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# LEGISLATIVE CONDITIONS FOR TRADE IN BIOLOGICAL MATERIAL OF FARM ANIMALS FROM A HEALTH PERSPECTIVE

# LEGISLATÍVNE PODMIENKY OBCHODOVANIA S BIOLOGICKÝM MATERIÁLOM HOSPODÁRSKYCH ZVIERAT Z POHĽADU ZDRAVIA

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## I. Introduction

The functioning of the European Union is characterized by the free movement of goods, which is one of the fundamental principles under the Treaty (Article 28 TFEU). Biological material, which is very important in animal reproduction, can be a specific object of trade. As defined in Article 3(28) of Regulation (EU) 2016/429 of the European Parliament and of the Council of 9 March 2016 on transmissible animal diseases and amending and repealing certain acts in the field of animal health ("Animal Health Law"), biological material should be understood as semen, oocytes and embryos intended for artificial reproduction and hatching eggs[(1)].

The subject of the article are issues related to livestock biological material trade. It consists of its storage, movement, use and disposal for commercial and non-commercial purposes.

The starting point for this discussion is a statement that due to the subject of trade, special rules apply to it. They result from the fact that biological material constitutes the essence of genetic resources used in animal breeding as well as in scientific research. At the same time, as Krawczyk and Kurpiński emphasize, effective and appropriate use of animal resources is the best form of their protection[(2)].

This issue is very important especially from the health point of view, both in international and national dimension. Moved biological material may contain pathogens. This is the case with transmissible animal diseases, which can cause enormous damage to animals, their owners and to the economy [(3)]. The range of these diseases is very broad and constantly changing. Individual diseases are not only transmitted by direct contact between animals or animals and humans. They are also transmitted by means of vectors. These include oocytes and embryos used for artificial insemination, semen, oocyte donation or embryo transfer [(4)]. Therefore, the legislator has formulated specific legal standards to limit the transmission of diseases in line with the European Union Animal Health Strat-

(1) Regulation (EU) 2016/429.

(2) Krawczyk, Krupiński (2016).

(3) Lipińska (2017).

(4) Gliński, Kostro, Zoń (2007).

**Abstract (EN)**

This article addresses issues related to the movement of livestock biological material that is used for reproduction. Its movement may be accompanied by the spread of pathogens. To avoid this, specific instruments have been adopted at EU and national level. The aim of this paper is to evaluate the legal standards adopted in this field, which shape the circulation of biological material in the aspect of livestock health safety. In conclusion, it was stated that the normative solutions established at the EU level lead to the unification and harmonization of conditions concerning trade in biological material of livestock, and thus meet the objectives set out in it. Nevertheless, national regulations should be modified in this respect and supported by executive acts allowing for full implementation of the EU solutions.

**Keywords (EN)**

biological material, trade, genetic resources

**Abstrakt (SK)**

Príspevok sa zaoberá otázkami súvisiacimi s pohybom biologického materiálu hospodárskych zvierat, ktorý sa používa na reprodukciu a ktorého pohyb môže byť sprevádzaný šírením patogénov. Ako prevencia tohto šírenia boli na úrovni EÚ a na vnútroštátnej úrovni prijaté osobitné nástroje. Cieľom príspevku je zhodnotiť prijaté právne normy v tejto oblasti, ktoré upravujú obeh biologického materiálu z hľadiska zdravotnej bezpečnosti hospodárskych zvierat. Vo výsledku môžeme konštatovať, že normatívne riešenia stanovené na úrovni EÚ vedú k zjednoteniu a harmonizácii podmienok obchodu s biologickým materiálom hospodárskych zvierat, a tým napĺňajú stanovené ciele. Vnútroštátne predpisy by sa však v tomto smere mali upraviť a podporiť vykonávacími aktmi, aby umožnili úplnú implementáciu riešení EÚ.

**Kľúčové slová (SK)**

biologický materiál, obchod, genetické zdroje

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egy (2007–2013) adopted in 2008 and its principle of "prevention is better than cure". The European Union's Animal Health Strategy (2007–2013) and its "prevention is better than cure" principle[5].

There are many reasons for choosing this issue. Properly isolated and marketed biological material reduces the occurrence and spread of infectious diseases in animals by eliminating potential infection routes. At the same time, the use of biological material which meets normative requirements has an impact on the environment and on the preservation of biodiversity, limiting its changes in an undesirable natural and economic direction. In turn, the acquisition and marketing of defective biological material may result in deformation of production and its loss, which entails certain economic losses on the part of the producer, and in extreme cases, may adversely affect food safety. Finally, compliance with certain marketing rules aims not only to prevent risks potentially posed to public and animal health, but to minimize them in terms of protecting the safety of the entire complex food and feed chain. This has a direct impact on livestock production planning, but also on the profitability of the entire sector.

The essence of the discussed issue is also shaped by practical considerations. According to the report for 2020 made available by the Veterinary Inspectorate, the total number of supervised entities dealing with biological material in Poland amounted to 3922, out of which 2533 plants were inspected (This data applies only to entities engaged in semen collection, semen storage, embryo collection and semen production). As a result, the Inspectorate found some irregularities in 236 of which 26 were subject to administrative or criminal proceedings[6].

## II. Objects and Methods

The aim of this article is to assess the legal standards adopted at EU and national level which shape the trade in biological materials in terms of livestock health security. Moreover, it aims at answering the question to what extent the legislator has unified the rules of trading in it so that no technical barriers are created between Member States.

The basic method used in the work is a dogmatic analysis of the legal text. It refers to specific conditions occurring in agriculture in which these regulations function. Therefore, selected legal norms were examined de lege lata. In the article, because of its nature the descriptive method was also used, as well as foreign and Polish literature on the subject.

# III. Biological Material Versus Diseases

Issues related to the circulation of livestock biological material are included in the aforementioned Regulation (EU) 2016/429 of the European Parliament and of the Council, in which the legislator referred, among other things, to measures aimed at the surveillance of its trade. Their background is the prevention, control and eradication of transmissible animal diseases.

In the first place, he recognized that effective recognition is one of the basic elements of elimination of disease entities. Therefore, he formulated requirements for biological material of each species of kept animals in terms of their identification and registration. It should be emphasized that the legislator does not limit trade, but defines legal instruments for its proper conduct, taking into account the welfare of humans and animals. Their selection is not accidental, because it refers to the most sensitive area of the supply chain – the initial production. It undoubtedly includes donation and insemination procedures, as well as accompanying activities. He also defined the catalog of farm animals, which includes cattle, sheep, goats, pigs and equines, as well as the specific requirements for the biological material collected.

The legal standards developed are based on the assumption that biological material can present a similar risk of spreading portable animal diseases as the animals themselves. In addition, certain characteristics of its production, linked to high animal health requirements for farm animals, call for more stringent specific conditions for donor animals. Their essential purpose should be to ensure the safe movement of the biological material, to maintain its expected high level of performance and to take into account its specific uses. Consequently, the power to adopt acts in accordance with Article 290 TFEU has been delegated to the Commission in respect of certain requirements for the movement of biological material of particular animal species as well as special requirements applicable also to derogations from the obligations laid down in that legislative act[7].

The legal solutions adopted in the regulation are shaped by two tracks. Firstly, they refer to entities directly involved in internal trade, i.e. plants and transporters. In their case the legislator has adopted certain requirements for registration and approval. In addition, in order to monitor trade, it has indicated ways to proceed with the movement and traceability of biological material. Secondly, they shape the rules for the introduction into the Union and the export outside the Union to third countries.

# IV. Certification and Endorsement

The acquisition, production, processing or storage of biological material may only take place in certified facilities. By establishment is meant any premises, structure (environment or place) in which – temporarily or permanently – this material is kept. However, it does not include farms where animals are kept and animal treatment facilities are excluded (Article 4, point 27 of Reg. 2016/429). An establishment dealing with biological material is thus: a) for semen, the establishment where it is collected, produced, processed and stored; b) for oocytes and embryos, a group of specialists or a structure supervised by a team veterinarian with competence in the collection, production, processing and storage of oocytes and embryos; and c) for hatching eggs, a hatchery.

Prior to the commencement of the aforementioned activities, each of the aforementioned entities is required to undertake

[5] Rezolucja (2008).

[6] Weterynaryjna (2021).

[7] Wątek (2016).

certain steps for registration. These include, according to Article 84 (1) of Reg. 2016/429, the obligation to notify the competent authority in the Member State where they operate of each of their establishments for which they are responsible. The legislator also requires the provision of information in terms of basic personal data, address, description of the facilities; information on the type and quantity of biological material to be kept in the establishment, together with an indication of its potential and any other matter relevant to the potential risk of spreading diseases. Establishments which are subject to approval under Article 94(1) of Regulation 2016/429 are exempt from this information requirement, such as (a) gatherers of ungulates and poultry; (b) dealers of biological material of bovine, porcine, ovine, caprine and equine species; (c) hatcheries; and (d) poultry establishments from which animals, biological material or poultry other than for slaughter or hatching eggs are moved to another Member State.

This registration is necessary as it allows the competent authority to supervise the sourcing and collection of material which serves to prevent, control and eradicate transmissible animal diseases. At the same time, in order to avoid unjustified administrative burdens and costs, Member States have the possibility to exempt certain types of establishments from registration if they pose a low animal health risk. Provisions in this regard shall be established by the Commission under the delegation in Article 86 of Regulation 2016/429.

As part of the information instrument for obtaining an establishment's approval, operators shall provide the competent authority with, inter alia, such data in addition to the address as: a) the location of the establishment and the characteristics of its facilities; b) the categories, species and number of terrestrial animals kept or the categories, species and quantity of biological material collected in the establishment; c) the type of establishment; and d) other matters concerning the establishment related to its specificity which are relevant for determining the risk posed by the establishment, if any (Article 96(1) of Reg. 2016/429).

Approval of an entity occurs when it meets several conditions together. In the first instance, these relate to the fulfilment of the requirements for bio-assurance measures. Their primary purpose is to minimize the risk of the introduction and spread of pathogenic agents in its area. Measures appropriate to the animal species prevent the occurrence of diseases by eliminating or reducing as much as possible potential sources of disease[8]. In addition, the establishment should meet surveillance requirements appropriate to its type and the associated risks to detect the presence of potential diseases in the biological material. At the same time, the establishment must demonstrate that it has adequate facilities and equipment, appropriate to its potential in relation to the quantity of biological material involved, and properly trained personnel to conduct its activities.

Establishments, in addition to the required registration, must comply with related record keeping obligations (Article 103 of Reg. 2016/429). Their scope concerns (a) the breed, age, identification data and health status of the donor animals used to produce the biological material; (b) the time and place of capture, processing and storage of the biological material captured, produced or processed; (c) the identification data with details of its destination, if known; (d) the documents required to be attached when the biological material arrives at or leaves the establishment concerned; (e) the results of clinical and laboratory tests, if applicable; and (f) the laboratory techniques used. These records must be kept for a minimum period specified by the competent authority and for no less than three years and may be exempted for establishments posing a low risk of spreading listed or emerging diseases. Exemption may be granted by the Member State.

The question of circulation of biological material is of particular importance in terms of disease control measures to be taken in the case of confirmation of disease in livestock. Accordingly, the legislator requires that, pursuant to Article 65(1) (d) of Regulation 2016/429, the competent authority of the Member State shall ensure that, subject to national provisions on obtaining access to private property, one or more disease control measures are implemented in the restricted area to prevent the further spread of a listed disease referred to in Article 9(1)(d). These include bio-assurance requirements concerning, inter alia, the collection, storage and handling of biological material. Another very important obligation of the establishment is to fulfil the requirements concerning the identification and traceability of the material (Article 9(1) h)[9].

## V. Traceability

As far as the traceability of biological material is concerned, this includes material derived from kept animals of the species indicated above. According to Article 121 of the said Regulation, operators producing, processing or storing biological material shall label it in such a way that the donor animals, the date of acquisition; and the establishments handling the biological material where the material was acquired, produced, processed and stored can be unambiguously identified. Such labelling should be designed to ensure the effective application of disease prevention and control measures as well as the traceability of its movements within and between Member States and of the introduction of the material into the Union. During movement, it is essential in relation to the spread of animal diseases that appropriate precautionary measures are taken to ensure that the biological material does not jeopardise the health status of terrestrial animals kept at the place of destination with regard to both officially listed and emerging diseases.

In order to ensure control and security of internal trade, the legislator requires notification of all movements of livestock biological material to other Member States. This is done by the integrated computerized veterinary system TRACES, the notifier being the competent authority of the Member State of destination.

## VI. Movement and Circulation of Biological Material

Biological material may be moved only if it meets certain normative prerequisites. It must come from registered establish-

[8] Realizacja (2018).

[9] Obal, Lesiów, Śmiechowska (2017).

ments and meet traceability requirements. On the other hand, operators of establishments at the place of destination who receive biological material from an establishment in another Member State are obliged to verify the labelling and animal health certificates. They shall inform the competent authority of the place of destination of the correctness of the movement. In the event of irregularities, the operator concerned shall isolate the biological material until the competent authority has taken a decision on the matter.

