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Understanding the dynamics of water services in the context of the Slovak Republic[3]

Abstract

Despite the fact that the legal regulation of water services is relatively young, it represents the result of significant and numerous changes, the common denominator of which is the effort to ensure a high level of availability, protection, and quality of water. Given the seriousness and global dimension of environmental protection, in addition to the attribute of dynamism, water management services also have the attributes of discussion and topicality. With regard to the above, the authors of the presented article employ basic scientific and theoretical methods to present a thorough analysis of the administration and management of water services in the Slovak Republic, with special emphasis on the institute of privatisation, which represented the initial step towards the transformation of water management enterprises after November 1989. The basic idea was to transfer decision-making authority over these enterprises from the state to municipalities and cities, with the aim of increasing the efficiency, quality, and long-term sustainability of the provision of water management services. In the authors' view, a deeper understanding of water services administration and management in the Slovak Republic appears highly valuable. It would not only serve as a suitable source for making comparisons with the situation in this area in other countries, but also as a means of stimulating informed dialogue in society, with the aim of increasing environmental awareness and thus preserving the most favourable environment for future generations.

Keywords: water management services, privatisation, financing, state administration, legal regulation

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1. Introduction

It is undeniable that water is the most abundant, basic, and essential raw material for the life of all organisms on Earth. The above statement gives a clear answer to the question of why water has long been the subject of various social, economic and, more recently, environmental challenges in all countries of the international community. These challenges are then reflected in legal regulation at the international,[4] regional, and national levels, including the Slovak Republic. Individual states are adopting various measures, some of which have their origins in legislation, to protect water. For example, the Slovak Republic responded to the need for water protection through a constitutional amendment that banned cross-border water transport.[5] Water protection is also ensured through the regulation of the provision of water management services, which primarily concern the areas of public water supply and public sewerage systems.

In the context of the Slovak Republic, the current legal regulation of the provision of water management services represents a synergy of numerous changes that have been influenced not only by historical, but also by political, financial, and ecological factors. One of the most significant changes in this area can be considered the introduction of the institution of privatisation, the basic principle of which is de-nationalisation, with the aim of increasing the efficiency, quality, and long-term sustainability of the provision of water management services. In addition to the undeniable advantages, however, the introduction and implementation of the privatisation institute also brought with it a number of concerns regarding compliance with aspects of fairness, affordability, and accountability. These controversies and discussions prompted us to thoroughly investigate this area of water service provision, while simultaneously examining various approaches to the issue of property rights, as well as to legal regulation and the institution of accountability, which undoubtedly affect the current situation and state of financing, establishment, operation, and development of water service provision in the Slovak Republic.

A thorough examination of the above aspects represents a suitable basis for fulfilling the main objective of this study, which is a deeper examination and understanding of the administration and management of water services in the context of the Slovak Republic, in order to support informed dialogue in society, as well as to enable comparison with the situation in this area in other countries. Fundamental research methods, a standard for the legal sciences, have been applied. More specifically, analytical and synthetic methods were used to examine the legislation, the related literature, and the results of the decision-making activity of

4 | For details, see: Jankuv 2022, 12–30.
5 | For details, see: Jakab 2023, 49–63.

public authorities. Explanations, interpretations, and analogies concerning institutes were also used.

2. Privatisation of water companies

The pre-privatisation period in the territory of today's Slovak Republic was characterised by the promotion of an interventionist policy based on the assumption that the private sector was not internally stable, that it tended to create an imbalance, which resulted in market failure, which then led to the need to supplement the functioning market system with the public sector, in which state or, more broadly understood today, interventionism of public authorities took place.[6] However, it is necessary to note that in all socialist countries (and therefore also in the territory of the then Czechoslovakia), the promotion of this policy took on extreme dimensions, as it was connected with the organisation and management of the national economy through directive planning and central price determination based on the implementation of the institution of nationalisation.[7] The mentioned high level of nationalisation of the economy (which naturally caused a great deal of dissatisfaction among the inhabitants of the then Czechoslovakia with the state and manner of managing the state's internal affairs), as well as foreign events (which include, for example, the adoption of the Final Act of the Conference on Security and Cooperation in Europe[8] in Helsinki in 1975 or the nuclear disaster in Chernobyl in 1986), caused the 'fall' of socialist ideologies on its territory at the end of 1989. Closely related to this was the need for a theoretical elaboration of the transition from an administrative-command economic system to a market economy system, i.e. the need to develop an economic policy for the transformation of the economic system, where the institute of privatisation came to the fore as a very original and so far unverified economic and political concept in social practice.[9] However, it was precisely the social unconventionality of the privatisation institute that gave rise to several dilemmas on the part of political leaders, which ultimately resulted in a relatively long and turbulent political development in Czechoslovakia at the time.[10] Namely, despite the stabilisation of the (initial) concept of privatisation, there was still disagreement in the political environment, especially regarding the issue of the time dimension of the implementation of privatisation methods. These political debates finally culminated in 1992, when, after the elections, the then-current privatisation concept was 'revised'. The new concept assumed placing

