few pointers to help you set up your new company and turn your research work to practical commercial use. In all cases, you must inform the KTO of your intention to start a spin-out company.
The KTO and the Ljubljana University Incubator (LUI) will help you start your entrepreneurial journey.

<table>
<thead>
<tr>
<th>Role of the KTO</th>
<th>Role of LUI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation on a business idea</td>
<td>Advice on drawing up a business plan</td>
</tr>
<tr>
<td>Preparing consents for setting up a company</td>
<td>Education and training in finance, marketing and management</td>
</tr>
<tr>
<td>Preparation of licensing and other agreements</td>
<td>Mentoring</td>
</tr>
<tr>
<td>Legal protection of intellectual property</td>
<td>Leasing of premises, offices and conference rooms</td>
</tr>
<tr>
<td>Connecting with industry</td>
<td>Networking with other entrepreneurs, investors and developers</td>
</tr>
</tbody>
</table>

The KTO has links with international investors and investment funds specialised in various fields. We can bring them face to face with researchers who offer potential innovations, and establish connections for potential future collaboration.

Your team

‘As soon as you have two people, you have cooperation, collaboration, and twice as much potential as you would have on your own. You also have politics, decision-making, blaming, and supporting one another’

Tim Berry

Tim Berry’s words reveal the essence of teamwork. By increasing the number of participants in your project, you can significantly increase the chances of your idea succeeding. However, if you do not choose the right people, they can become an obstacle. The number of members in your team is extremely important. Ideally, a good start-up team consists of four to five members on average. Later on, you can expand the team to reflect the growth of your company. You can still continue working with external colleagues who possess the skills you need.

All successful directors agree that a precise division of work and tasks between individual team members is essential if the team is to function well. Specialisation and the division of roles differ so greatly from team to team that it is very difficult to draw parallels between start-ups in different fields. The key
to achieving the best results and teamwork is common to all good teams: collaboration, adequate communication and the constant flow of information.

In the opinion of investors and mentors, the team is the most important thing for ensuring that an idea is realised successfully. A large number of factors need to be taken into consideration if a company is to be successful. These include the situation on the market, the competition, financial capacity, the product and the network of acquaintances. If an enterprise idea is to be turned into a successful business opportunity, the most important thing is the team. It is the team that will build the overall image around the product or service, and construct the story that it wishes to offer to the market. Business angels and other investors are well aware of the importance of a good team, which is why they most often only work with companies whose team inspires their confidence.

After setting up a spin-out company, we advise you to choose a project/team leader at the earliest possible stage. This can be a researcher, one of the inventors or an appointed director.

**Support environment, Ljubljana University Incubator**

The mission of the Ljubljana University Incubator (LUI) is to act as a ‘personal enterprise coach’ that helps entrepreneurs and potential entrepreneurs to test and realise their ideas on the market. Since its inception, LUI has focused on increasing the spirit of entrepreneurship and knowledge of enterprise within UL and more broadly.

LUI organises business breakfasts with well-known Slovenian entrepreneurs, expands knowledge within the enterprise community via the ‘Ideas Mixer’ mechanism, and organises enterprise lectures, the Rector’s Award for the best innovation at UL, and the Falling Walls Lab Ljubljana. It also provides tailored assistance to entrepreneurs in the form of one-to-one consultations and coaching, and an informal mentoring system involving experienced business figures.

They can provide:

- **CONSULTATIONS** on an enterprise idea, on its market potential and on your options;
- **ADVICE** and help in preparing a business plan;
- **EDUCATION AND TRAINING** in finance, marketing, management and the legal protection of intellectual property rights;
- **MENTORING** with experienced mentors who can help your company develop and grow;
• **NETWORKING** with other entrepreneurs, investors, managers and developers;
• **LEASING OF PREMISES**, offices and conference rooms.

Support for enterprise through consultations, training and other forms of assistance is also offered by:

- Chamber of Commerce and Industry of Slovenia;
- Chamber of Crafts and Small Business of Slovenia;
- Erasmus for Young Entrepreneurs;
- Technology Park Ljubljana;
- Start:up Slovenija Initiative;
- Slovenia Business Point (SPOT, one-stop shop).