As regards movements of animal genetic material to other Member States, operators must verify that the biological material was obtained, produced, processed and stored in appropriate facilities. In addition, donors must be verified that they meet the necessary animal health requirements and the operators involved in its transport (Article 159 of Regulation 2016/429).

Biological material may be moved provided that it is accompanied by an animal health certificate issued by the competent authority of the Member State of origin (Article 161(1) of Reg. 2016/429). It should contain information about the establishment, the type of material, the species of donor animals kept, its quantity or number and, if required, its labelling. On the other hand, biological material that is subject to restrictions due to a suspected disease and for which specific eradication or emergency measures have been taken shall be excluded from the movement. The restrictions in question do not apply if the material was obtained before the outbreak and was stored separately from other biological material.

The above-mentioned rules on the movement of biological material are intended to avoid the spread of animal diseases. However, their application does not prevent Member States from taking specific measures. If a disease other than a listed disease poses a significant risk to animal health, the Member State concerned may introduce national measures to control the disease in question and may restrict the movement of the biological material. This is allowed as long as these measures do not impede distribution and do not go beyond what is appropriate and necessary to control the disease (Article 171 of Reg. 2016/429).

The legislator also allows the introduction into the Union of biological material from third countries as long as it is not covered by a derogation granted under Article 239(2) of Reg. 2016/429. At the same time, the Commission, by means of implementing acts, may draw up lists of countries from which the introduction into the Union of biological material is permitted. In the case of its introduction, it must be demonstrated that the animal health requirements are as stringent as in this Regulation and in the rules adopted pursuant to it that apply to the movement of biological material within the Union, or offer guarantees equivalent to those indicated in the Regulation (Article 234 of Reg. 2016/429).

The movement of biological material is also subject to internal and external verification under Regulation (EU) 2017/625 of the European Parliament and of the Council on official controls[10]. Internal control under Article 20 of Regulation 2017/625 covers every stage of production, processing and distribution. The external one, on the other hand, concerns material entering the Union. Control is carried out by the competent official authorities at the border inspection post of first arrival in the Union regarding the prevention of risks to public and animal health (Article 47 of Reg. 2017/429). It includes verification of the consignment, documentation, including identification and physical checks. Checks are carried out by the official veterinarian or designated staff.

## VII. National Legal Conditions of Trade In Biological Materials of Farm Animals

Issuance of the EU regulation required adjustment of national regulations. Accordingly, the issues related to trade in biological material of farm animals in Poland are regulated by the provisions of the Act of 11 March 2004 on the protection of animal health and combating infectious animal diseases[11]. The act, in its Article 1(f), contains veterinary requirements for undertaking and carrying out activities in the field of, inter alia, commercial production, acquisition, preservation, treatment, storage, marketing or use of biological material. The legislature independently defines its circulation and trade. By trading it means its import, placing on the market and export to third countries. On the other hand, trade in biological material is free trade between Member States of the European Union within the meaning of Article 28(2) of the Treaty on the Functioning of the European Union (Article 2(12)). At the same time, it makes its admissibility conditional on holding a certificate confirming the origin of the material, in accordance with applicable EU regulations.

The legislator treats the concept of biological material in a broader manner, including semen, ova, embryos and tissues used in their production, originating from animals, intended for use in reproduction, with the exception of hatching eggs from poultry and aquaculture animals (Article 2(10) of the Act).

Considering biological material as the essential core of reproduction, it is necessary to refer to its zootechnical conditions, which must be met. They have been defined in the Regulation of the Minister of Agriculture and Rural Development of 26 November 2009 on the biological material used in reproduction of farm animals[12] under the disposition contained in Article 39 of the Act. In principle, semen used in artificial insemination, as well as ova or spores, should come from animals registered in herd books or registers. Their material must meet the veterinary requirements set out in these regulations on the protection of animal health and the control of infectious animal diseases. This also applies to stored material. In addition, veterinary requirements for carrying out activities related to the production, collection, preservation, treatment, storage, marketing or use of semen, as well as its import and trade, have been formulated for individual livestock species by regulation[13].

Turning to the analysis of the solutions concerning the trade

[10] Regulation EU 2017/625.

[11] Act (2020).

[12] Regulation (2009).

[13] Regulation (2009), Regulation (2011), Regulation (2013).

itself, which are contained in the Act, it should be noted that certain principles for the "safe" movement of material have been defined. During the movement and transport of biological material, as noted when discussing the EU regulation, appropriate certificates are required. These are issued by breeders' associations or entities maintaining herd books or registers. In addition to those mentioned, other entities may also have the right to grant them if: 1) have been authorised to engage in the business of collecting, packaging, storing and supplying or storing and supplying semen, or 2) are engaged in the business of collecting, preserving, storing and supplying or storing and supplying ova or embryos, in accordance with the provisions on the protection of animal health and the control of infectious animal diseases. The holder of the certificate is obliged to keep it for at least 12 months from the date of its issuance, which is potentially to facilitate possible tracing of the material being moved. It is worth mentioning that the supervision over the health quality of biological material and poultry hatching eggs is carried out by the Veterinary Inspection[14].

In addition to the certificate, each batch of biological material marketed on the national territory is provided with a commercial document containing, inter alia, data allowing the identification of the donor or donors[15]. In addition, it specifies the date of collection or production of the material and information about its producer and recipient. In the case of bovine embryos and semen, that document shall also include (a) the results of an assessment of breeding value carried out on the national territory, if such an assessment has been carried out, (b) the results of an international assessment of breeding value, if any, carried out by a reference body, (c) in the case of bulls of the Holstein-Friesian breed, the results of an international assessment of breeding value made available on the website of a breeders' association or other body which has been authorised by the minister responsible for agriculture to carry out such an assessment of cattle of that breed, and (d) the results of a test for the carrier of genetic defects in the bull, if such a test has been carried out.

With regard to the health of the animals and the biological material collected from them, the legislator, in accordance with Article 16 of the Act, allows their movement from Poland to another Member State. However, it is subject to compliance with the veterinary requirements for trade in it. In particular, each consignment should be accompanied by the original health certificate issued by an official veterinarian of the country from which the material was imported, or a certified copy of this certificate. Movement also implies the holding of a veterinary border crossing certificate issued by the border veterinarian. In duly justified cases the movement of material may be prohibited. This occurs when there is a fear of the occurrence or appearance of an infectious disease on the territory of a third country from which the material is imported. The minister responsible for agriculture in each Member State is competent in this respect. He shall impose a ban on movement with a view to protecting public health and safeguarding animal health, acting on the basis of the aforementioned EU provisions (Article 17 of the Act). The introduction of a trade restriction must be justified and the other Member States and the European Commission must be informed immediately. The ban remains in force until the Commission issues a decision on the import ban of the biological material.

Based on the disposition contained in Article 268 of Reg. 2016/429, the national legislator has established provisions on sanctions applicable in case of violation of the established rules for the circulation and trade of biological material. It is worth mentioning that underlying their formulation was the assumption that sanctions must be effective, proportionate and dissuasive.

As a result, failure to meet the discussed requirements for the marketing of biological material entails criminal or administrative penalties. Well, in accordance with Art. 77 of the Act, whoever, among others 1) while conducting supervised activity, fails to meet the veterinary requirements provided for it, thus causing an epizootic or epidemic threat or an inappropriate health quality of the products, or conducts such activity without confirming that the veterinary requirements have been met; 3) trades,..., without complying or in breach of the veterinary requirements applicable in this scope, 7) carries out research and other activities with genetic material, for research, diagnostic or production purposes without approval – shall be subject to a fine, penalty of restriction of liberty or imprisonment of up to one year. In turn, in accordance with Art. 85a of the Act section 1 who: 1) conducts supervised activities without registration or obtaining approval or conditional approval, 2) does not possess commercial documents or health certificates that meet certain requirements, imports animal by-products or derived products that do not meet the requirements – shall be subject to a fine.

## VIII. Conclusions

The analysis conducted allows to conclude that the normative solutions established at the EU level lead to the unification and harmonization of conditions concerning trade in biological material of farm animals. This is a result of, among other things, the need to meet accepted international standards in this area, as well as to ensure the health security of humans and livestock. Due to the risk posed by transmissible infectious diseases, there is a concern that the emergence of an epidemiological threat would affect several Member States simultaneously and could even spread across borders with significant economic and social impact. The introduction of identical rules and procedures in all Member States with a preventive character will undoubtedly limit the risks associated with it.

It should be underlined that the approach of the legislator allows for safe biological material to be obtained as a result of the controls on its circulation. Member States participate in internal trade but also have the possibility to trade with third countries. This exchange is not free as it implies certain requirements such as registration and approval of establishments involved in the trade, professional qualifications for certain highly specialised establishments or activities (e.g. embryo collection teams), the necessary documentation and specific supervision by the competent authority. Nevertheless, it does not lead to technical barriers to trade in biological material used for reproduction.

[14] Act (2004).
[15] Act (2020).

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15. Act of 10 December 2020 on the organization of breeding and reproduction of farm animals, Journal of Laws of 2021, item 36.

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# CROSS–BORDER PUBLIC PROCUREMENT IN THE EUROPEAN UNION

# CEZHRANIČNÉ VEREJNÉ OBSTARÁVANIE V EURÓPSKEJ ÚNII

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## I. Introduction

Public procurement is a complex agenda that includes legal, economic and political aspects. Public procurement is, because of to the volume of funds that public authorities spend to meet their needs, a tool through which public policy makers try to achieve also secondary benefits, such as environmental or social benefits. Every year public authorities in the EU spend around 14% of GDP on public procurement.(1) Public procurement also has the potential to contribute to innovation. Increas-ingly, public procurement is used as a lever to drive economic growth, and achieve objectives such as unlocking innovation, SMEs participation and delivering sustainable outcomes.(2) In order to sup-port the functioning of the EU Single Market and to eliminate possible barriers arising from specific public procurement rules in the Member States, the EU has adopted EU public procurement law and rules that gradually unify public procurement rules in the Member States.

For preventing cross-border economic and legal obstacles, public procurers from different Member States are allowed to implement joint public procurement. Cross-border public procurement makes it possible to jointly meet the needs of several contracting authorities from different EU Member States and thus contribute to a more efficient functioning of the single internal market.

The aim of this paper is to contribute to analytical results in the field of cross-border public pro-curement contracts carried out jointly by contracting authorities from several EU Member States.

## II. Theoretical background

Public procurement is a crucial pillar of services, goods and works delivery for public authorities. The most important goal of joint cross-border public procurement is to make the most of the poten-tial of the Single Market(3). "Efficient and transparent public procurement can help address the major challenges Europe faces, especially when it comes to creating sustainable economic growth and new jobs. Through improved procurement practices, public authorities can get better value for money and contribute to a more innovative, sustainable, inclusive, and competitive economy, while also tackling societal policy objectives"(4). European legislation on public procurement is in place to increase transparency and facilitate competition within the EU Single Market. The assumed benefits include lower prices and better quality for public purchasers when procuring supplies, services and works. One of the key objectives of having common public procurement procedures across EU as

(1) European Commission, (2017)
(2) OECD, (2019)
(3) Azud, J., Plaváková, L., Bartoš, P. (2019)
(4) European Commission, (2021a)

**Abstract (EN)**

Joint cross–border public procurement is a public procurement procedure in which a contract is awarded jointly by contracting authorities from two or more Member States. Such an approach con-tributes to the fulfilling potential offered by the EU Single Market. The aim of the paper is to con-tribute to the analytical results focused on the evaluation of joint cross–border procurement. The results are processed on the basis of data selected from TED. The results show that this approach in public procurement is not commonly used by contracting authorities. The use of this approach is dominated by the supply of services and the use of open procedure as a tendering procedure.

**Keywords (EN)**

public procurement, joint procurement, cross–border procurement

**Abstrakt (SK)**

Spoločné cezhraničné verejné obstarávanie je taký postup vo verejnom obstarávaní, v ktorom za-dávajú zákazku spoločne verejní obstarávatelia z dvoch alebo viacerých členských štátov. Takýto postup podporuje využitie plného potenciálu, ktorý ponúka vnútorný trh EÚ. Cieľom článku je prispieť k štúdiám zameraným na hodnotenie spoločného cezhraničného obstarávania. Výsledky sú spracované na základe údajov selektovaných z oznámení uverejnených v TED. Z prieskumu vy-plýva, že táto forma verejného obstarávania nie je v praxi bežne využívaná verejnými obstarávateľmi. Pri využití tohto postupu dominuje dodávka služieb a verejná súťaž ako uplatnený postup verejného obstarávania.

**Kľúčové slová (SK)**

verejné obstarávanie, spoločné obstarávanie, cezhraničné obstarávanie

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laid down by European law is the facilitation of cross-border procurement[5].

Cross-border procurement is a specific form of procurement that is characterized by a cross-border element. Cross-border procurement coordinates between contracting authorities or contracting au-thorities from several EU Member States. In accordance with Directive 2014/24/EU on public pro-curement and repealing Directive 2004/18/EC, cross-border public procurement can be implemented in several models.