6 | Husár 2013, 67.
7 | Vincúr 2001, 17.
8 | Hereinafter referred to as the CSCE.
9 | Husár 2013, 67.
10 | These dilemmas mainly consisted of choosing the speed of the privatisation process, choosing the privatisation method, or choosing the privatisation sequence.

even greater emphasis on standard privatisation methods (thus giving coupon privatisation a backseat), as well as expanding the powers of central government bodies (especially ministries) in the area of privatisation.[11] However, the high level of time required, which is closely related to standard privatisation methods, and the lack of political will in the line ministries ultimately caused a slowdown in the privatisation process, which ultimately culminated in a vote of no confidence in the then government, despite the fact that towards the end of its term in office, it began to promote the concept of accelerated approval of direct sales in 1994.

Even though the interim government made several efforts to accelerate the privatisation process (especially through simplifying the approval process for direct sales, preparation, and implementation of the so-called second phase of coupon privatisation), the initial implementation of the transformation of state-owned water infrastructure enterprises did not occur until 1995, when the new government submitted the government's program statement to the National Council of the Slovak Republic.[12] In this program statement, the government pledged to specify the state's interest in the privatisation of strategic enterprises, especially in the energy, gas, telecommunications, water management, arms production, and banking sectors, and to limit the scope of the public sector for the purpose of balanced and stable development of society.[13] This document also outlined the course of this transformation, which consisted of transferring water supply, sewerage, and wastewater treatment plants to the property of municipalities, in order to create stable conditions for the development of this sector.[14]

Based on this program statement, the proposal for the transformation of water management enterprises was approved within the framework of the Report on Water Management of the Slovak Republic for 1995 by Resolution of the

11 | However, the new concept was based on the legal regulations adopted so far, in particular Act No. 92/1991 Coll. on the conditions for the transfer of state property to other persons, as amended by later legal regulations. This legal regulation is also often referred to in professional literature as the 'privatisation act', with regard to the provision No. 1 para. 1, according to which this Act regulates the conditions for the transfer of state property to which state enterprises, state financial institutions, state insurance companies, and other state organisations (hereinafter referred to as the 'enterprise') have the right to manage, including their equity interests in the business of other legal entities, as well as the conditions for the transfer of state equity interests in this business to Czecho-Slovak or foreign legal entities or individuals (hereinafter referred to as 'privatisation'). The central state administration body in the field of privatisation was based on the Act of the Slovak National Council No. 347/1990 Coll. on the organisation of ministries and other central state administration bodies of the Slovak Republic, as amended by later legal regulations, the Ministry of National Property Administration and Privatisation of the Slovak Republic, whose predecessor was the Office for National Property Administration and Privatisation.

12 | For the sake of completeness, it is necessary to note that the Interim government prepared a concept for the transformation of state-owned water infrastructure enterprises, which was contained in Resolution of the Government of the Slovak Republic No. 1003/1994. However, this concept was abolished by the new government based on Resolution No. 7 of January 3, 1995.

13 | Program Statement of the Government of the Slovak Republic No. 87/1995 of 17 January 1995.

14 | Ibid.

Government of the Slovak Republic No. 621 of August 22, 1995 and Resolution of the National Council of the Slovak Republic No. 192 of September 13, 1995.[15] On this basis, three privatisation projects were implemented simultaneously (initial, pilot, or experimental), based on the free transfer of selected infrastructures to the property of municipalities. This involved the water and sewage infrastructure of West Slovak Waterworks and Sewers, SOE, Bratislava, branch plant Trenčín, the infrastructure of West Slovak Waterworks and Sewers, SOE, Bratislava, branch plant Komárno, and the infrastructure of West Slovak Waterworks and Sewers, SOE, Bratislava, branch plant Hlohovec. In the case of the Trenčín branch plant, the municipalities contributed their water and sewage infrastructure as a non-cash contribution to the newly established company Trenčín Waterworks and Sewers, SOE, Trenčín, and the operating assets of this branch plant were sold to the private Water Management Company, SOE, Trenčín. In 1999, Komárno entrusted the operation of its infrastructure to its own company, CIVITAS, while the operating assets of the West Slovak Waterworks and Sewerage Company remained with the Komárno branch.[16] The 'Komárno model' was also applied in the case of the Hlohovec branch plant, on the basis of which the Water and Sewage Company, Inc., Dubovany was established.[17]

However, these pilot projects did not prove to be effective, as they faced several shortcomings, including:

- exclusion of municipalities without water supply and sewage systems from the transformation process;
- in the case of group water supply and sewerage systems, only the infrastructure assets were often transferred, because not all municipalities in the group were always interested in taking over the assets (as a result, the 'extra-municipal part' remained in the ownership of the state);
- refusal of municipalities to take ownership of investment projects under construction due to a lack of funds to complete them, and further procedures in these cases were not resolved at all;
- despite negative experiences from neighbouring countries, the process of atomising the established organisational structures for water supply, and wastewater collection and treatment has begun;
- a gradual removal of 'profitable plants' (Trenčín, Komárno, and Hlohovec) from the state enterprise, leaving 'loss-making plants' in it, which was one of

15 | The concept of transformation of state-owned water and sewerage enterprises approved by Government Resolution No. 35 of January 17, 2001.

16 | Antimonopoly Office of the Slovak Republic, 2008, 1–2.

17 | In addition to West Slovak Waterworks and Sewerage Company s. e. Bratislava, at the time of the implementation of these three pilot projects, another four water management entities participated in the supply of drinking water to the population, as well as the drainage and treatment of wastewater in the territory of the Slovak Republic, namely Waterworks and Sewers, SOE, Bratislava, Central Slovak Waterworks and Sewers, SOE, Banská Bystrica, North Slovak Waterworks and Sewers, SOE, Žilina and Eastern Slovak Waterworks and Sewers SOE, Košice.

the consequences of applying the 'principle of voluntariness' of municipalities, etc.[18]

The shortcomings mentioned ultimately led to the formulation of a new concept of transformation, which was formulated in Government Resolution No. 217 of March 7, 2001. The prism of this concept was the favouring of the establishment of joint-stock companies by the National Property Fund of the Slovak Republic[19], which was established by the Act of the Slovak National Council No. 253/1991 Coll. on the competence of the authorities of the Slovak Republic in matters of transfers of state property to other persons and on the National Property Fund of the Slovak Republic, as amended by later legal regulations.[20] The National Fund for National Resources, as the exclusive owner of the shares of the newly established water companies, subsequently transferred the shares free of charge to cities and municipalities within the territorial jurisdiction of the given water company, regardless of whether or not a public water supply or public sewage system had been built in the municipality, with the main criterion for redistributing the shares being the number of inhabitants of the municipalities.[21][22]

2.1. The influence of international institutions on the privatisation of water utilities

It is necessary to emphasise that the transformation of the centrally planned system into a market economy cannot be perceived only through a change in ownership structures, but in a broader context, taking into account the irreplaceable influence of international conventions and international institutions, which include, in particular, the World Bank, the International Monetary Fund, and the European Union.[23] As for the World Bank and the International Monetary Fund,

18 | See also: Concept for the transformation of state-owned water and sewerage enterprises, approved by Government Resolution No. 35 of January 17, 2001.
19 | Hereinafter referred to as the FNM.
20 | The Fund was an independent legal entity, which was organisationally subordinate to the Ministry for the Administration and Privatisation of National Property of the Slovak Republic. The Fund operated until 2015, when it was abolished by Act No. 375/2015 Coll. on the abolition of the National Property Fund of the Slovak Republic and on amendments and supplements to certain Acts.
21 | Antimonopoly Office of the Slovak Republic 2008, 2.
22 | Based on this transformation, seven water companies were created, namely: a) Bratislava Water Company, Inc., Bratislava, b) Trnava Water Company, Inc., Piešťany, c) West Slovakia Water Company, Inc., Nitra, d) North Slovakia Water Company, Inc., Žilina, e) Central Slovakia Water Company, Inc., Banská Bystrica, f) East Slovakia Water Company, Inc., Košice, g) Subtatra Water Company, Inc., Poprad. In 2006, North Slovak water company, Inc., Žilina was divided into six (successor) water companies, namely Považská Bystrica, Turčianske Teplice, Ružomberok, Orava, Liptov and Žilina water companies, Inc. (Ibid).
23 | From the perspective of international treaties and conventions, the Protocol on Water and Health, proclaimed by the United Nations in London in 1999, which the Slovak Republic ratified in 2001, cannot be overlooked. The objective of this Protocol is to promote, within the framework of sustainable development at all relevant levels in the national and international context, the protection of human

they influenced the transformation process mainly from an economic perspective, as they recommended and promoted the strategy of the so-called Washington Consensus for the transformation process, the basic ideas of which are, mainly deregulation, market institutions and mechanisms, privatisation, reducing the tax burden and minimal state interference in the economy.[24] The Washington Consensus, in the field of political economy, therefore, relies on the use of the so-called window of opportunity or periods of 'exceptional politics'.[25] For the sake of completeness, it should be noted that this policy of extraordinary times (i.e. a policy promoting the fastest possible privatisation) in the territory of the Czechoslovak Socialist Federal Republic was complemented by another economic concept originating from experts from the International Monetary Fund and the World Bank, specifically the concept of so-called 'shock therapy'. It is based on the assumption that in the target state, the market will be the coordinator of economic activities.[26] Although experts' opinions on the appropriateness of choosing the fastest possible privatisation differ, it is evident that these concepts brought about price liberalisation in 1991, which is one of the necessary conditions for the effective functioning of a market economy (of which water management is also a part).