**Acquiring start-up capital**

As far as funding is concerned, you can also apply for various forms of state aid in Slovenia granted through public calls for applications. The conditions of the call for applications must be checked in every case:

- what the state aid is and what preconditions are attached;
- which companies are eligible to apply;
- which investments are eligible for state aid;
- which countries are excluded from participating by the rules;
- the period of eligibility of the operation.

The Slovenian Ministry of Economic Development and Technology designs policies and carries out programmes and measures to promote entrepreneurship, the development of SMEs and the enterprise support environment, and measures to promote technological development and the development of key competencies (creativity, entrepreneurship, innovation) among young people. Among other things, it also organises voucher-based incentives for the growth and development of companies. The Slovene Enterprise Fund (SEF) also carries out specific measures alongside those of the Ministry of Economic Development and Technology.

The enterprise support systems provide two types of support:

- financial support through calls for applications or under more favourable terms, the provision of access to business premises;
- support in the form of information-provision, guidance, consultancy and training.
Slovene Enterprise Fund

The SEF is a state-level financial institution set up to allocate financial support and incentives to the enterprise sector in Slovenia. Every year, the SEF invites applications for state aid for development and expansion investments aimed at small and micro enterprises in Slovenia.

The financial incentives are aimed at two target groups:

- enterprises that are less than five years old (programme ‘Young enterprises’);
- enterprises that are over five years old (programme ‘SME5+’).

As part of the programme ‘Young enterprises’, the SEF has devised a range of products for young, innovative enterprises. These products accompany the enterprise from start-up (or the start of product development), through verification of market potential, and onwards towards entry onto the market and expansion to new markets. It therefore helps young enterprises through the following stages of development:

1. **development stage** – product development and start-up incentives in the form of grants:
   - P2 incentives for the start-up of innovative enterprises (subsidies of up to EUR 54,000),
   - P2R incentives for the start-up of enterprises in problem areas with high unemployment (subsidies of up to EUR 40,000),
   - P2L incentives for the start-up of wood-using enterprises (subsidies of up to EUR 40,000);

2. **development stage** – entry onto the market and seed capital:
   - SK75 convertible loans (up to EUR 75,000),
   - direct capital for growth of innovative enterprises (minimum investment EUR 100,000, up to EUR 2,400,000);

3. **development stage** – rapid global growth and venture capital:
   - entry into the ownership structure and management of the enterprise in cooperation with capital investments from private investors (venture capital and mezzanine capital).

Under the programme ‘SME5+’, the SEF helps enterprises via the following products:

4. **development stage**, aimed at further growth:
   - P7 micro-credits for micro and small enterprises at the national level (up to EUR 25,000),
   - P7R micro-credits for micro, small and medium-sized enterprises in problem areas (up to EUR 25,000),
   - P1 plus guarantees for bank loans with interest rate subsidy, in cooperation with participating banks in Slovenia, and
guarantees and interest rate subsidies given for loans of up to EUR 1.25 million.

As young enterprises are often exposed to considerable risks that compromise their success on the market, it is vital that these enterprises have access to a support environment in the form of advisers and mentors who can help them through the critical points of company growth. The SEF also runs the ‘SEF TWIN’ scheme, which pairs financial incentives with access to the relevant knowledge and experience of mentors.

**Silicon Gardens**

Silicon Gardens is designed to help founders of start-ups to build a team, an idea and a company at the start of their journey, thereby equipping them to become competitive on international markets. The Silicon Gardens angel fund invests between EUR 20,000 and 40,000 in five to ten companies in their first year of operation. The chief aim is to enable teams with great potential to research international markets, affirm their ideas and make those ideas ready for further funding. In exchange for investment, the fund acquires a 5–15% share in the company. The company is also allocated a mentor (one of the members of the investors’ fund).