Joint cross-border public procurement can take the form of central procurement. In the context of this model of cross-border procurement, in order to eliminate conflicts between the national laws of the EU Member States, the conflict rule provides that the provision of centralized procurement ac-tivities by a central purchasing body located in another Member State is carried out in accordance with the national rules and provisions of the Member State in which the central purchasing body is located.

In addition, cross-border procurement may take the form of occasional joint procurement by several contracting authorities or contracting entities from different EU Member States. In such a case, however, the implementation of cross-border procurement must be preceded by the conclusion of a written agreement between the contracting authorities or entities participating in the joint cross-border procurement.

Other model of joint cross-border procurement is its implementation through a joint body set up by contracting authorities or contracting entities from different Member States. In the case of this cross-border procurement model, the relevant legislation governing the public procurement process needs to be defined, either by a decision of the competent authority acting on behalf of such a body or in the founding act of the joint entity, with two options to choose from conflict of law of the applicable law, either the law of the EU Member State in which the joint body has its registered office or where carries its activities.

Several studies have been undertaken in recent years to investigate the extent of cross-border public procurement. The number of factors that were potentially associated with cross-border procurement is very large[6]. Several benefits arise from committing to joint cross-border public procurement such as lower price, innovation or simplification of administration.

Cross-border public procurement is also intended to help entities implement various cross-border development projects. In this way, it is possible to apply uniform rules to the entire performance, which is the subject of the project[7]. On the other hand, from the Opinion of the European Committee of the Regions - Implementation report on public procurement[8] shows that cross-border pro-curement has not brought any added value to local and regional authorities. Despite uniform pro-curement procedures across the EU, which are costly and time-consuming, no or very few cross-border tenders are submitted. According to the opinion, this is probably due to the fact that the electronic platforms of the individual Member States differ from each other and constitute an ob-stacle to the participation of businesses and entities from neighbouring countries[9].

Possible reasons for the low share of cross-border public procurement include different Member States' rules, e.g. in the areas of health and safety at work, construction, waste management and others. Potential foreign bidders often lack the necessary capacities, material and legal resources to meet the requirements of other Member States. Barriers also include requirements for cross-border certificates and electronic signatures[10].

## III. Legal background

Joint procurement by contracting authorities from different Member States currently encounters specific legal problems related to conflicts between national laws and rules.

The conditions created by EU public procurement law and rules were expected to result in increased cross-border tendering. Despite the fact that joint cross-border procurement is not new in EU law, contracting authorities still face significant legal and practical difficulties in procuring from central procurement organizations in other Member States or in joint procurement. These difficulties should be eliminated so that contracting authorities can reap the full benefits of the internal market's poten-tial.

Joint cross-border procurement rules should be shaped in order to facilitate cooperation between contracting authorities and increase the benefits of the EU internal market by creating cross-border business opportunities for suppliers of goods and service providers. These rules should lay down the conditions for the cross-border use of central purchasing bodies and determine the applicable public procurement legislation, including redress legislation, in cases of common cross-border procedures, supplementing the conflict-of-law rules[11].

Contracting authorities from different Member States are allowed to set up joint bodies. Special rules are laid down for such forms of joint procurement. Such a joint body may be the European Grouping of Territorial Cooperation (EGTC)[12]. The main objective is to facilitate and promote terri-torial cooperation and cohesion throughout the EU and regions.

Contracting authorities from different Member States may act jointly in the award of public con-tracts. A Member State may not prevent its contracting authorities from using centralized procure-ment activities offered by central purchasing bodies located in another Member State. Several con-tracting authorities from different Member States may jointly award a public contract, conclude a framework agreement or operate a dynamic purchasing system. However, contracting authorities should not use joint cross-border procurement to circumvent the mandatory rules of public law ap-plicable in the Mem-

(5) European Commission, (2011).

(6) Tkáč, J., Griga, M., (2016).

(7) Tkáč, J., Griga, M., (2016).

(8) Opinion of the European Committee of the Regions – Implementation report on public procurement (2020/C 39/09).

(9) Piga, G., Tátrai, T., (2016).

(10) Opinion of the European Committee of the Regions – Implementation report on public procurement (2020/C 39/09).

(11) Directive 2014/24/EÚ of the European Parliament and of the Council.

(12) Regulation 1082/2006 of the European Parliament and of the Council.

ber State in which they are located. Such rules may include provisions on trans-parency and access to documents or specific requirements for the traceability of sensitive supplies, etc.

The EU law emphasizes the importance of strategic planning in public procurement and the empha-sis on its environmental, social and innovative aspects[13].

# IV. Methodology

It should be noted that data on cross-border public procurement are scarce and not widely availa-ble. To create a dataset for analysis, we used a special selection in Tenders Electronic Daily (TED). TED is the online version of the 'Supplement to the Official Journal' of the EU, dedicated to Euro-pean public procurement. It is the special source for the study of public procurement data at the mi-cro level. Tenders for public contracts that fall under EU rules must be published in the TED.

Our dataset contains data on contract award notices (CANs) published in TED in 2014-2021[14] by the contracting authorities based in the EU27 Member States (MS), the UK, and the EFTA coun-tries. We have selected CANs which are joint procurement in the EU MS (contract involves joint procurement)[15] and then we individually examined every CAN whether it contains a cross-border element. Cross-border elements means that contracting authorities are from at least two or more MS, or central contracting authority purchase behalf on contracting entities from at least two MS. Participating countries and the number of contracts that involve joint procurement can be seen in the tab. 1.

**Table 1:** Joint Public Procurement (2014-2021)

| Country | Contract Award Notice (CAN) |
|---|---|
| Denmark | 14 |
| France | 2 |
| Germany | 6 |
| Spain | 5 |
| Portugal | 1 |
| Belgium | 9 |
| Sweden | 8 |
| Italy | 3 |
| United Kingdom | 166 |
| Finland | 7 |
| Netherlands | 1 |
| Switzerland | 1 |
| Austria | 1 |
| Norway | 66 |

*Source: own processing based on TED data, 2021*

In the analysis, we focused on identifying the contracting authority (type of buyer), tendering pro-cedures, type of contract and number of cooperating countries per CAN. It is interesting to find out whether any of the above-mentioned characteristics dominate.

# V. Results

Segmenting the "joint procurement" CANs by cross-border elements showed that the cross-border share is lower. The results by year and country can be seen in the tab. 2. Germany dominates the participating countries.

Our analysis reveals that contracting authorities prefer joint cross-border public procurement, in particular for the supply of services (fig. 1.). Only a small number of cross-border CANs from da-taset were for the supply of goods and no record for work contracts.

If we look at the number of cooperating countries, we find that the most frequently cooperating are contracting authorities from 2 to 5 countries (fig. 2.). Co-operation between contracting authorities from all or almost all Member States is rare.

Based on the results, we can summarize that joint cross-border public procurement was most often used by bodies govern by public law and by utilities entities (fig. 3.). In the future, there is potential for increasing the share of cross-border procurement by the European institutions, which could serve as a model for the use of this tool. Member States should take measures to encourage the par-ticipation of regional and local public authorities and agencies in joint cross-border procurement. It is for this type of entities (public procurers) that joint cross-border public procurement can have the greatest benefit. This method can be used in the implementation of a number of EU projects, which are implemented, for example, in border areas by partners from several Member States. Open proce-dure was mostly used in joint cross-border procurement CANs, almost 50% (fig. 4.). In an open procedure anyone may submit a full tender. This procedure is used most frequently in general. It is open to the unlimited number of economic operators.

The second most common tendering procedure was negotiated procedure without prior publication. It is a special procedure for awarding above-limit contracts, which may be used by the contracting authority if the conditions laid down by law for its use are met. The joint cross-border public pro-curement can be more effectively used within lighter public procurement regime[16].

Within the joint procurement (regardless of the cross-border element), the most economic tender was used as a criterion for award contract. This was followed by the criterion of the lowest price. The major question arising from implementation of joint (cross-border) procurement are still related to the price and the number of procurers joining the common purchasing[17].

Joint cross-border public procurement can contribute to the creation and implementation of innova-tion, where innovation means the introduction of a new or significantly improved product, service or process for public procurement purposes. In case where no solution yet exist on the market, pro-curement enables buyers to get new solution according to their needs[18].

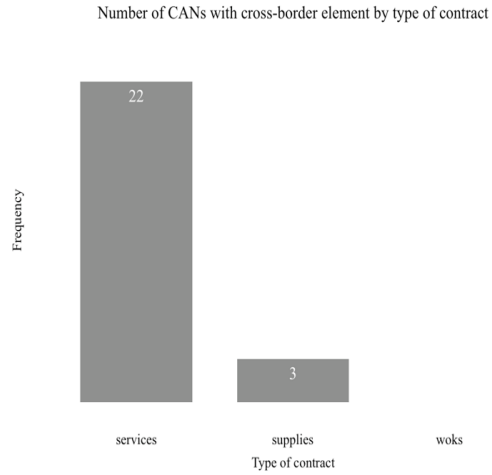
[13] Tkáč, J., Slobodníková, M., (2020).
[14] last update August/24/2021.
[15] advanced search by "joint procurement".
[16] Calleja, A. (2016).
[17] Piga, G., Tatrai, T., (2018).
[18] Bovis, Ch., (2016).

**Table 2:** Joint Public Procurement with Cross-border elements

| Contract Award Notice (CAN) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Country** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** | **2021** | **total** |
| Denmark | | | | | | | 1 | 1 | 2 |
| France | | | | 1 | | | | | 1 |
| Germany | | 1 | 3 | | 1 | | | | 5 |
| Spain | | | | 1 | | | 1 | | 2 |
| Portugal | | | | | 1 | | | | 1 |
| Belgium | | 1 | 1 | | | | 1 | | 3 |
| Sweden | | | 1 | 1 | | | | 1 | 3 |
| Italy | | | | | 1 | 2 | | | 3 |
| Finland | | | 1 | 1 | 1 | | | | 3 |
| Netherlands | | | | | 1 | | | | 1 |
| Austria | | | | | 1 | | | | 1 |
| total | 0 | 2 | 6 | 4 | 6 | 2 | 3 | 2 | 25 |

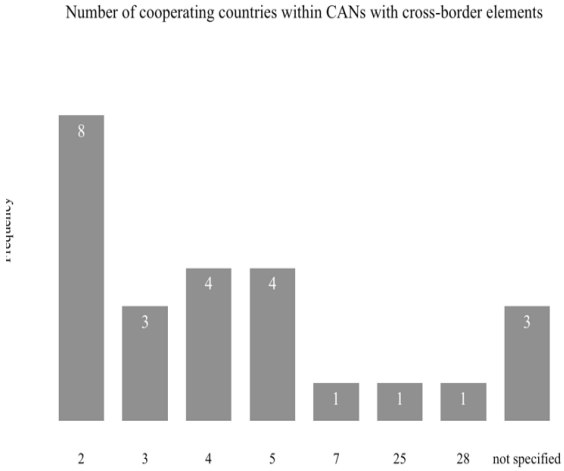
*Source: own processing based on TED data, 2021*

**Figure 1:** Number of CANs by the type of contract



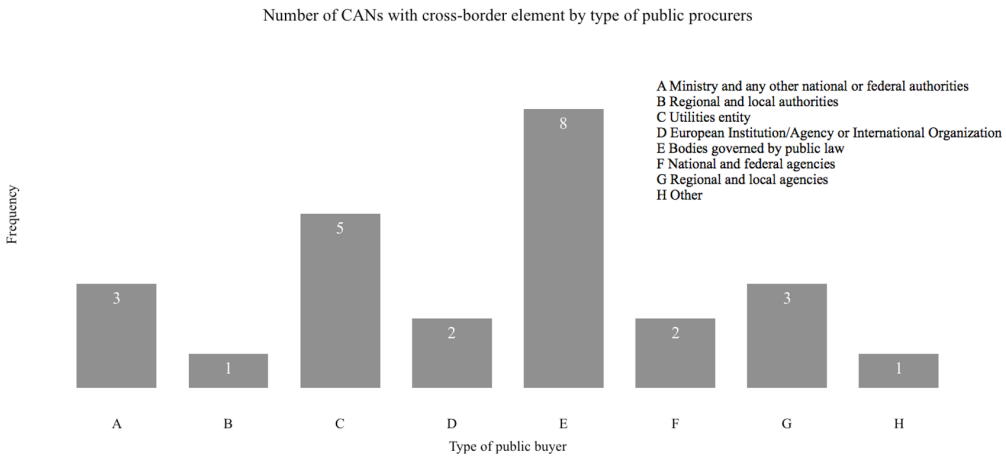

Source: own processing based on TED data, 2021

**Figure 2:** Number of cooperating countries per CANs



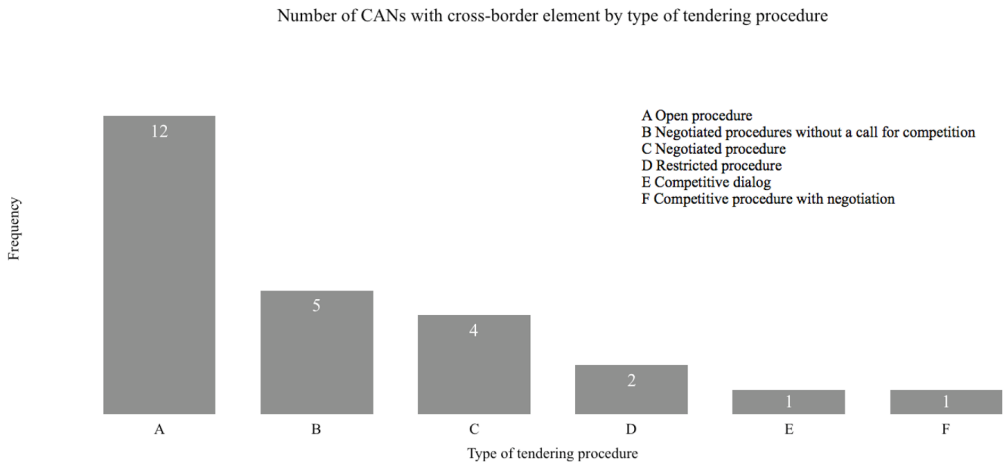

Source: own processing based on TED data, 2021

**Figure 3:** Number of CANs with cross-border element by type of public procurers




Source: own processing based on TED data, 2021

**Figure 4:** Number of CANs with cross-border element by type of tendering procedure




Source: own processing based on TED data, 2021

# VI. Conclusion

Joint cross-border public procurement represents an opportunity for contracting authorities to reap the full benefits of the EU Single Market. Currently, it is necessary for the European institutions in particular to take measures to ensure the popularization of joint cross-border public procurement and the relevant legal framework. The results based on the data from TED show that this procedure is used rather exceptionally. It is used at all levels of governance, but in our opinion, it has the po-tential to bring benefits especially for regional and local public authorities. These contribute greatly to the implementation of European territorial cooperation projects, which take place not only in bor-der regions. Within them, public authorities from several countries cooperate and can thus apply uniform rules to achieve the objective of public procurement related to cross-border projects.

