A statutory model for organising the process of intellectual property protection and commercialisation in Polish public universities *

Magdalena Rutkowska-Sowa †
Department of Intellectual Property Law, Public Economic Law and Labour Law
Faculty of Law/ University ofBialystok, Bialystok/Poland
m.rutkowska@uwb.edu.pl

ABSTRACT/POVZETEK

For almost two decades, the Polish legislator has been encouraging the spread of the idea of entrepreneurship in the academic environment, delineating the scope of organisation of the process of protection and commercialisation of the R&D results created by university employees. As part of successive amendments to the Act - Law on Higher Education, it has proposed the introduction of internal regulations governing the management of intellectual property rights and the principles of commercialisation, the establishment of organizational units responsible for supporting the commercialisation process, and incentives such as additional remuneration for the implementation of the so-called third mission of the university. The aim of the conference paper is to show how the statutory model of intellectual property management at Polish public universities looks like. The final conclusions will take into account the results of research carried out in 2023-2024 under the project entitled: "Transfer of R & D results from universities of Podlaskie voivodeship to the economic and social environment", funded by the Ministry of Education and Science.

KEYWORDS / KLJUČNE BESEDE

commercialization, public universities, technology transfer units, internal regulations

OPENING REMARKS

It is important to note at the outset that this paper refers only to public universities, of which there are currently 133 in Poland [1]. The main legal act regulating their functioning is The Act of 20 July 2018 - The Law on Higher Education and Science [2]. It explicitly indicates that the mission of the higher education system and science is to provide the highest quality of education and scientific activity, to shape citizenship, and to participate in social development and the creation of an economy based on innovation (art. 2). Thus, it can be assumed that Polish universities are obliged to

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the owner/author(s). *Information Society2023,9–13October 2023, Ljubljana, Slovenia* © 2020 Copyright held by the owner/author(s).

fulfil the so-called "third mission", that is seen by many as crucial for making universities more responsive to societal needs. The idea behind it is that universities should not only serve their students but also engage with society, industries, and local communities to contribute to social development and economic growth. It often requires universities to work more closely with various external stakeholders and to develop new partnerships and collaborations outside the traditional academic sphere [3].

Through two decades of successive revisions of the Act - Law on Higher Education, the polish legislature has advocated the adoption of internal regulations governing the management of intellectual property rights and the principles of commercialisation, the establishment of organizational units dedicated to oversee those processes, and the implementation of incentives, including supplementary compensation, to bolster the realization of universities' "third mission." Currently, the Act of 20 July 2018 - the Law on Higher Education and Science contains a separate section "Commercialisation of research results and know-how".

REGULATIONS GOVERNING THE MANAGEMENT OF INTELLECTUAL PROPERTY RIGHTS AND THE PRINCIPLES OF COMMERCIALISATION

At the level of statutory provisions, legislator assumes that the senate of public university shall establish regulations governing the management of copyright, related rights and industrial property rights as well as the principles of commercialisation. It shall specify in particular:

- the rights and obligations of university, employees, doctoral students and students with regard to the protection and use of IP rights,
- 2) the rules for the remuneration of authors,
- 3) the rules and procedures for commercialisation,
- the rules for the use of a university's assets used for commercialisation and the provision of services in the field of scientific activity;
- 5) the rules for the distribution of funds obtained from commercialisation between an author who is an employee of a university and that institution
- 6) the rules and of mode of providing a university by employees, doctoral students and students with information on the research results and know-how related to them, information on the commercialisation funds obtained by the employee and the rules and mode of

^{*}Article Title Footnote needs to be captured as Title Note

[†]Author Footnote to be captured as Author Note

- provision by an employee of a part of the funds obtained from commercialisation to the institution;
- 7) the rules and mode of providing an employee by a university with information on the decisions concerning commercialisation or non-commercialisation and the part of the funds derived from commercialisation they are entitled to (*cf.* art. 152).

THE DECISION-MAKING PROCESS FOR THE COMMERCIALISATION OF R&D RESULTS

It is worth noting that the further described obligations related to the process of protection and commercialisation concern R&D results created by university employees. With regard to students and doctoral students, the university may define rules for dealing with the results of their creative work and support them in securing their resources. However, given the general principles of intellectual property law, in the absence of a separate agreement, it is the student/doctoral student who remains the subject of rights and retain the freedom to dispose of the R&D results.