**RSG Capital**

RSG Capital is a venture capital firm whose mission is to fill the capital gap or make up the funding shortfall for enterprises during their early stages of development. It invests in enterprises in early stages of development that are already generating revenue or are just about to commercialise their products, and in enterprises that require capital in order to drive an expansion of their business operations. With its experience of managing companies and its network of partners in Slovenia and abroad, it provides entrepreneurs not only with financial assistance but also with more efficient business operations, and helps them to optimise their business model and financial plan, open up sales channels more quickly and make connections with research institutions.

**ABC Accelerator**

The ABC Accelerator brings new enterprises face to face with industry partners, investors and mentors. Its aim is to enable individuals from Eastern Europe to realise their good ideas through a three-month programme. Over the course of the programme, the new enterprise affirms and develops its product, builds a good business model, gathers funding, and makes initial links.

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20 The most recent product and incentives are presented on SEF’s web site.
with customers. The initial investment is worth between EUR 15,000 and 25,000 per start-up. This ensures that all the costs are covered for the duration of the programme. In addition, the accelerator also offers premises, an IBM Cloud, a Microsoft licence and the mentoring services of more than 120 business angels and professionals from industry and enterprise. The highlight of the mentoring programme is ‘Demo Day’, where enterprises present themselves to an audience of strategic and financial investors. This can lead to increased investment for the enterprise.

**Business Angels of Slovenia**

The Business Angels of Slovenia was the first formal organisation of business angels to be established in the country. It brings together top Slovenian businessmen and women prepared to invest in companies in their initial phase of growth. Business angels become part-owners of the company. In addition to capital, they also provide a realistic assessment of your business plan, education and training in business, knowledge of how to build a business, a swift and effective investment process, and quicker access to venture capital. The organisation also works with other business angel and investor groups at home, in Europe and worldwide.

In addition to the capital-raising possibilities outlined above, there are also subsidies and other forms of financial assistance available from the following organisations and institutions:

- **Agency of the Republic of Slovenia for Agricultural Markets and Rural Development** (support for the establishment and development of micro enterprises);
- **Employment Service of Slovenia** (subsidies for self-employment and the occasional provision of grants for self-employment);
- **Slovenian Regional Development Fund** (repayable funds for initial investments in the fields of enterprise, agriculture and regional development);
- **SID Bank** (provision of favourable funds for companies and insurance for export operations);
- **Eco Fund** (provision of favourable funds for investments in environmentally minded projects and energy efficiency);
- **Spirit Slovenia** (provision of project grants).

There are also various awards and incentives that enable you to verify the value of your idea and business plan, such as the Rector’s award for the best innovation of the University of Ljubljana, the Falling Walls Lab Ljubljana, the Climate-KIC and so on.
Business plan

A business plan is most often the first thing we are faced with when setting up a new company. It is the foundation of a good business. It sets out the main business policies, along with any risks and shortcomings associated with realisation of an enterprise idea. A business plan enables you to check whether your enterprise idea has traction, define your company’s vision, mission and goals, and determine the operational strategy.

Business plans used to be significantly more extensive than they are today, although this obviously depends on the target audience. There are several sets of instructions available on the internet on how best to formulate a business plan. If we examine closely all the sections of the business plan as set out below, we can see that writing is a question of good organisation, the establishment of plans and their insertion into the templates provided. The templates are described precisely in each section: what should be inserted, how the details are to be written and when each section should be addressed.

To write a business plan, you must have good knowledge of the problem you are trying to solve with your business idea, of the solution itself, and of the fields of finance and marketing. ‘Business models’ can help you in this process, enabling a mechanism to be established through which your company can obtain finance. Once our business model is set out, the writing of the business plan is merely a case of formally putting it into words.

‘Lean Canvas’ is the latest business model. It is tailored to start-up companies and is distinguished by the fact that it is not too extensive in scope—indeed, it comprises only one page and can be adapted as you go along. It is used to summarise the essence of your product, and also distributes all the key points evenly, thereby forcing a start-up to examine all of them closely. The biggest problem faced by newly established companies is that they focus too heavily on the product, to the detriment of other issues. New companies are tasked not only with managing the product, but also with ensuring transfer to the market and commercial realisation.