The main findings of this paper highlight that the public procures most often used this approach in cooperation between two to five countries.

The EU legal framework allows for the use of multiple models for the implementation of cross-border public procurement. The results show that contracting authorities have used this approach mainly to procure services. At the same time, they used the public tender to the greatest extent.

Various EU and national policy initiatives should to facilitate joint cross-border collaboration in public procurement and promote benefits which may be attained by contracting authorities. The Member States have to find means to incentive public procurers to look beyond borders.

**Acknowledgements**

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## Legislation

1. Directive 2014/24/EÚ of the European Parliament and of the Council from 26 February 2014 on Public Procurement and Repealing Directive 2004/18/ES.
2. Opinion of the European Committee of the Regions – Implementation report on public pro-curement (2020/C 39/09).
3. Regulation 1082/2006 of the European Parliament and of the Council from 5 July 2006 on Eu-ropean Grouping of territorial Cooperation (EGTC).

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# LEGAL TOOLS IN INTERNATIONAL ENVIRONMENTAL LAW

# PRÁVNE NÁSTROJE V MEDZINÁRODNOM ENVIRONMENTÁLNOM PRÁVE

Zoltán SZIRA* – Hani ALGHAMDI* – Erika VARGA* – Kinga BÁRDOS**

## I. The sources of international law

Since there is no world government, there is no world Congress or parliament to make international law the way one country is formed by domestic legislatures. As such, there can be some difficulties in deciding precisely what international law is. There is no "Code of International Law". Although there is an International Court of Justice and a number of specialized international courts and tribunals, their authority is fundamentally dependent on state approval and they lack what can properly be defined as compulsory jurisdiction of the kind that national courts possess. The consequence is that the acts of the 192 states that make up the international community make international law essentially on a decentralised basis. The Statute of the International Court of Justice mentions these sources:

- Treaties between States;
- Customary international law derived from the practice of States;
- General principles of law recognized by civilised nations; and, as subsidiary
- Judicial decisions and the writings of "the most highly qualified publicists".

Although this article is only directed at the International Court of Justice, it has developed over

the years into a widely accepted definition of what the origins are in international law. It also explains how States should establish new international law and enforce it.

Treaties are the strongest and the most binding category as they represent consensus agreements among the signatory countries. Treaties are similar to contracts between countries; agreements are shared, negotiated in writing, and signed between states. States may discuss the interpretation or implementation of a treaty, but the treaty's written provisions are binding. Treaties can address a variety of areas such as trade relations, such as the North American Free Trade Agreement, or nuclear arms control, such as the Nuclear Non-Proliferation Treaty. They can be either bilateral (between two countries) or multilateral (between many countries). They can have their own rules for enforcement, such as arbitration, or refer enforcement concerns to another agency, such as the International Court of Justice. The rules concerning how to decide disputes relating to treaties are even found in a treaty themselves- the Vienna Convention on the Law of Treaties[(1)].

(1) United Nations (1969)

**Abstract (EN)**

Environmental law concepts are expressed in conventions, international binding laws, state practice and soft law commitments. They may be applicable to all foreign community members. These are widely recognized and even approved in the practice of the state.

A special feature of international environmental law is that many environmental issues are governed by non–binding soft–law instruments that allow faster responses to international environmental issues. Governments tend to resist legally binding treaty regulation for different reasons but are much more likely to adopt a written action plan or resolution, at least voicing a political will to address an issue. The numerous constitutional standards of several countries must be followed when negotiating international agreements: for example, the way the national parliament must approve and enforce a treaty. The paper investigates the regulation system of international environmental law.

**Keywords (EN)**

international treaty, environment, law, agreement

**Abstrakt (SK)**

Koncepty environmentálneho práva sú zakotvené v dohovoroch, medzinárodne záväzných právnych aktoch, v štátnej praxi a tiež v záväzkoch tzv. soft law. Takéto koncepty sa môžu vzťahovať na všetkých členov zahraničnej komunity, sú všeobecne uznávané a dokonca schválené v praxi štátu. Zvláštnosťou medzinárodného práva životného prostredia je, že mnohé environmentálne otázky sa riadia nezáväznými nástrojmi tzv. soft law, ktoré umožňujú rýchlejšie reakcie na medzinárodné environmentálne problémy. Vlády majú tendenciu brániť sa právne záväzným zmluvným nariadeniam z rôznych dôvodov. Na druhej strane je oveľa pravdepodobnejšie, že prijmú písomný akčný plán alebo uznesenie, ktoré prinajmenšom vyjadrí politickú vôľu problém riešiť. Pri vyjednávaní medzinárodných zmlúv sa musia dodržiavať početné ústavné normy viacerých krajín: napríklad spôsob, akým musí národný parlament schváliť a uviesť zmluvu do platnosti. Príspevok skúma systém regulácie medzinárodného práva životného prostredia.

**Kľúčové slová (SK)**

medzinárodná zmluva, životné prostredie, právo, dohoda

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Strictly speaking a treaty is not so much a source of legislati;on as a source of lawful duty. Treaties are only binding on States who are parties to them and choosing whether or not to become a party to a treaty is solely one for the State – there is no obligation to sign a treaty. Customary international law, pacta sunt servanda, requires all States to respect their treaties. That is why treaties are defined more accurately as sources of lawful obligation. But as authoritative statements of customary law, several treaties are relevant, too. A treaty that is openly signed between a large number of states is also seen as writing down what previously unwritten customary law rules were. Clearly this is the case where a clause of the treaty is meant to codify existing law. In principle, where a provision of a treaty codifies a rule of customary law the basis of law is the original practice and opinio juris – the provision of a treaty is merely evidence. But this overlooks the fact that it updates the rule by writing down a rule that was previously unwritten. From that point on, it is the written law that everybody must look at, and questions about the nature of the regulation must concentrate mostly on interpreting the text rather than examining the underlying procedure. In reality the fact that a large number of States agree on a clause of a treaty is itself an important piece of state practice. If subsequently those and other states enforce the provision of the treaty – particularly where they are not parties to the treaty – then it can quickly become part of customary international law.

The rules of customary international law slowly developed to reflect the changing international community. Before the Second World War – and before international law was specifically documented after the war as written international agreements – customary law was deemed to develop gradually and involve sincere action from the majority of States. The notion was that when a certain foreign practice is considered by the majority of states to be legally binding (opinio juris), it eventually transforms into a lawfully binding statute.

Such a custom shall be universal and essentially systematic and shall endure for some time. States will always believe they follow a custom as they are bound by a legal rule to do so. In comparison, in other fields of international cooperation, other rituals and procedures are practiced, but not because States find them legally binding.

It is more difficult to determine customary international law (CIL) than the terms of a signed treaty. CIL is created by the actual acts of states (called "state practice") as they show that certain states believe it would be unlawful to behave otherwise. Even if the CIL rule isn't written, it still links states and expects them to obey it. For example, countries have provided ambassadors protection for thousands of years. As far back as ancient Greece and Rome, when on their diplomatic missions, ambassadors from another nation were not affected, even though they represented a country at war with the country in which they were situated. Many countries have publicly stated throughout history that they agree that this protection should be granted to the ambassadors. So, if a country hurt an ambassador today it would be in breach of customary international law. Similarly, in modern history, governments have accepted by their acts and comments that killing civilians deliberately during wartime is unlawful under international law. However, deciding CIL is complicated, as it is not written down in relation to a treaty. Certain rules are so commonly followed and accepted by many states as law, that there is little question that CIL exists with respect to them; but other laws are not as generally known and there are disagreements as to whether or not they are actually CIL.

If states negotiate a legally binding global convention, they are actually signalling their willingness to be bound by certain rules. States are continually sharing their opinions about how other states will act within international organizations, and in other forums. The manner in which states 'talk' and the formal commitments they make are becoming increasingly relevant for the implementation of modern international law. International laws are being drawn up at a increasing rate, both by treaties and through other international instruments.

Customary international law is not an effective method for reacting to threats to the environment since it is always subject to interpretation. Environmental issues should be tackled as soon as possible and handled in a manner that is fluid and capable of being adjusted to the latest science.

One advantage of customary international law is that it binds every country in the world, while treaties bind only the parties to them: thus, for example, if 150 states are parties to a global convention, more than 40 states remain outside the system. If it can be proved and tested that most of the principles of the convention have evolved into customary international law, then the principles will be legally binding on all the world states. Even if a state withdrawn from the treaty in question, the customary international law will still remain legally binding[(2)].

The third source of international law is focused on the "natural law" principle, which claims that laws are a result of the instinctual conviction that certain actions are right and other actions are wrong. For example, most legal systems respect "good faith," that is to say the idea that everyone intends to abide by the agreements they make. In certain countries, courts will investigate whether the parties to a case have behaved in good faith, and take this question into account when determining a matter.

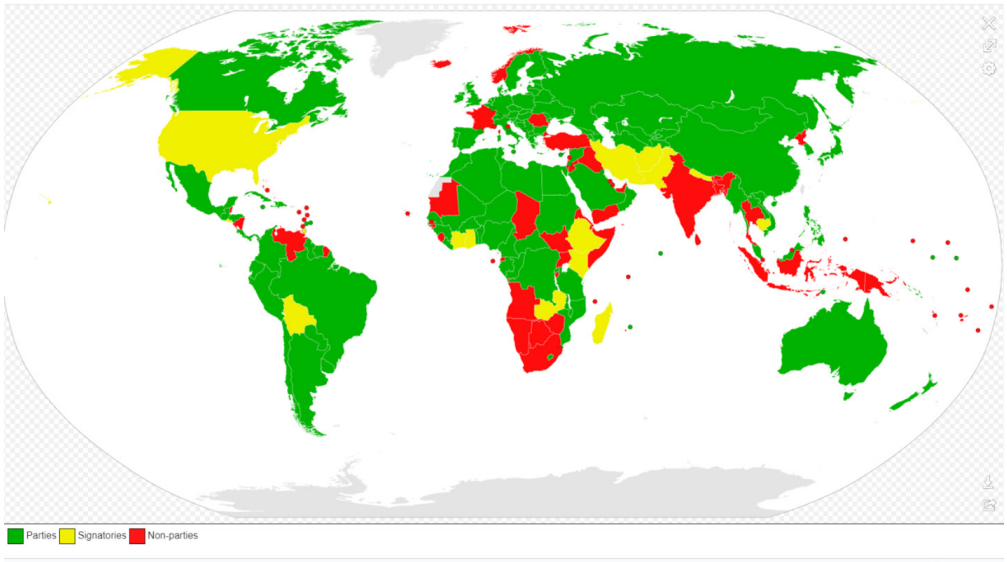
The last two sources of international law are considered to be subsidiary means for deciding rules of law. Although these sources are not international law by themselves, when combined with proof of international practice or general principles of law, they may help to prove the existence of a particular rule of international law.

Judicial rulings, both at the International Court of Justice (ICJ) and at national courts, are especially important. The ICJ, as the main legal body of the United Nations, is considered to be an authoritative expounder of law, and when other countries' national courts begin to recognize a certain principle as a legal rationale, this may signal a wide-ranging acceptance of that principle, such that it can be considered part of international law.

Legal scholarship, on the other hand, is not in itself completely authoritative, but may characterize rules of law commonly followed around the world. Thus, law professors may consult articles and books to find out what international law is.

(2) Koivurova (2014).