Furthermore, the procedure discussed below relates only to:

- 1) scientific research being an invention, utility model, industrial design or integrated circuit topography, grown or discovered and developed plant variety,
- 2) development works,
- 3) artistic creation created under the performance of duties resulting from the employment relationship by an employee of a university, and the know-how related to such results (art. 153).

It should be also clearly stated that the current statutory regulation does not define the process of commercialisation of R&D results (in this respect generally applicable acts of law are in force, including: Act of 15 September 2000 Commercial Companies Code [4], Act of 23 August 1964 Civil Code [5], the Act of 30 June 2000 – Industrial Property Law [6], the Act of 4 February 1994 on copyright and related rights [7]), however, obliges the university to decide whether it will undertake the commercialisation of R&D results or transfer the rights back to the employee.

The first step required of an employee is to provide a university with information on the research results and know-how relating to them. In the case of an employee's declaration of interest in the transfer of rights to those results and the related know-how, the higher education institution shall decide on their commercialisation within 3 months.

Where a university decides not to undertake commercialisation or after the expiry of the 3 months' time limit, the higher education institution shall, within 30 days, make an offer to the employee to conclude an unconditional and paid agreement for the transfer of the rights to the research results and the related know-how, together with the information, works, including the ownership of the media on which they are recorded, and technical experiments. The agreement shall be concluded in writing; otherwise, it shall be null and void. The remuneration payable to a university for the transfer of rights may not be higher than 5% of the average remuneration in the national

economy in the previous year, as published by the President of Statistics Poland. In 2022 the amount was 317.30 PLN [8].

If the employee does not accept the offer to conclude the agreement the rights to the research results and the related know-how, together with the information, works, including the ownership of the media on which they are recorded, and technical experiments, shall remain with the university.

It should be emphasised that the aforementioned rules of procedure and time limits shall not apply if the research was conducted:

- 1) under an agreement with the party financing or co-financing such research, providing for an obligation to transfer the rights to the research results to that party or to an entity other than a contracting party;
- 2) with the use of financial resources, the rules for the granting or use of which specify a different way of disposing of the research results and the related know-how.

It is also worth pointing out that upon receipt of information from an employee on the research results and the related know-how, a university and an employee may, in a manner other than provided above, determine the rights to such results or the manner of their commercialisation by way of an agreement (art. 157).

EMPLOYEE'S OBLIGATIONS

Beyond doubt, academics play a multifaceted role in technology transfer, contributing their expertise, research, innovation, collaboration, and industry partnerships to bring university-developed technologies from the lab to practical applications that benefit society and the economy. They collaborate with colleagues within their own institutions and across other universities, research institutions, industries, and government organisations. These networks facilitate the exchange of ideas, resources, and expertise, accelerating the technology transfer process. Effective communication and engagement with these stakeholders are crucial for securing funding, support, and resources for technology transfer initiatives.

Employee's input is critical in the commercialization of technologies. By actively engaging in activities such as licensing agreements, startup creation, and technology spinoffs, they ensure that the technologies are properly transferred to the private sector for further development and market penetration.

In view of the above, the legislator has formulated a catalogue of obligations to be observed in the process of protection and commercialisation of R&D results. An employee of a public university shall be obliged to:

- 1) preserve the confidentiality of the research results and related
- 2) provide the higher education institution with all its information, works, together with the ownership of the media on which they were recorded, and the technical experience needed for commercialisation,
- 3) refrain from any action aimed at the implementation of the results
- 4) cooperate in the commercialisation process, including the proceedings aimed at obtaining exclusive rights not longer

than for the period in which the rights of the higher education institution apply.

These obligations are formulated in very general terms and should be made more specific in the IP internal management regulations and/or in the employee's contract.

EMPLOYEE'S RIGHTS

As can be seen from the above, the process of protection and commercialisation is formalized and very involving and time-consuming. The statutory model does not balance these challenges by establishing an incentive system, in fact it only provides for additional remuneration for successful commercialisation.

Art. 155 states that, in the case of commercialisation, an employee shall be entitled to no less than 50% of the value of funds obtained by the university from direct commercialization/ by the special purpose vehicle as a result of a given indirect commercialisation, reduced by no more than 25% of the costs directly related to such commercialisation, which were incurred by the university or the special purpose vehicle.