The key issues to be considered when writing a business plan are:

- the problem itself (outline between one and three problems that have to be resolved for a potential customer);
- the customer segment (the target customers whose problem is solved by your idea);
- unique value proposition (why you are different from the competition and worthy of attention);
- the solution (outline all the existing solutions on the market that solve the problem);
- channels (who your customers are and how you can reach them);
- revenue streams (how you will create revenue on the market through your product, service, etc.);
• cost structure (list of all operating costs);
• key indicators (key numbers that you will measure to get an idea of how well you are progressing);
• unfair advantage (the ways in which you are better than the others, the advantages that will keep you on the market).

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>SOLUTION</th>
<th>UNIQUE VALUE</th>
<th>UNFAIR ADVANTAGE</th>
<th>CUSTOMER SEGMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 3 problems</td>
<td>Top 3 characteristics</td>
<td>PROPOSITION</td>
<td>Not possible to easily copy or buy</td>
<td>Target customers</td>
</tr>
<tr>
<td>KEY INDICATORS</td>
<td>Key measurable activities</td>
<td></td>
<td></td>
<td>CHANNELS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Path to customers</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COST STRUCTURE</th>
<th>REVENUE STREAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs of attracting customers</td>
<td>Revenue model</td>
</tr>
<tr>
<td>Distribution costs</td>
<td>Total value</td>
</tr>
<tr>
<td>Hosting</td>
<td>Income</td>
</tr>
<tr>
<td>Staff, etc.</td>
<td>Gross margin</td>
</tr>
</tbody>
</table>

The Lean Canvas is taken from a business framework (http://www.businessmodelgeneration.com) and is registered under a Creative Commons Attribution-Share Alike 3.0 Unported licence.

These points are described in detail in an e-book titled Running Lean.

This one-page business model is quicker to complete than a business plan (you can write it in an afternoon), more concise (because it only comprises one page, with only the really important information included) and easier to read.

**Setting up a new company and acquiring founding capital**

Once you have conducted market research and verified that your enterprise idea can be realised, you must then start setting up the company. The procedures for doing this have been simplified significantly and made more beneficial in recent years. The first question you have to ask yourself when setting up a company is what form that company will take. You have a choice between sole trader (‘samostojni podjetnik’ or s. p.) and limited liability company (‘družba z omejeno odgovornostjo’ or d. o. o.), although there are also unlimited liability companies, limited partnerships, publicly limited companies, social enterprises, institutes and the like. However, we will only address limited liability companies...
and sole traders below, simply because these are the forms most commonly used.

A company, whether an s. p. or a simple d. o. o., may be set up at a physical ‘one-stop shop’ SPOT (VEM) Office or online via SPOT portal (only in Slovene)\(^2\). You will need a digital certificate if you decide to register your business online at the SPOT portal. If you would like to set up a multi-member d. o. o., the services of a notary-public must be engaged.

Before setting up a company, it makes sense to learn about the differences between the various organisational forms taken by companies in Slovenia.

<table>
<thead>
<tr>
<th>s. p.</th>
<th>d. o. o.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal liability</strong></td>
<td>YES (liable with your personal assets)</td>
</tr>
<tr>
<td><strong>Initial capital</strong></td>
<td>Not required</td>
</tr>
<tr>
<td><strong>Set-up costs</strong></td>
<td>Free of charge</td>
</tr>
<tr>
<td><strong>Taxation of profit</strong></td>
<td>Progressive taxation in line with the level of profit and the system of income tax bands (*upon fulfilment of certain conditions, profit may be taxed at a fixed rate of 20%, taking into account normalised expenditure). Progressive taxation in accordance with the system of income tax bands (16%, 27%, 34%, 39% and 50%).</td>
</tr>
<tr>
<td><strong>Keeping books of account</strong></td>
<td>Simple bookkeeping Double-entry bookkeeping A sole trader claiming normalised tax expenses does not need to keep books of account.</td>
</tr>
<tr>
<td><strong>Business account – cash</strong></td>
<td>You can freely dispose of cash in the account.</td>
</tr>
<tr>
<td><strong>Salary</strong></td>
<td>The profit registered by an s. p. is also the sole trader’s salary, which means that salary cannot be claimed as an expense.</td>
</tr>
</tbody>
</table>