**Figure 1**: List of parties to the Vienna Convention on the Law of Treaties




*Source: UN (1969)*

## II. International agreements

Since World War II, the primary source of international law has been international treaty law, as States have signed a large number of conventions. For the international community that had previously been governed largely by customary international law this was a significant shift. States will now read the laws regulating their actions in written treaties. The previous ambiguous and unwritten laws of customary law were far from perfect, since the exact responsibilities of states were still undefined.

There are several terms of international written multilateral agreements: pact, treaty, convention, agreement and protocol. All of them are governed by customary international law applicable to all treaties; these principles apply in situations where the parties themselves do not categorize a matter in an agreement. The Vienna Convention regulates the adoption, modification, interpretation and many other matters relating to all written treaties. As of April 2020, the Convention includes 116 parties and a further 15 states have signed but have not ratified the convention (Figure 1). The International Court of Justice has noted in many rulings that all of its articles codify customary international law. By virtue of Article 18 of the Vienna Convention, when states conclude a treaty, they undertake 'not to defeat the object and purpose of a treaty before it enters into force.' This is an important point to recognize. Newspapers and newspapers often refer to the parties to a treaty as their signatories, which is an incorrect term indeed. Signing a treaty is not synonymous with being a party, although states often agree that it is only by signature that an agreement is binding. A procedure is generally accompanied by a first signing of an agreement by states to show their goodwill and intention to become a party in the immediate future. Following signing, the agreement joins each state's national legislative framework according to its domestic constitutional law. When the State is prepared to be bound by the treaty, it shall be deposited with the body defined in the agreement.

However, even ratifying an environmental treaty cannot automatically result in the immediate binding of a state or states. An international treaty must also come into effect. Some treaties may define a minimum number of states that are expected to become parties to the agreement before they can enter into force.

In general, a multilateral environmental treaty proceeds as follows:

- **At the negotiation stage**: In addition to drafting the substantive obligations, it also addresses how to implement the final text in the treaty, how to convey the will to become a member, when the treaty is binding on a state, and the conditions under which it can enter into force internationally. A particular article also defining how states become a full party to a treaty. If a state signs a treaty, it must abstain from acts that would undermine the aim and intent of that treaty, even before it enters into force. Because a state does not become a party to a treaty by merely signing it, the treaty does not yet become fully legally binding on that state.
- **After signing**: several states have to send the treaty for approval to their own national Parliament. The state then signals its agreement to be bound by a treaty depositing the instrument of ratification with the depositary defined in the treaty (as provided for in the treaty). The treaty also specifies a limited period of time between depositing the ratification instrument and accepting the state as a member. Specifically, in the case of global environmental treaties, states may become directly parties, bypassing both the negotiation stage and the signing act. Typically, the process is referred to as accession.
- **Entry into force**: several treaties also prescribe a minimum number of ratifying states needed to put the treaty

into international force. This is primarily because adopting the treaty is pointless before a sufficiently significant number of states have engaged in the fight against the international environmental problem at problem[3].

Modern environmental treaties parties appear to define in more and more detail how the terms are to be interpreted, thus reducing the ability of states to interpret them in such a narrow way as to reduce their obligations. Most environmental treaties do not recognize reservations, for the same reason. On the other hand, most environmental treaties are fairly weak; in the case of a conflict, they do not impose an obligation to account for environmental harm or include compulsory dispute resolution between the parties. Most of the documents were designed to be so ambiguous they were merely a very open-ended obligation.

## III. Implementation of the international agreements

International environmental law varies from traditional international law in the way it compels the parties to an international environmental agreement to meet their commitments in action. In general, international law, the principal rule is that if state A violates its duty, the injured state B can take the following measures:

- State B can first attempt at a political settlement of the dispute: that is, through negotiation, or through third party mediation.
- If still unsatisfied, state B may, with the consent of the parties to the dispute, bring the dispute before an arbitration court or an international court of justice; in most cases, states will seek to resolve the dispute themselves by negotiation rather than sending it to court proceedings.
- In certain situations, the injured state can respond only by countermeasures to a breach of the treaty. Countermeasures are acts taken by the injured state that would ordinarily be contrary to international law; they are rendered lawful because they are a justified reaction to the earlier violation of statement A. In many cases, the obvious result is a vicious spiral: state A denies having breached its obligations towards state B, and in turn takes its own countermeasures in response to state B's measure.

These procedures can hardly push international legislation on the environment forward. The goal is to combat or even remove an external threat to the Therefore, it is vital to avoid mutual disputes as far as possible relating to non-observance of the regulations of the treaty. Most of the environmental treaties do contain a dispute resolution paragraph. But usually this only allows states to settle their differences by the means they find acceptable themselves.

Environmental treaties take a different path and seek to resolve violations by joint commissions of enforcement. A meeting of the parties usually sets out the monitoring protocols and nominates an implementation committee responsible for developing ways of managing breaches such that they do as little harm as possible to the overall functioning of the agreement framework. Implementation of a treaty (and potential breaches) is reviewed by the negotiating committee and/or at the parties' meetings. Such committees will work only if they are briefed on how states are dealing with their obligations. They will obtain the information as unbiased as possible. This is a difficult system, but environmental treaties have slowly succeeded in establishing processes that at the very least provide clearer details about how treaties are implemented and enacted by states. The state reports go either to the parties' conference, to the treaty secretariat, or directly to the implementing committee. Expert panels can be used on the most ambitious environmental treaties. For example, in the climate regime, Annex I states' greenhouse gas emissions and sink inventories are first certified by the secretariat, and then by the panel of experts. When the panel of experts is dissatisfied with the inventory of a department, queries will be referred to the compliance committee[4].

The total number of international environmental agreements is impressive: Since 1945, more than 2,000 environmental agreements and protocols have been signed[5]. Some of the oldest IEAs regulate fisheries, endangered species, agriculture and wetlands, but a growing proportion of IEAs now tackle habitat protection, energy generation, hazardous waste, and pollutant emissions[6].

In addition to those international environmental agreements, preferential trade agreements (PTAs) are gradually contributing to global governance of the environment. Modern PTAs usually provide a fully-fledged environmental protection portion, with responsibilities that are often more precise and stricter than those found in IEAs[7]. 94.3 % of PTAs concluded since 2000 contain at least one environmental clause, and 78.4 % includes at least one clause addressing particular environmental concerns such as whaling, waste management, etc[8]. Thus PTAs can be considered a subset of environmental agreements. The combined abundance of IEAs and PTAs is so prevalent that some experts in environmental governance do not hesitate to speak about "treaty congestion"[9].

Not all the treaties, however, have equal incentives for their enforcement. For two key reasons it is expected IEAs to have a different impact from that of the environmental clauses of PTAs. Firstly, PTAs with environmental provisions by their very nature connect trade and the environment. If this relation is essential for one party to a PTA, the other party may be given an opportunity to follow environmental legislation to protect this PTA and to obtain preferential access to a foreign market. Some multilateral IEAs do have trade controls, but they are limited to some goods, and only have clear incentives for domestic legislation to be implemented. Second, PTAs usually rely on compliance mechanisms more efficient than IEAs. In certain cases, if it fails to enforce its environmental commitments, a party to a PTA may potentially face monetary or trade sanctions. This

[3] *Ibid.*

[4] *Ibid.*

[5] Mitchell (2020).

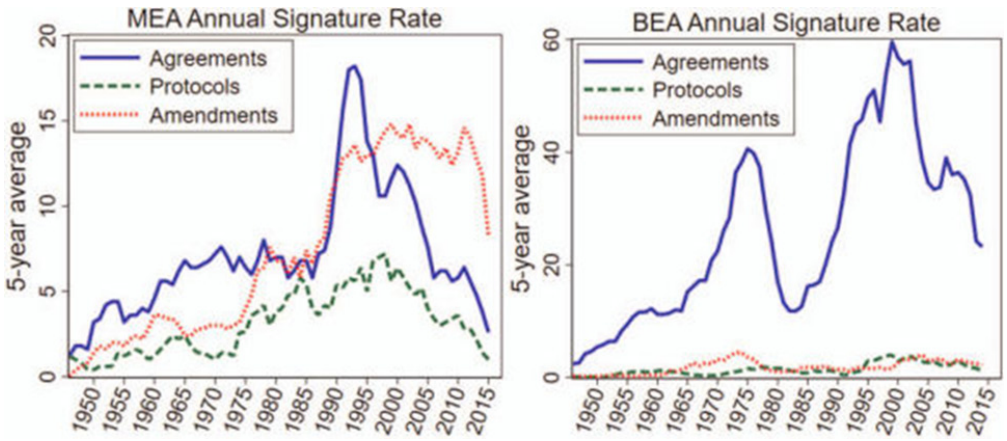
[6] Egger (2013).

[7] Jinnah (2011).

[8] Morin, Blouin (2019).

[9] Anton (2013).

**Figure 2:** Rates of Successfully Completed IEA Negotiations




*Source: Mitchell et al. (2020)*

is almost unheard of when it comes to making environmental treaties. Instead, most IEAs rely on enforcement management processes, such as capacity building, accountability, and political dialogues[10] [11].

Previous empirical research reviewing multilateral environmental agreements either centred primarily on factors affecting the decision of a single country to ratify a particular environmental treaty[12] or considered a subset of agreements[13]. General findings indicate that richer countries have a more competitive political structure, are more open to trade and are more likely to collaborate and ratify a MEA.

GDP, distance and preferential trade agreements, variables that generally clarify well bilateral international trade flows, are also strong predictors of the probability that two countries will have a multilateral agreement on the environment and the number of agreements they have. Countries which trade more among themselves are more likely to be parties to at least one environmental agreement. Countries reducing pollution or preserving endangered species can suffer economic losses. Perhaps the most widely cited claim in opposition to pollution-restraining agreements is that limiting pollutant emissions such as carbon dioxide could harm firm competitiveness in global markets as new regulations raise production costs. In addition, participating in some environmental agreements, given new regulations, can result in less trade between states. As a result, countries that trade more with each other could avoid entering MEAs together, as that could have a negative effect on them. On the other hand, when the economic relations are strong, it could be easier for countries to align their economic and environmental policies. Two countries can jointly address environmental and economic concerns, because these linkages can ensure greater cooperation on both concerns. A nation which is not interested in protecting the environment can be able to do so if it can enjoy benefits from reduced trade barriers from its trading partners. Countries with large economic interactions have more chances of such relations than countries with less interactions. In addition, countries may suffer non-environmental costs if they choose not to cooperate on an environmental agreement[14]. A nation may be disqualified from a potential trade deal for example if it fails to comply on an environmental deal. Conversely, due to an environmental agreement, foreign trade will increase. It may happen when an agreement is signed by one of the signatories promising to comply with the higher environmental requirements already in force in the other signatory. In such an environment, one country is increasing its standards and allowing its businesses to enter a market that used to be inaccessible to them, leading to increased trade between the two nations[15].

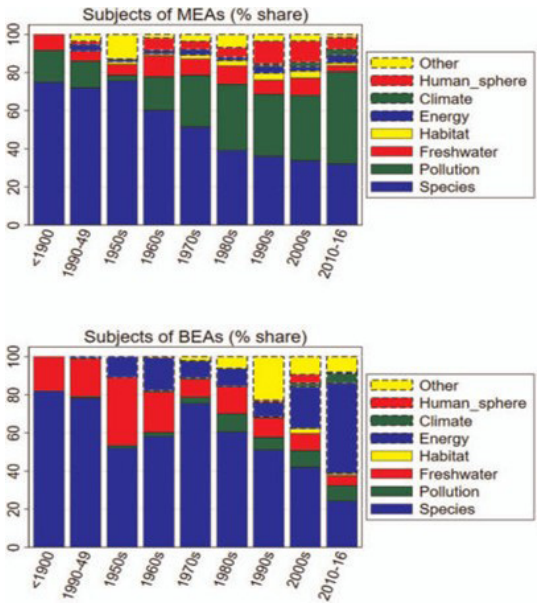
The International Environmental Agreements Data Base (IEADB), launched in 2002, catalogues the documents, memberships, and design features of more than 3,000 multilateral and bilateral environmental agreements. Using IEADB data, we can have a thorough overview of the evolution of international environmental law, including how the number, subjects and IEA state membership has changed over time.

While the 1972 United Nations Conference (UNCHE) is frequently viewed as having kick-started international environmental law[16], by 1950, states had signed over 250 IEAs. Figure 2 shows the five-year moving average of the signing of signed original agreements, protocols and amendments, showing states agreeing far more original bilateral environmental agreements (BEAs) than multilateral environmental agreements (MEAs) but changing them less regularly through protocols and amendments.

Around the time of UNCHE, states negotiated several BEAs, and both MEAs and BEAs around the time of the 1992 UN Conference on Environment and Development. Early MEAs and BEAs were dominated by species-related issues about overfishing, marine mammals and other wildlife, and trade threats to agricultural plants and animals, with pollution and freshwater resources only gaining serious attention after the

[10] Chayes (1995).
[11] Tallberg (2002).
[12] Fredriksson, Gaston (2000).
[13] Davies, Naughton (2014).
[14] Besedes, Johnson, Tian (2019).
[15] *Ibid.*
[16] Joyner (2005).