It is worth noting that also in the reverse situation, in the case of commercialisation by an employee, a university shall be entitled to 25% of the value of funds obtained by the employee from commercialisation, reduced by no more than 25% of the costs directly related to such commercialisation which were incurred by the employee.

Costs directly related to commercialisation shall be understood as external costs, in particular the costs of legal protection, expert opinions, valuation of the subject of commercialisation and official fees. These costs shall not include the costs incurred before the decision to commercialise and the remuneration payable to a higher education institution for the transfer of rights.

The regulation acknowledges the role of researchers and innovators in generating valuable ideas, inventions, or discoveries that can be translated into products, services, or 'technologies. By offering employees a share of the value obtained from commercialization, the regulation provides a direct financial incentive for researchers and innovators to engage in activities that could lead to valuable outcomes with commercial potential. This can motivate researchers to explore practical applications for their work and actively participate in technology transfer and commercialization efforts.

KEY ACADEMIC UNITS INVOLVED IN THE TRANSFER OF R&D RESULTS

For obvious reasons, the process of protecting and commercialising knowledge cannot rest on the shoulders of academics, specialised units are established that are crucial in bridging the gap between academia and industry. If these offices are not effective, well-staffed, or properly funded, the commercialization process may falter.

Law on Higher Education and Science indicates which units may be set up by public universities to support entrepreneurship and the process of transferring R&D results into the economy. Art. 148 stipulates, that higher education institutions may operate academic business incubators (hereinafter referred to as a ABI) and technology transfer

centers (hereinafter referred to as a TTC). These units are differentiated by their structure and scope of action.

An ABI shall be established to support the business activities of the employees, doctoral students and students. It can operate in the form of a general university unit (under regulations approved by the senate) or a capital company.

A TTC shall be established for the purpose of direct commercialisation, consisting in the sale of research results or know-how related to these results, or to the provision of these results or know-how for use, in particular on the basis of a license, rental and lease agreement. It may be established as a general university unit and shall operate under regulations approved by the senate.

The law requires that the director of an ABI in the form of a general university unit or a TTC shall be employed by the rector after consultation with the senate from among candidates presented by their supervisory boards.

According to art. 149 a higher education institution may also, for the purpose of indirect commercialisation, consisting in taking up or acquiring shares in companies or taking up subscription warrants entitling it to subscribe for or take up shares in companies, in order to implement or prepare for the implementation of the research results or know--how related to those results, establish only single-member capital companies (hereinafter referred to as a "special purpose vehicle"). To finance the share capital of a special purpose vehicle, the higher education institution may make a contribution in kind (in whole or in part) in the form of research results and know-how related to those results. A special purpose vehicle shall be established by the rector with the consent of the senate. The university may, by way of an agreement, entrust a special purpose vehicle with:

- 1) the management of rights to the results or know-how in the scope of direct commercialisation;
- 2) the management of research infrastructure.

A special purpose vehicle may additionally conduct business activity separated in terms of organisation and finance from the activity referred above.

The university shall allocate the dividend paid to a special purpose vehicle to the performance of its basic statutory tasks. Art. 150 underlines that only higher education institutions may be partners or shareholders of a special purpose vehicle. A special purpose vehicle may be established by several public higher education institutions. A public university may join a special purpose vehicle established by another public higher education institution.

All the institutions indicated above may operate, but are not an obligatory units within the structure of public universities. In fact, ABIs, TTCs and SPVs are the core of the IP protection and knowledge commercialisation model. They work in collaboration, seeking to share experience and develop best practices. To amplify these effects the Polish Association of Centers for Technology Transfer (PACTT.pl) was established in 2015. It is a voluntary association of representative units of Polish universities responsible for the protection, management and commercialization of university intellectual property. Among its objectives, it has adopted:

- the integration and development of the professionals dealing with the knowledge and technology transfer in academic ecosystem;
- exchange of knowledge, experience, standards and good practices;
- cooperation in the field of commercialization of research results
- joint representation of the members of PACTT.pl before public administration bodies, employers' associations and other entities operating toward innovation and cooperation between science and business. This representation applies, in particular, to such actions as: initiating pro-innovation activities of national character, preparing and giving opinions on legal changes and issuing opinions on strategic documents and actions taken by authorized bodies in the area of national innovation policy [9].