\(^2\) Non-residents of the Republic of Slovenia have to obtain a Slovenian tax number before starting to set up a company in Slovenia.
Loans – funds from calls for applications

Arranging a bank loan is more difficult and the options for applying for funds from calls for applications are limited.

Arranging a bank loan is easier, which means that a d. o. o. is a more appropriate form if you wish to apply to a call for applications.

SOURCE (SLOVENIAN BUSINESS POINT)

When you have decided which business form best corresponds to the kind of business you will be doing, you have to provide the following information:

a) Company/business name

Every company must have a name under which it operates. Every company name must incorporate an indication of the company’s activity, the legal organisational form of the company (d. o. o. or s. p.) and an additional element that describes the company in more detail. In the case of an s. p., the name and surname of the sole trader must be included.

An abbreviated company name may also be registered and used alongside the full company name (at the least it should contain an element that distinguishes the name from the names of other companies, and an indication of the form the company has taken). The company name must differ clearly from the names of all other companies. You may check the name in the AJPES Business Register before you set up the company.

b) Date of entry or establishment of the company

If you are setting up an s. p., you may designate the date of entry in the Business Register of Slovenia. When setting up a d. o. o., you may not designate the date of entry yourself.

c) Company business address

For the company’s business address, choose the town, street and house number at which you will perform the activity or from which you will generally operate the business. If you are not the owner of the building at the business address, you must enclose a certified declaration from the owner of the building (in Slovene) in which they state that they allow you to operate the business from this address.
d) Contact details

e) List of company representatives

Ob registraciji d. o. o. je treba v podjetju določiti vsaj enega poslovodjo oziroma direktorja. Samostojni podjetnik lahko imenuje zastopnika oziroma prokurista, ni pa nujno. Če zastopnika ne imenujete, pomeni, da ste kot s. p. hkrati tudi zastopnik.

f) Company activity

You need to select a core activity when setting up a company. The core activity is the one that delivers the main bulk of income. It is also recommended that you select other activities that you intend to pursue. There is no limit to the number of activities you may choose. All of them are entered in the company's articles of association.

If you set up an s. p., you should choose only those activities you will actually pursue or that will provide the bulk of your income.

In both cases of company establishment, the activities are chosen from the code list contained in the Standard Classification of Activities (SKD) (in Slovene).
REGULATING RELATIONS BETWEEN THE UNIVERSITY OF LJUBLJANA AND A SPIN-OUT COMPANY

The University of Ljubljana strives to nurture a culture of innovation, openness, interconnection and willingness to take risk. With measures to promote entrepreneurship and a functioning enterprise support environment in place, it encourages staff and students to embark on their own enterprise journey. Before establishing a company, an employee must obtain the consent of UL and the newly established company must obtain authorisation to use UL knowledge by signing a licensing agreement or an agreement on the transfer of intellectual property rights.

Consent to the establishment of a spin-out company, the performance of work within it, and conflicts of interest

Every employee who plans to set up a spin-out company, and assume a managerial position or act as a procurator within it, must go through the KTO to obtain consent from UL and the member institution at which they work. The consent-granting procedure begins with completion of the Spin-Out Company Establishment Form (in Slovene), which can be found on the KTO’s website.

Owing to a potential conflict of interest, it is not desirable for an employee to simultaneously perform work for a spin-out company that is, by its nature or content, similar to the work they perform at UL (e.g. research work or expert consultancy on topics similar to those in which are engaged as part of their employment at UL). If an employee wishes to work for and be employed by a spin-out company, they have the option of signing an agreement

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22 The recommendations below are based on legal provisions and internal UL regulations (chiefly the Rules on Avoiding Conflicts of Interest and on the Conditions for Performing Work Outside the University of Ljubljana), and take into account the specific characteristics of spin-out companies.