**Figure 3:** Share of Subjects Covered by MEAs and BEAs




*Source: Mitchell et al. (2020)*

1970s[17]. Subjects have continued to diversify, with one third of IEAs now addressing animals, one third addressing pollution and energy, and the remaining third covering a number of other concerns (Figure 3).

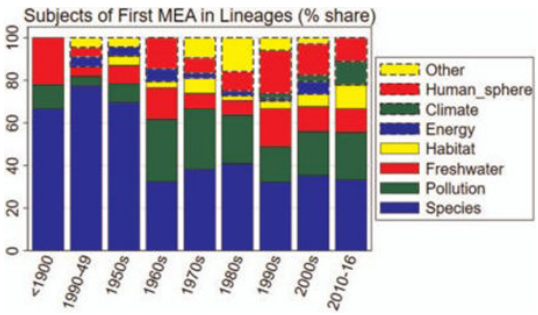
When counting lineages rather than individual IEAs, the IEA landscape appears different. Mitchell[18] coined the term lineage as a legal counterpart to the definition of a system, describing it as a series of "agreements, protocols, and amendments that alter, expand, substitute, or directly originate from one or more original agreements. The IEADB put more than 1,300 MEAs into 290 such lineages, with BEAs to be assigned in the future. These groupings record when a collection of states first discusses an environmental issue and how they over time alter their efforts. Thus, the tradition of "ozone protection" started with the Vienna Convention in 1985 and was amended by the Montreal Protocol of 1987 and eighteen modifications and changes.

As IEAs usually deal with the same subject within a lineage, we use the subject of the initiating agreement of each lineage as a proxy for when a group of states first effectively discuss a subject within a regional or global environment. Figure 4 graphs lineage-initiating agreements, showing how the range of subjects discussed by lineages has shifted, as either states take on new environmental issues or states in one region emulate initiatives in other regions to resolve a given problem. Lineage sizes (the number of IEAs each includes) represent very different approaches to governance. Of the 290 lines most (70 percent) are not complex regulatory initiatives and include only one initial MEA and one or two modifying protocols or amendments. In comparison, each of the ten largest lineages comprises twenty or more MEAs, representing up to one-third of the 1,300 MEAs collectively. This variation probably reflects various factors, including the age of the lineage; changes in scientific knowledge;

[17] Balsiger, VanDeveer (2012).

[18] Mitchell (2003).

**Figure 4:** Subject emergence




*Source: Mitchell et al. (2020)*

state preferences that favour strong initial action or prefer to make adjustments as support for action increases; adjustments in domestic and international concern about an environmental issue; and provisions in lineage-initiating IEAs that may allow, encourage or hinder frequent modifications.

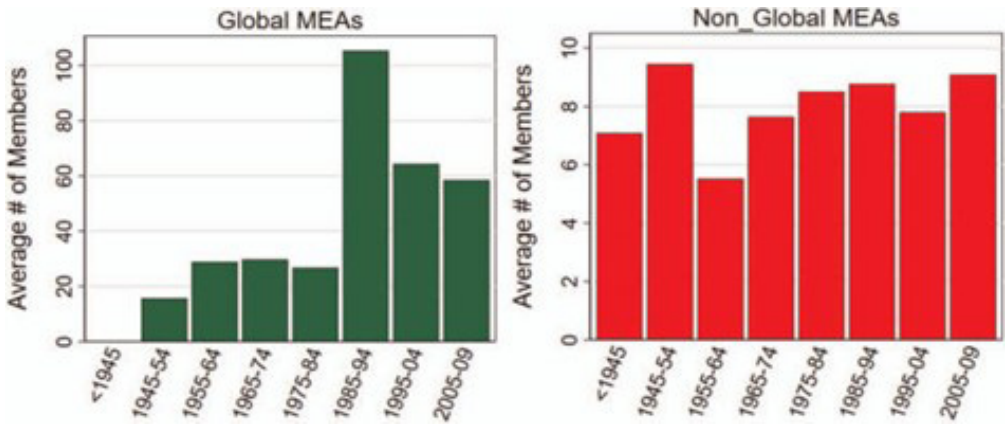
In recent decades, the level of state participation in international environmental law, proxied by IEA membership counts, has increased rapidly. Total IEA membership growth reflects more states-negotiated MEAs and BEAs, more states in the international system (UN membership rose from 51 in 1945 to 193 in 2020), and more states entering more MEAs. Most IEAs are small: 80% are BEAs, 90% of MEAs have 10 members or fewer and only 30 MEAs have more than 100 members. Many MEAs are open to new members indefinitely, with membership usually increasing over time; thus, to accurately compare changes in MEA size over time, the memberships of each MEA is counted nine years after signature.

To resolve the fact that membership in protocols and amendments is mostly limited to members of the underlying agreement and is automatic for them, 457 MEA agreements were reviewed that have come into force and have at least nine years of membership data. Distinguishing 69 "global" MEAs (open to all UN members) from 388 MEAs limiting membership, reveals that, in their ninth year, global MEAs usually averaged less than thirty members until the 1980s, but have since averaged more than fifty. In comparison, MEAs limited to designated states, states in a specified area, or states with specified characteristics have never averaged more than 10 members (Figure 5).

Using these same MEAs to classify MEA memberships in the average state indicates that more IEAs are joining states. The approximately 140 UN members in the 1970s had ten MEA memberships; the total number of 180 or more UN members since the early 1990s has reached 50 memberships, with some approaching 100 and even new states having 10 to 20. The 10 states with the most MEA memberships are all European states in the high-income group of the World Bank, with each of the 457 MEAs assessed having joined 25 %. At least 15 % of these MEAs have entered another 28, including states from all continents and 9 that are not high in revenue. This geographic and economic diversity represents various pressure on states to join IEAs including domestic environmental issues, foreign political pressure, and financial opportunities included in some MEAs.[19]

[19] Mitchell (2020).

**Figure 5:** Average Year 9 Memberships in 69 Global and 388 Non-global MEA Agreements




*Source: Mitchell et al. (2020)*

# IV. Conclusions

Researchers used data regarding IEADB membership to examine state behaviour. For example, Andonova, Hale, Roger[20] consider that state IEA ratifications provide a specific proxy for cooperation on the environment that helps explain the form of transnational climate governance. States, especially low-income states, tend to introduce new environmental regulations during periods when they join other IEAs[21] and the annual environmental reputation score of a state (the share of MEAs that it has joined) predicts better than its economic power if its trade agreements contain environmental provisions[22].

Comparing 67 MEAs to a set of non-environmental UN treaties, Axelrod[23] considered the former to be more deferential to trade and other areas of international law. Analysing 300 IEAs chosen to include health-related provisions[24] it was revealed the significant, previously unrecognized contributions of IEAs to global health governance, and it was found that the current MEAs provide clear normative foundations for negotiating a new treaty on sustainable mineral resource use.

The IEAs have helped reshape the content and mechanisms of global environmental governance, encouraging the participation of transnational and sub-national environmental actors and incorporating environmental concerns into trade agreements, development banks and other non-environmental institutions

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# EU LEGISLATIVE SUPPORT IN THE WASTE SECTOR

# PODPORA LEGISLATÍVY EÚ V ODPADOVOM SEKTORE

Eleonóra MARIŠOVÁ – Marina VALENĆIKOVÁ*

## I. Introduction

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (Framework Directive) and Directive 2018/851 of the European Parliament and of the Council of 30 May 2018 shall be incorporated into primary EU waste legislation. In this paper, we will look at the relationship between Slovak, French and Finnish legislation, as well as European legislation and strategies aimed at increasing municipal waste recycling and promoting the circular economy (hereinafter CE) in these countries.

Municipal waste is defined by Wright R. T. and Boorse D. T. (2011) [(1)] as the total amount of recovered materials from households and smaller local businesses where the local government provides the collection.

In addition to European legislation, the Slovak Republic (hereinafter SR) has enacted its own waste legislation, specifically Act No. 79/2015 Coll. on waste and the amendment of certain laws, as amended, as well as strategic documents, namely Waste Management Program (further WMP) SR 2021 – 2025, Waste Prevention Program of the Slovak Republic for the years 2019 – 2025, and the Environmental Strategy until 2030. The overarching goal of these strategic documents is to achieve a higher level of environmental quality and a more sustainable CE while using as few non-renewable natural resources as possible. All entities in the SR must gradually increase waste sorting, thus supporting the CE, which focuses on waste elimination through the economy's closing loops. This is primarily waste that would otherwise end up in landfills or, later, incinerators. A WMP and a waste prevention program are important to waste management documents that each European Union (hereinafter EU) Member State must have following Directive 2008/98 / EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain directives.

Following European legislation, France has adopted CE roadmap of France: 50 measures for a 100% CE in 2018, which outlines 50 measures. Furthermore, President Macron signed Law 2020-105 on CE and Waste Reduction on February 10, 2020. With this new economic model, France might use less nonrenewable resources and waste.

Nonetheless, the purpose of the Waste Act 1072/1993 (amendments up to 747/2007) in Finland is to support sustain-

(1) Wright, Boorse (2011).

**Abstract (EN)**

In the waste sector, EU Member States implement EU legislation. They rely on EU Directives and their waste legislation and policies. During the evaluated period (2015–2021), the Slovak Republic amended the Waste Act 79/2015 Coll. and issued strategy papers following EU legislation. France adopted its National program for prevention of waste and Finland its National waste management plan. In our research, we use a method of comparison and analysis of selected legislative documents to examine the achievement of the Green Deal's objectives in the Slovak Republic and selected EU countries. We have shown the legislative process results through research, which indicate the achievement of set waste management goals. In our future research we will focus on building waste management infrastructure in the EU since it is necessary to apply the idea promoting the support of such waste treatment facilities that will be sustainable throughout their existence.

**Keywords (EN)**

waste legislation, circular economy, EU, Finland, Slovakia, France

**Abstrakt (SK)**

V sektore odpadov členské štáty EÚ implementujú legislatívu EÚ. Vychádzajú zo smerníc EÚ, jej legislatívy a politík v oblasti odpadov. Slovenská republika v hodnotenom období (2015–2021) novelizovala zákon o odpadoch 79/2015 Z.z. a vydala strategické dokumenty v súlade s legislatívou EÚ. Francúzsko prijalo svoj Národný program predchádzania vzniku odpadu a Fínsko svoj Národný plán odpadového hospodárstva. V našom výskume využívame metódu komparácie a analýzy vybraných legislatívnych dokumentov na skúmanie dosahovania cieľov Zelenej dohody v SR a vo vybraných krajinách EÚ (Francúzsko a Fínsko). Výskumom sme získali výsledky legislatívneho procesu, ktoré poukazujú na dosahovanie stanovených cieľov odpadového hospodárstva. V našom budúcom výskume sa zameriame na budovanie infraštruktúry odpadového hospodárstva v EÚ, keďže je potrebné uplatniť myšlienku presadzovania podpory takých zariadení na spracovanie odpadu, ktoré budú udržateľné počas celej svojej existencie.

**Kľúčové slová (SK)**

legislatíva odpadov, obehové hospodárstvo, EU, Fínsko, Slovensko, Francúzsko

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able development by promoting rational resource use, preventing and combating waste-related hazards to human health and the environment. The National Waste Plan is a government-approved strategic plan for waste management and prevention in Finland through 2023. Consequently, Finland published the world's first national CE roadmap in 2016 called Finland's CE Roadmap 2016-2025. The roadmap is a decision-making tool for societal transformation. Several key stakeholders contributed to the roadmap, including their views on why change is required and how to transition to a CE.

# II. Objective and methodology

The theoretical foundation of the paper is developed primarily through the interpretation of amended legislation and strategic documents of the SR that govern the issue of waste and legislation from selected EU Member States - France and Finland.

We examine the extent to which the provisions of EU directives and targets set by the governments of the SR, France, and Finland in the field of waste are met using the method of analysis and evaluation of these countries' legislation following EU legislation. These are particularly notable: National program for prevention of waste in France, National waste management plan in Finland, shaping their global waste policies and the current legislation of both states in the waste sector.

In the SR, we are focusing on the Slovak's Environmental Policy Strategy until 2030, the WMP for 2021-2025, and the Waste Prevention Program for 2019-2025.

# III. Discussion

Directive 2008/98 / EC of the European Parliament and the Council on waste and repealing certain Directives, which were Council Directive 75/439 / EEC on the disposal of waste oils, Council Directive 91/689 / EEC on hazardous waste, and Directive 2006/12 / EC of the European Parliament and of the Council on waste, which repealed the original Council Directive 75/442 / EEC on waste. In its ten years, the current and effective Waste Directive of 2008 has been amended 86 times, the most recently on October 17, 2019. The most recent consolidated version was published on July 5, 2018. The Directive's goal is to put measures to protect the environment and human health. The Framework Directive defines critical concepts such as waste, waste recovery, and waste disposal and establishes the fundamental requirements for waste management, including the requirement for establishments and undertakings carrying out waste management activities to be licensed or registered, as well as the obligation for the Member States to develop waste management plans. Simultaneously, the Directive establishes guiding principles, such as the obligation to dispose of waste in a manner that does not harm the environment or human health, and promotes the use of the waste hierarchy according to the polluter pays principle. The cost of waste disposal must be borne by the holder, previous holders, or producers of the product from which the waste originated.