A year earlier the Polish Association of University Knowledge Transfer Companies (PSC) was appointed. The Association is a forum for cooperation of 34 university special purpose vehicles, established to commercialize scientific research results from universities and research institutes and carry out applied research commissioned by enterprises. Shows the real importance of SPVs that cooperate with investors, business angels, and innovative entities ready to implement science-based technologies, are vehicles supporting the creation of spin-off companies [10].

CONCLUSIONS

The commercialization process at Polish universities, like in many other countries, faces challenges despite having laws and bylaws in place. A one-size-fits-all approach does not guarantee success. Different fields and research areas require customized strategies and support. Currently, the legal and administrative processes is cumbersome, slow, and complicated, deterring both researchers and potential industry partners from engaging in collaborative ventures.

Cultural barriers exist both at the side of academia, as well as at the industry. The prevailing academic culture prioritizes traditional research and publishing over commercialization. It takes a shift in mindset to view research not just as an intellectual pursuit but also as a potential commercial product. Academics lack the necessary skills or understanding of market dynamics, business planning, and entrepreneurship required to transform research into a marketable product. Research is conducted in areas that don't align with current market needs or industry interests, leading to a gap between the creation of IP and its practical application. If universities do not provide proper incentives, recognition for commercialization efforts, researchers may see little personal benefit in pursuing these paths.

There is also insufficient funding to support the development, protection, and commercialization of R&D results. Polish science is underfunded. The share of higher education and science expenditure in GDP in 2023 was only 1.1 per cent. Not enough money for R&D activities and lack of dedicated resources for commercialization hinder the process of technology transfer. Without a robust ecosystem of venture

capital and private investment, it can be challenging to secure the funding needed to scale up a commercial venture.

Placing the burden on universities to build a model for commercialisation of research and development results can be assessed as a solution for adapting it to the specifics of each university and a manifestation of broadening the scope of selfdetermination of scientific institutions. However, it is not justifiable at this stage, as shown by research carried out in individual regions. Preliminary research carried out in 2023 under the project entitled: "Transfer of R & D results from universities of Podlaskie voivodeship to the economic and social environment", funded by the Ministry of Education and Science., confirmed that Polish universities still avoid innovative and risky ventures in favour of safe and standard activities. They have little experience in the commercialisation of research results and have not developed procedures to deal with their transfer. Universities fulfil the requirements set out in the Act - The Law on Higher Education and Science as obligations imposed by the legislator and not to achieve developmental goals.

We are therefore still left with the conclusion that addressing all the challenges requires a comprehensive approach involving fostering an entrepreneurial culture, promoting collaboration between academia and industry, simplifying regulatory processes, and improving access to funding and investment.

REFERENCES

- [1] POLON system, https://polon.nauka.gov.pl/en/public-data/; data access: 17.08.2023
- [2] Act of 20 July 2018 The Law on Higher Education and Science (Journal of Laws 2023, item 742, as amended)
- [3] Hubert Izdebski, Jan M. Zieliński, 2011, *Prawo o szkolnictwie wyższym. Ustawa o stopniach naukowych i tytule naukowym. Komentarz do nowelizacji*, Warszawa 2011, p. 31.
- [4] Act of 15 September 2000 Commercial Companies Code (Journal of Laws No. item, as amended)
- [5] Act of 23 August 1964 Civil Code (Journal of Laws 2023, item 1610, as amended)
- [6] Act of 30 June 2000 Industrial Property Law (Journal of Laws 2023, item 1170, as amended)
- [7] Act of 4 February 1994 on copyright and related rights (Journal of Laws 2022, item 2509, as amended)
- [8] Statistic Poland, Average monthly gross wage and salary in national economy in 2022.

https://stat.gov.pl/sygnalne/komunikaty-i-obwieszczenia/lista-komunikatow-i-obwieszczen/komunikat-w-sprawie-

przecietnego-wynagrodzenia-w-gospodarce-narodowej-w-2022-

roku,273,10.html?fbclid=IwAR1q1nwLHGjEJXp8DJLi6A5VWUHrGLe_uilMT1yLFvoTuXeWOPIMNzaJtXk

- [9] The Polish Association of Centers for Technology Transfer, https://pactt.pl/en/about-pactt
- [10] The Polish Association of University Knowledge Transfer Companies,https://psc.edu.pl/en/