23 Article 39 of the Employment Relationships Act (ZDR-1, The Official Gazette RS, No 21/13, with subsequent amendments) provides as follows: ‘For the duration of the employment relationship an employee may not, without the employer’s written consent, perform work or conclude business on their own or another’s behalf which falls under the business activities actually carried out by the employer and constitutes or could constitute competition for the employer.’
with UL suspending their employment contract. The employee remains employed, but their employment-related rights are suspended for the agreed period of time. This lowers the risk for the employee, as they then have the option of returning to their job at UL once the period determined in the agreement expires. In this way, UL reduces the personal risk of an employee who opts to embark on an enterprise path.

An employee who wishes to retain their employment at UL and is at the same time the owner of a company and occupies a managerial position within it must, under the terms of the Rules on Avoiding Conflicts of Interest and on the Conditions for Performing Work Outside the University of Ljubljana, and of other laws and rules, adhere to the rules set out below.

1. **R&D collaboration with a spin-out company**
   Research and development collaboration between a spin-out company and a UL employee may only take place via the relevant member institution. It is therefore the member institution that signs the written R&D collaboration agreement with the company. The price determined for collaboration must be the market price, must cover all the costs relevant to the research, and may not enable a company to obtain a material benefit because of its connection with an employee. An employee may not take part directly in negotiations between UL and the company.

2. **Protecting trade secrets**
   Employees must protect all trade secrets and other confidential information of UL, its member institutions and external partners, and may not use them to carry out spin-out company activities, nor make them available to third parties without the written permission of UL or the member institution.

3. **Use of premises and other property**
   Employees may not, without the written permission of UL or a member institution in the form of a compensation agreement signed in accordance with the published price list which reflects market conditions, use premises, soft-

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24 Article 11 of the Rules on Avoiding Conflicts of Interest and on the Conditions for Performing Work Outside the University of Ljubljana provides that an employee may, for the purpose of performing an economic activity, request the suspension of their employment contract for a period of up to two years, during which time their contractual and other rights are placed on hold, along with the obligations deriving from employment, and they receive no remuneration from UL. A period of suspension may not last longer than four years in total.
ware, research equipment and other resources of UL or a member institution for the purposes of spin-out company business. When using physical assets, a spin-out company must act in line with the Physical Assets of the State and Local Government Act and its implementing regulations (intention to let property, public collection of tenders, etc.).

4. **Outflow of intellectual property**

   *Employees* may not ascribe or transfer to a spin-out company inventions and other knowledge created within the context of their employment at UL, or enable the use of inventions and other knowledge without a prior written agreement signed between UL and the spin-out company.

5. **Notice of a potential conflict of interest**

   *Employees* must avoid all circumstances that could lead to a conflict of interest, and inform their superior at once should such circumstances arise.

6. **Non-compete obligation**

   *Employees* must inform the KTO before embarking on business or carrying out an activity that could constitute competition to UL.

7. **Separation of roles**

   *Employees* must strictly separate their activities for a spin-out company, and may not use the UL trademark for these activities without the written permission of UL.
Granting a licence or transferring intellectual property rights

A spin-out company must, before embarking on the commercial exploitation of knowledge created at UL, sign an agreement by which the rights to the knowledge it wishes to acquire are transferred for the purposes of commercial exploitation. The knowledge may be transferred in full by means of an assignment agreement or a right to use that knowledge granted by means of a licensing agreement. More details on the signing of these types of agreement may be found in the Agreements on the transfer of intellectual property rights section.

Under the terms of state aid rules and by adherence to established international frameworks, UL is obliged to grant rights to commercial exploitation to a spin-out company under market conditions. This chiefly means that UL may not transfer rights under more favourable conditions than those it would apply to other entities on the market. Nevertheless, as UL is aware of the vulnerability of newly established companies and the importance of generating revenue in the first few years, it has various instruments in place that are designed to support spin-out companies, such as an introductory payment grace period, and the option of purchasing knowledge in the event of the entry of an investor.