Mohammed et al. (2018)[(2)] stresses that: *"waste is necessary as long as one lives and engages in economic activities."* The majority of waste generated is recycled or landfilled, decomposing for decades or even centuries.

Directive 2008/98 / EC of the European Parliament and of the Council on waste and repealing certain Directives, as amended by 2018/851, can be included among the basic EU legislation in the field of waste management. Each Member State must have in accordance with this Directive 2008/98 / EC (19/11/2008) a waste management and prevention program for sustainable development. CE and closing the loops of biological materials support the reduction the greenhouse gas emissions (which should be at least 55% by 2030). EU makes steps towards achieving climate neutrality by 2050.

## 3.1 Legislation in Slovak Food Sector

Currently, the basic legal regulation governing the issue of waste in the SR is a valid and effective Act no. 79/2015 Coll. (hereinafter Waste Act) on waste and the amendment of certain laws, which has been amended 18 times in its six-year existence. We certainly do not consider the current state of amendments to the relatively recently adopted completely new law adequate. Its continuous, albeit necessary, the amendment does not bring stability to legal relations and legal certainty to its addressees. Nonetheless, the aim of the new Waste Act, according to the explanatory memorandum, is to modify existing and establish new waste management rules in order to create standard conditions (from the perspective of developed EU countries) for environmental change, enabling development and implementation of waste management activities for legal certainty, comparable to the conditions in other EU Member States.

The Waste Act governs waste management program documents, waste prevention measures, the rights and obligations of legal entities and natural persons in waste prevention and waste management, extended producer responsibility, the disposal of reserved products and waste streams, municipal waste management, cross-border waste movement, a waste management information system, and the competence of state administration bodies and municipalities in matters of state administration.

The most important provisions for municipalities are § 14 (which regulates the obligations of the waste holder) and § 81 (which specifies how municipalities are to dispose of municipal waste).

Individual amendments to the Waste Act contributed significantly different from the initially adopted wording.

The municipality's responsibility for the disposal of the collected municipal waste component in the appropriate collection container was adjusted under Act no. 312/2018 Coll., Amending and Supplementing Act no. 79/2015 Coll. on Waste and Amendments to Certain Acts, if, based on continuous control, it is discovered that the container contains a municipal waste component other than that for which the collection container is intended. Pollution rate as defined in Annex 8a (up to and including 35% for 2021). Until then, the proportion of this component was greater than 50%, and the producer responsibility organization was not responsible for such waste. Under 81 para. 25 of the Waste Act, the municipality must report data on municipal waste production for the previous year

[(2)] Mohammed, Donkor, Ozbay (2018).

to the organization of producer responsibility for packaging with which it has a contractual relationship by 28 February. Small composting plants up to 100 tones of biodegradable waste per year will no longer be required to develop operating rules, according to § 97 par–1 letter (e).

Act No. 302/2019 Coll. on the deposit of disposable beverage packaging and the amendment of specific laws. In Art. 103 of the Waste Act, he revised the legal regulation of the waste management information system. The waste management information system, functions, and content were redefined, as was the concept of liable person and the location of waste occurrence. The amendment's goal was to ensure that the producer of disposable prepaid packaging does not have to pay fees to the producer responsibility organization, which will not be involved in waste collection.

There was also a significant change in the acceptance of legislation in the waste sector in the form of generally binding regulations as forms of law in the SR issued by local governments. In accordance with Act No.369/1990 Coll., about the management of municipal waste and small construction waste generated in the territory of the municipality is responsible the municipality itself[3].

The municipality shall regulate the details of municipal waste management and small construction waste, including biodegradable kitchen and restaurant waste from the kitchen operator and electrical waste from households by a generally binding regulation, which sets out details on the method of collection and transport of municipal waste, on the method of separate collection of individual municipal components. Waste, on the collection method of bulky waste, household waste containing harmful substances and small construction waste and the reasons for not introducing a separate collection of biodegradable kitchen waste from households, if such separate collection is not introduced in the municipality.

According to the Strategy of the Environmental Policy of the Slovak Republic until 2030 (hereinafter Greener Slovakia), the SR has committed to, among other things, limiting food waste production by 2030. Restaurants and supermarkets will continue to use compulsory food, such as donating junk food to charity. If food is no longer edible, they will be able to compost it or recover it for energy or other uses (e.g., selling at a reduced price for feed purposes, other than feeding wild animals). This obligation was met by Slovak legislation in the Food Act No. 152/1995 Coll., which became effective on January 1, 2017 and was amended by Act No. 69/2021 Z. z, effective since 1.01.2022. care or social services following special regulations and may not require any direct or indirect performance for those foods. Only after registration may the charity dispose of the food after the date of minimum durability. It is required to request that the relevant regional public health officials conduct an official inspection of each charity's dispensary following a special regulation.

The Government of the SR approved the WMP for the years 2021–2025 in August 2021: it is the sixth national program outlining the basic requirements, objectives, and waste management measures. It is based on an evaluation of the SR's previous WMP for the years 2016–2020 and an analysis of the current state and needs of waste management in the SR.

The main goal of the new program is to shift the priority in Slovak waste management from material recovery to waste prevention following the Slovak waste management hierarchy. This trend is consistent with the EU Action Plan for the CE, which advocates for a low-carbon, resource-efficient economy. Such a transition represents an opportunity to transform our economy and secure new and long-term competitive advantages for Europe."

As previously stated, as an EU Member State, the SR has adopted the WMP for the years 2019–2025. Furthermore, it has committed to the strategic document Greener Slovakia, which aims to reduce food waste production by 2030. Other EU countries, such as France and Finland, have followed suit.

In France, we recognize the National program for the prevention of waste. On the other hand, the CE in France includes more comprehensive laws in four different sectors, such as production, consumption, waste management, and mobilizing actors. It is planned that by 2025, the recycling rate in France will reach 100%. In Finland, we recognize from recycling to a CE: national waste plan to 2023, which is part of the national waste management plan excluding Åland Islands.

## 3.2 Waste Management Strategies in Finland

Finland's waste policy promotes resource efficiency and protects human and environmental health. Environmental policy is developed at the regional, EU, and international levels[4]. The Ministry of Environment is in charge of developing national waste legislation and implementing it. In Finland we recognize Waste Act 1072/1993[5]; amendments up to 747/2007 included and the purpose of this Act is to support sustainable development by promoting the rational use of natural resources, and preventing and combating the hazard and harm to health and the environment arising from wastes. Waste management is ranked on a scale of importance that includes:

- When reusing waste is not possible, it must first be recovered as products (recycled) and then as resources.
- Waste must be prepared for reuse if it is generated.[6]

The Ministry of the Environment helps shape Finnish, European, and global waste policies. This country's waste laws are based on international and EU rules. The Waste Act is administered by the Ministry of the Environment. Landfills, incineration plants, hazardous waste disposal sites, and large-scale waste recovery or final treatment plants are all subject to environmental permits. Economic, transportation, and environmental centers guide and monitor municipal waste management.

The municipal waste management authority is responsible for setting the municipal waste tariff and implementing the waste treatment system. If several municipalities join forces to form a regional waste management company, they must also form a joint administrative body. Municipal environmental

[3] Mura, Stehlíková (2021).

[4] Piippo (2013).

[5] Waste Act (1072/1993; amendments up to 747/2007 included).

[6] Environment.Finland (2013).

protection authorities may be tasked with the responsibility of supervising one or more municipalities. Waste permits are granted to smaller operations, such as hazardous waste storage and end-of-life vehicle storage. Additionally, they accept notifications from licensed waste haulers. Municipalities are responsible for enforcing the Waste Act, which requires businesses and citizens to participate in an organized waste management system, properly collect waste, and refrain from littering[7].

The National Waste Plan is a government-adopted strategic plan outlining the government's priorities and initiatives for waste management and prevention in Finland through 2023. The Waste Program's target nation is as follows[8]:

- A balanced CE requires a high standard of waste disposal
- Efficient energy processing and use safeguards renewable resources and helps mitigate global warming.
- The amount of waste produced has decreased from its current level. Reuse and recycling have advanced to a new level.
- The recycling industry is in good health. Recycling and reusing create new opportunities. Oftentimes, valuable low-raw materials are recovered from recycled products.
- Stock processes are non-toxic, and processing involves the use of fewer and less dangerous chemicals.
- There is a high level of innovation and development in the waste field, as well as a high level of experience with waste problems[9].

The four primary focus areas of the Regional Waste Program are waste construction and destruction, biodegradable waste, urban waste, and electrical and technological waste. Finnish waste law is largely based on EU regulations, though it contains some requirements and restrictions that are more stringent than those implemented throughout the EU. Finland already has rules in place for non-EU waste types. The National Waste Plan was revised in 2021. Additionally, the coverage period of the plan is extended from 2023 to 2027. The plan makes recommendations for achieving waste management and prevention goals.

To present the current state and development of waste management in Finland, the national waste plan to 2023 aims to present Construction and demolition waste, biodegradable waste, waste electrical and electronic equipment (WEEE), and municipal waste are the four priority waste areas (including packaging waste). This includes increasing resource-efficient production and consumption while reducing waste volume. Various waste management targets for 2030 have been proposed. Following are some of the general waste prevention objectives:

- Reduce waste generation – increase material recovery to 70%.
- Biodegradable waste: Half food waste.
- Decouple municipal waste growth from GDP growth.
- Extend the life of electrical and electronic equipment.

The fragmentation of responsibilities and constant changes in waste legislation are cited as major reasons for Finland's low recycling rate by the waste legislation reform working committee. As a result, municipalities would be in charge of all waste transportation, and property owners would no longer be able to organize waste transportation. Also, public waste transportation contracts would be updated to ensure equal participation of small and medium-sized businesses. The Ministry of the Environment is already working on the waste and product information system, as the national information systems must be expanded as there is an obligation to collect and provide data. The project will take several years.

Manufacturers and importers of certain product types must bear responsibility for managing their products when they become waste, instead of waste producers. Municipalities must organize hazardous agricultural and domestic waste recovery and treatment. Moreover, municipalities are in charge of municipal waste generated by the government, services, and education. Municipalities also provide waste management information and advice. In practice, many municipalities delegate most of their waste management duties to local businesses, which then bid on the services. The Ministry of the Environment controls, develops, and enforces the Waste Act[10]. Companies that pack products in Finland, import packed products into Finland, or sell packed products to Finland via distance sales are subject to producer responsibility for packaging in Finland (e.g. foreign online shops). Producer accountability applies to all packaging. A waste-free society is based on reducing waste, increasing reuse and recycling. The Finnish Waste Act is based on EU Packaging and Waste Directives[11]. In Finland, the new Waste Act 2021 requires effective material flow management to comply. In the new Waste Act, CE operators must now account for and report on their waste. Among others, changes include:

- Waste handlers must keep track of the products and materials recovered from waste.
- Metals separated for recycling from waste bottom ash and slag are required to be recorded by waste incineration.
- In addition to recording waste removed during pre-treatment, pre-processors must record the proportions of waste from other countries and waste removed during pre-treatment.
- They must also provide the waste handler with the above information.
- Food businesses will have to keep track of their food waste and report it to the FDA.
- Exporters of waste must keep records of how waste is recycled, recovered, and treated.

Local businesses will also be affected by the cost increase. The new law's increased recycling targets will result in higher rates. This is a direct result of increased household waste collection. Aside from that, producers will be responsible for 80% of the cost of recycling plastic. However, as the payers, the obligated companies must be involved in the collection process[12].

Finland published the world's first national CE roadmap

[7] *Ibid.*
[8] Valto (2017).
[9] Info Finland (2019).
[10] EEA (2013).
[11] Rinki (2021).
[12] EEA (2019).

in 2016, making it the first country to do so. The roadmap is a strategic planning tool for societal transformation that is used to guide decisions. Several key stakeholders provided input into the roadmap, which included their thoughts on why change is needed and what steps should be taken to transition to a CE. During the past year, Sitra, the Finnish Innovation Fund, has led an extensive stakeholder engagement effort to gather feedback on critical measures for promoting the CE as well as to identify existing CE projects. It has an impact on Finland's current government program, which is informed by the roadmap. The publication of "Critical Move – Finland's Road Map to a CE 2.0" by Sitra in 2019 marked the latest update to the organization's roadmap to a CE 2.0. Its goal was to chart Finland's development, to raise our aspirations, to accelerate change, and to link the CE and climate change mitigation together. Finnish CE will be advanced through the implementation of the Roadmap, which is organized around five major themes. These efforts include a sustainable food system, forest-based loops, technical loops, transportation and logistics, and collaborative efforts among various stakeholders.[13]

## 3.3 Waste Management Strategies in France

The acceleration of environmental constraints has an impact on all public policies. The general waste management service is no exception, accounting for 4% of France's greenhouse gas emissions. Reducing the waste volume and improving waste treatment quality are becoming national and European priorities. The law on energy transition for green growth and the law on waste and the CE was passed in 2015 and 2020, respectively, to meet reinforced objectives. They necessitate ambitious measures to be implemented within a short time frame by sector players. Parallel to this regulatory change, the other lever aimed at changing behavior is modifying the rates of the general tax on polluting activities applicable to waste, storage, and incineration. It will also have significant financial ramifications, possibly leading to an increase in service costs. Since 2017, inter-municipal authorities have managed the general household waste service in France with their taxation. They are now solely responsible for this service, with the option of delegating management to be public or private companies or transferring their competence to unions. The goal of reducing waste volume necessitates a collaborative effort that begins with the eco-design of products and extends to the fight against obsolescence, the strengthening of recycling, and so on. However, users at the heart of the system continue to be the most important players. They have been encouraged to take greater responsibility for their waste by sorting, recycling, and visiting recycling centers or voluntary collection points for several years. With the generalization of bio-waste collection at the source, households will need to step up their efforts even more in the coming years. Awareness and communication will be critical in promoting acceptance of these new constraints and facilitating their implementation. The challenge is to persuade residents that these changes are necessary without causing a drop-in service quality and explaining why collection costs are likely to rise further.