Using the name and logo of the University of Ljubljana

The rights to use the name of the University of Ljubljana are usually set out in the intellectual property transfer agreement.

A spin-out company may not make use of the University of Ljubljana’s name or logo, although these may be used as a reference for the purposes of calls for applications to obtain financial subsidies. A spin-out company must request written permission every time it intends to use UL as a reference in order to acquire business.25

We much encourage spin-out companies to state explicitly that they are a ‘University of Ljubljana spin-out company’. UL may prohibit the use of its name in the event of abuse or any potential damage to its reputation.

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25 General Recommendations of the University of Ljubljana Governing Board for the Transfer of Knowledge into Practice, adopted on 18 December 2014.
What do I need to do . . .
 . . . before starting a spin-out company?

✓ BUSINESS MODEL:

☐ I have studied my business idea closely.
☐ I have an innovative product or service.
☐ I have looked into where the product will be developed, manufactured and sold.
☐ I have studied the competition, the size of the market and the customer segment.
☐ I have prepared a business model (‘Lean Canvas’).

✓ TEAM:

☐ I have an enterprise team whose skills complement each other.
☐ Individuals’ roles have been clearly defined.
☐ Individuals have the appropriate knowledge and skills.
☐ Ownership shares in the company have been adequately defined.
☐ The team has good contacts who will assist it along its enterprise path.
☐ I know a mentor who will be able to help us on our enterprise journey.
✓ FUNDING:

☐ I have formulated a financial plan for the next three years (revenue, expenditure).
☐ I have secured funding for the first three years.
☐ I have reviewed the options for applying to calls for applications.
☐ I have looked into how to gather funds for research and development.
☐ I have prepared a pitch and a proposal for investors in case I wish to acquire investment.
☐ I have prepared substantive proposals for the signing of a licensing agreement.

✓ SUPPORT ENVIRONMENT:

☐ I have presented the idea to the KTO.
☐ I have reviewed the options for legally protecting intellectual property.
☐ I have notified the KTO of a service invention.
☐ I have enquired at the KTO regarding the signing of a licensing agreement.
☐ I have looked into the mentoring opportunities at LUI.
☐ I have checked the calls for applications published by the Slovene Enterprise Fund.
☐ I am familiar with the Rector’s Award.
☐ I have defined relations with the UL member institution at which I currently work.
EXAMPLES OF GOOD PRACTICE
Examples of good practice

ACIES BIO

Founded as a start-up in 2006, Acies Bio is an example of good practice in biotechnology. The company develops new microbial strains, bioprocesses and bioactive compounds that improve people's lives, and fosters sustainable solutions for the pharmaceutical, food and chemical industries. Its business model is based on two pillars: contractual research for industry and in-house research. It is a research-oriented company that develops solutions for the biotechnological production of high-added-value molecules, while seeking partners to market its products. In 2018 they entered a partnership with the Chinese biotechnology company Desano. This former start-up employs 37 people, and has a total workforce of between 50 and 60 if external contractors are included. They generated revenues of more than EUR 3.15 million in 2018.

KINESTICA

Kinestica is a spin-out company that engineers biomedical rehabilitation technology. It was established at the UL Faculty of Electrical Engineering’s Laboratory for Robotics. The company develops and produces medical devices for neurological post-stroke recovery, traumatic brain injury, multiple sclerosis and other conditions. The company is presently active in Europe and Asia.

Its first product is Bimeo, a sensor-based system for neurological rehabilitation using virtual reality. The system allows patients to perform therapeutic tasks in a virtual reality environment by moving their arms. Using various modes, the therapy can be adapted to patients at different stages of rehabilitation.
VITABITS

Vitabits is a platform developed by the Laboratory for Data Technologies at the Faculty of Computer and Information Science, and enables the remote monitoring and telemedical treatment of patients. In 2018 the potential of Vitabits was recognised by Ipmit d. o. o., which went on to purchase the intellectual property rights related to the product. Ipmit will upgrade the platform in cooperation with the faculty as part of the SOSTOP project, co-financed by the Ministry of Economic Development and Technology, with the aim of developing a comprehensive system for remote monitoring and the telemedical treatment of patients.

Telemedicine is experiencing significant growth globally. The remote monitoring of patients with chronic diseases can substantially reduce treatment costs, since a virtual doctor’s consultation can be up to three times cheaper than a physical one. The telemedicine market is projected to grow to EUR 33 billion by 2022, with a potential customer base that includes health insurance companies, pharmaceutical companies, health resorts, healthcare IT solution providers and telecommunications operators.

ISKRATEL AND THE FACULTY OF ELECTRICAL ENGINEERING

The Laboratory for Telecommunications, which operates within the Faculty of Electrical Engineering at UL, has been collaborating with Iskratel, d. o. o., Kranj for several years in the fields of research and analysis, prototype development, development tasks, and the maintenance of solutions, as well as in the monitoring and proposal of strategic policies. For each joint project, the client and provider agree on the topic, exact content and planned inputs, as well as the method of implementation and the financial estimates, all of which they define using a special form attached to the cooperation agreement. The agreed collaboration forms the basis for joint applications for major national and European R&D tenders. The collaboration results and solutions, such as Signalizacija Številka 7, Sigtran, Diameter and Radius, are also part of Iskratel's product portfolio.
Useful links

• University of Ljubljana Knowledge Transfer Office: https://ppz.uni-lj.si/en/

• European IPR Helpdesk: https://intellectual-property-helpdesk.ec.europa.eu/index_en/


• European Patent Office: https://www.epo.org/index.html


• Slovenian Intellectual Property Office: http://www.uisi-sipo.si/sipo/office/tools/home/

• Copyright Agency of Slovenia: https://aas.si/en/home/

• EspaceNet (patent search): https://worldwide.espacenet.com/

• Design view (database of industrial designs): https://www.tmdn.org/tmdsview-web/welcome#/dsview

• TMView (database of trademarks): https://www.tmdn.org/tmview/

• Ljubljana University Incubator: https://lui.si/english/

• Slovenia Business Point: http://eugo.gov.si/en/
The University of Ljubljana Knowledge Transfer Office is predominantly financed under the terms of the Consortium for Technology Transfer from Public Research Organisations to the Economy Sector (1 September 2017–30 June 2022). The investment is co-financed by the Republic of Slovenia and the European Union from the European Regional Development Fund. The aim of the project is to promote connections and cooperation between public research organisations and the business sector, and to bolster the competencies of technology transfer offices, researchers and companies. The Consortium includes the technology transfer offices of Jožef Stefan Institute, the University of Ljubljana, the University of Maribor, the University of Primorska, the National Institute of Biology, the National Institute of Chemistry, the Agricultural Institute of Slovenia and the Faculty of Information Studies in Novo Mesto.
Our goals

**Cooperation with industry**
The Knowledge Transfer Office promotes collaboration between researchers and industry by creating opportunities for the two sides to make contact with each other. In cooperation with companies, it announces and publicises research challenges, and is also available to help researchers draft and review various types of contracts.

**Legal protection of inventions**
All forms of knowledge transfer are closely tied to the concept of ‘intellectual property’. The Knowledge Transfer Office takes the lead in formal procedures for claiming service inventions at the University of Ljubljana, and for securing legal protection for inventions and other forms of UL knowledge.

**Commercialisation of intellectual property**
The KTO strives to ensure that every new invention is brought to life by practical application. It supports researchers when reviewing the state of the art and evaluating the market potential of their knowledge. For every product or technology, they try to locate a suitable business partner capable of exploiting the invention on the market and creating added value.

**Establishing spin-out companies**
Establishing spin-out companies and start-ups is an important form of knowledge transfer to the commercial sector. The Knowledge Transfer Office helps researchers assess their business idea, and walks them through the procedure of starting a spin-out company.

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