[13] EU (2016).

Waste management expenditure is increasing (3% per year on average and 2.5% in euros per inhabitant), while individual efforts and household waste production decrease. Between 2007 and 2017, the amount of waste produced per inhabitant decreased by 2%. The goal is to reduce CO2 emissions by 15% by 2030. As a result, the household effort must continue. Implementing incentive pricing based on the weight of waste collected can be a critical tool in ensuring the acceptability of these new measures and the achievement of objectives[14].

On April 23, France published its CE Roadmap, which outlines 50 measures, including a mandatory repairability label for electrical and electronic equipment (EEE) and the abolition of the Green Dot for packaging. In order to meet its 2025 targets of halving landfill waste and recycling 100 percent of plastic, the French government expects the new measures to be effective. The CE Roadmap outlines a strategy for achieving the lofty CE objectives set forth in the Climate Plan. The roadmap outlines 50 actions that will improve production, consumption, waste management, and mobilize all stakeholders in order to achieve a 100% CE by 2050. Additionally, the CE will assist France in meeting a number of the Sustainable Development Goals (SDGs) set out in Agenda 2030:

- 30% reduction in resource consumption in relation to GDP between 2010 and 2030.
- A 50% reduction in the amount of non-hazardous waste landfilled by 2025, compared to 2010.
- Aim towards 100% of plastics recycled by 2025.
- Reduce greenhouse gas emissions: avoid the emission of 8 million additional tones of CO2 each year thanks to plastic recycling.
- Create up to 300,000 additional jobs, including in new professions.

On February 10, 2020, President Macron signed Law No. 2020-105 Regarding a CE and the Fight Against Waste. This law aims to transform French society from a linear to a CE, reducing waste and reusing resources. This new economic model would use less nonrenewable resources, recycle 100% of plastics, and reduce waste. The law sets specific targets, such as a 15% reduction in household trash per person by 2030 and a 5% reduction in economic waste. The law also mandates 100% plastic recycling by 2025 and bans single-use plastic packaging by 2040. While additional legislative and regulatory action is required to achieve these goals, the Law includes specific measures. Disposable straws, silverware, and polystyrene foam boxes for fast-food restaurants will all be banned by 2021. Plastic packaging for fruits and vegetables under 1.5 kilograms will be illegal in 2022, and public buildings must have water fountains. Disposable plates and cups for on-premise food and beverage consumption will be banned in 2023. The new law also aims to improve plastic recycling by expanding refund systems. This new law also includes provisions to better inform consumers about product environmental attributes. Terms like "biodegradable" and "environmentally friendly" will no longer

[14] ecologie.fr (2021) EU(1). 2018. Circular Economy roadmap of France: 50 measures for a 100% circular economy. . [online] [cit. 2021-12-13]. Available at: https://circulareconomy.europa.eu/platform/en/strategies/circular-economy-roadmap-france-50-measures-100-circular-economy.

be allowed on product packaging.[15] Starting in 2021, certain electrical and electronic products must have a "reparability rating" and a "durability rating" to combat planned obsolescence. Beginning in 2021, computer and cellphone manufacturers must inform customers when their devices will be updated with new software. By failing to warn consumers that updating the iPhone's operating system may slow down older models, Apple recently violated current legislation. The law also prohibits the destruction of unsold non-food inventory such as clothing, shoes, beauty products, books, or consumer electronics. Manufacturers, distributors, and retailers will be required to donate or recycle unsold inventory instead of incinerating or dumping it. The law also encourages manufacturers to design products that are more easily recyclable. This new law also targets illegal waste dumping, punishable by a fine of up to 15,000 euros and the impounding of the vehicle involved.[16] With the law "to combat waste and promote recycling" of 10 February 2021, France has extended producer liability (EPR) to additional products and tightened it for existing products. Extended producer responsibility (EPR) originates from European waste legislation. It describes a system in which product manufacturers or importers and distributors bear the financial and organizational liability for management in the waste phase of the life cycle of the products they produce or market. In France, the principle of extended producer responsibility has been enshrined in law since 1975. The first nationwide system was introduced in 1992 for the collection of packaging waste from private final consumers. Meanwhile, there are about 20 different EPR systems in France.[17]

# IV. Conclusion

In the EU, legislation and waste recovery strategies aim to reduce landfill waste by separating its components in the recycling process. Separation of bio-waste is critical, especially since it is a component of waste. Based on an examination of EU legislation and selected strategies, we can conclude that Slovakia, France, and Finland will complete their system with the necessary information and monitoring compliance in order to facilitate waste sorting and recycling. Drawn on waste legislative analysis, we plan to continue our research in modeling of effective cooperation of administrative bodies of state administration and local self-government (municipalities) in waste management and construction proceedings.

**Acknowledgment**

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[15] Ministere de la Transition Écologique (2020).

[16] Euractiv (2019).

[17] Loi n2020-15 du 10 février 2020 relative à la lutte contre le gaspillage et à l'économie circulaire. Aavaible at: https://www.legifrance.gouv.fr/eli/loi/2020/2/10/TREP1902395L/jo/texte.

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# QUALITY SOIL AS A PATHWAY TO HEALTHY FOOD IN THE EU – PROJECT INFORMATION

# KVALITA PÔDY AKO CESTA K ZDRAVÍM POTRAVINÁM V EÚ – INFORMÁCIE O PROJEKTOCH

Zuzana BOHÁTOVÁ – Lucia PALŠOVÁ – Jarmila LAZÍKOVÁ*

Numerous studies have shown that heavy metals can accumulate in tissues, subsequently affect organ functions, and disrupt the reproductive, nervous or endocrine system. In general, heavy metal compounds are toxic, mutagenic, teratogenic, and carcinogenic in animals. They enter the body through ingestion, inhalation, or through the skin, and their presence can cause serious toxicity. Therefore, the health status in relation to xenobiotics should be monitored and explored.

There is a need to contribute to food safety, quality control and/or effects of risk factors of food chain on animal and human health status. It is necessary to foster an expertise dialogue between the crucial experts (academics, public authorities, professionals from practice) in the field of food/feed management in the EU affecting achieving the objectives of correlated EU policies and recently adopted European Green Deal. Therefore, the Institute of Law in cooperation with the Institute of Applied Biology of the Slovak University of Agriculture in Nitra and Association of Agrarian and Environmental Lawyers organized in 2021 an International Scientific Conference with the title "Quality Soil as a Pathway to Healthy Food in the EU- Challenges to 2030".

This event was organized in the framework of the *Jean Monnet Project "Quality Soil as a Pathway to Healthy Food in the EU", acronym FOODIE, no. 621119-EPP-1-2020-1-SK-EPPJMO-PROJECT*. The International Scientific Conference was organized online (October 19-21, 2021) due to the ongoing pandemic situation caused by the COVID-19. In total 40 researchers, teachers, PhD. students, representatives of public authorities and experts at different levels of competence in the field of food and feed management attended the conference. Participants from universities and research institutions from Slovakia, Czech Republic, Poland, Hungary, Bulgaria, Italy, Germany, the Netherlands, and Croatia presented their research results and stimulated a rich debate on the sustainability of soil quality in the context of the EU food security, as well as on the necessary measures to guarantee sustainable agriculture and food security in the EU in the future.

Finally, the participants broadened their knowledge on the risk factors influencing soil contamination and food quality; promoted professional cooperation between the institutions in the field and agreed on further gathering knowledge and expertise and on exchanging experiences on food quality, food chain risk factors and risk assessment.

The multidisciplinary approach (political, legal, socio-economic, agrotechnical and medical) to the addressed issue was evident from the individual presentations. The discussion on the risk factors of the food chain in the EU was conducted in synergy between experts at different levels of competence (academics, public authorities and practitioners), which contributed to the next steps in environmental, food and health policy.

Although the conference took place online, its results have strengthened the cooperation between the participating experts and broadened the latest knowledge in the field. These results will be used in teaching, research and further project activities and will contribute to the development of risk as-

**Abstract (EN)**

Globalization and the pressure to increased industrial agriculture result in deterioration of the environment, climate change and a serious threat to human and animal health. Soil contamination affected by the environmental pollution is one of the most pressing issues in the political and expert debate on food safety within the related EU policies as Common Agricultural Policy, EU agri-environmental, EU food policy and EU health policy.

**Keywords (EN)**

soil quality, healthy food, projects

**Abstrakt (SK)**

Globalizácia a tlak na zvyšovanie priemyselného poľnohospodárstva majú za následok zhoršovanie životného prostredia, zmenu klímy a vážne ohrozenie zdravia ľudí a zvierat. Kontaminácia pôdy ovplyvnená znečistením životného prostredia je jednou z najpálčivejších otázok v politickej a odbornej diskusii o bezpečnosti potravín v rámci súvisiacich politík EÚ ako je Spoločná poľnohospodárska politika, agroenvironmentálna politika EÚ, potravinová politika EÚ a zdravotná politika EÚ.

**Kľúčové slová (SK)**

kvalita pôdy, zdravé potraviny, projekty

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sessment of food chain aspects in the EU as well as to raising awareness of the impact of food chain risk factors (as well as processing risks) on animal and human health.

In 2021, the Institute of Law of the Slovak University of Agriculture in Nitra also participated in the *Demand-driven Research for the Sustainable and Innovative Food, Drive4SIFood 313011V336*, co-financed by the European Regional Development Fund https://www.agrobiotech.sk/dopytovo-orientovany-vyskum-pre-udrzatelne-a-inovativne-potraviny-drive4si-food/.

The overall goal of this project is to expand knowledge and better understand the topics in the development of quality, safe and innovative foods and their subsequent environmental and energy processing through scientific research activities.

This project focuses on research and development of innovative foods that condition sustainable health, especially in case of vulnerable groups. The tool for reflecting the requirements of the current consumer is 15 activities synthesizing a circular approach to the problem. Activity 6 focuses on the economic and legal aspects of healthy food. It is divided into five topics, the last of which deals with EU Food Law. This topic focuses on food marketing and food labeling, functional foods, foods with nutrition and health claims, novel foods, intellectual property in the food industry (trademark, inventions, designations of origin, geographical indications, traditional specialties guaranteed, designs) and food safety risk management. The realization of the project started in 20219 and will finish in 2023.

The Institute of Law in 2021 successfully finished two Jean Monnet Modules *"EU Intellectual Property Law", no. 599683-EPP-1-2018-1-SK-EPPJMO-MODULE: https://eu-intellectual-property.webnode.sk and "Economic and Legal Basics of Entrepreneurship in Agrifood Industry", no. 600459-EPP-1-2018-1-SK-EPPJMO-MODULE*. Both projects were realized during the period 2018-2021.

The project "Intellectual Property in the EU" focused on the creation of the course "Intellectual Property in the EU" for the Master students. It has addressed issues of copyright, industrial rights such as inventions, utility models, designs, new plant varieties, designations of origin, geographical indications, traditional specialties guaranteed and trademarks. The newly established course provides students with knowledge in the field of intellectual property, which will enable students to better understand the value of intellectual property and learn about the ways and possibilities of its legal protection in the EU. The project published two professional monographs, The Collection of Judgements of the ECJ to the Intellectual Property and Quality Systems for Agricultural Products and Foodstuffs in the EU, one scientific monograph Commentary on the Trademark Act, 6 scientific articles, 1 textbook and 1 script. An online international scientific conference was organized as part of the project, the proceedings of which is available on the project's website.

The main objective of the project "Economic and Legal Basics of Entrepreneurship in Agri-food Industry" was to bring new view on the basic economic and legal aspects of the business within the agriculture and food industry with emphasis on the EU territory. New knowledge was gained by students across different faculties of the Slovak University of Agriculture in Nitra. There was also research conducted within the project. Different papers were published in national and international journals. During numerous activities within the project all new knowledge was composed in a new publication "Economic and legal aspects of agri-food business within the EU". This book will be used as a teaching material for future students of the course.

All above mentioned project realized at the Institute of Law contribute to increasing the competencies of the members of the Institute, improving the quality of the teaching process, stimulating dialogue between experts from several related fields and improving international cooperation.

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