In addition to the World Bank and the International Monetary Fund, the transformation process was also significantly influenced by the European Union, or so-called EU-isation.[27] The ideas of peace, security, freedom, justice without internal borders, economic growth, price stability, protection and improvement of the environment, as well as support for scientific and technological progress, which the European Union embodied, gave a clear answer to the question of which direction Slovakia (as well as other post-socialist countries) would take after the long-lasting socialist era full of fear, worries, serious distortion of the three-part separation of state power (through the hypertrophy of the executive power), unsatisfactory living standards of the population, and state budget deficits (including later ongoing inflation). By submitting an official application for membership in

health and well-being at the individual and collective levels, carried out through better use of water, which includes the protection of aquatic ecosystems, as well as through the prevention, control, and reduction of water-related diseases (Ministry of Environment of the Slovak Republic 2021, 1).

24 | Myant & Drahokoupil 2013, 144.

25 | Morvay et al. 2005, 12.

26 | Morvay et al. 2005, 9.

27 | EU-isation should be seen as a system encompassing the synergy of changes in candidate and member states of the European Union, which are a consequence of the obligation to introduce ideas, standards, and legislation of the European Union in these states (Wallace, 2000). This concept should not be confused with the concept of Europeanisation, which has a much broader dimension based on multiple approaches to the European Union, or rather to Europe. *In concreto,* Europeanisation does not only represent consideration of the phenomenon of European Union enlargement (i.e. territorial approach), but also includes the organisational aspect consisting in building European institutions (e.g. EU, NATO, or Council of Europe), the aspect of 'exporting' European institutions (rules and structures) to other (non-European) countries, the political aspect linked to a political project (the vision of which is the effort to deepen European integration), as well as the conditioning aspect consisting in the influence of European Union institutions on the political situation in the member states (Olsen 2001, 333).

the European Union in 1995, the Slovak Republic was obliged to meet the so-called accession (Copenhagen) criteria, which undoubtedly influenced the privatisation process. The criteria were as follows:

- stable institutions that guarantee democracy, the rule of law, human rights and respect for and protection of minorities,
- a functioning market economy and the ability to cope with competitive pressure and market forces within the EU,
- the ability to take on the obligations of membership, including the ability to effectively implement the rules, standards and policies that make up the body of EU law (the '*acquis*'), and to comply with the objectives of political, economic and monetary union.[28]

Since the fulfilment of these criteria was examined individually and in mutual contexts, not only the legal system and economy of the Slovak Republic as a whole were subject to examination, but also their individual components, including the water management sector. *In concreto*, the stability criterion contained in the first Copenhagen criterion must also be seen in terms of the need to create national regulators, especially in relation to markets where competition is not sufficiently developed.[29] One of these areas is undoubtedly the area of network industries, which provide a final product through a technological network in the form of the delivery of a certain good (in our case, water) or the form of the provision of a service, e.g. wastewater disposal.[30] This criterion, stemming from the perception of the absence of real competition (due to the disproportionately high costs required to build parallel network systems alongside the existing ones), as well as from the perception of the irreplaceability of the commodities provided by this sector for other sectors of the national economy, ultimately led to the adoption of Act No. 276/2001 Coll. on regulation in network sectors and on amendments and supplements to certain acts.[31][32] Based on this Act, the Regulatory Office for Network Industries was established as a body independent of state power and regulated entities, to whose substantive competence at the beginning of 2003 the area of price regulation of network industries (including the water sector) was transferred from the Ministry of Finance of the Slovak Republic.

The second Copenhagen criterion is closely related to the concept of the aforementioned shock therapy (i.e. the perception of the state as a 'partner' of business entities). An efficient market economy assumes that emerging market solutions are then formulated and integrated by economic policy, in cooperation with its

28 | European Union, 2024.
29 | Seman, Jakab & Tekeli 2020, 24.
30 | Bilišňanský 2017, 60.
31 | Bilišňanský 2017, 60.
32 | This act was later replaced by Act No. 250/2012 Coll. on Regulation in Network Industries, as amended by later legal regulations.

partners, into a programmatic form striving for a synthesis between the trends of the real economy and the anticipated structural changes that eliminate threats to future development and create a corridor for long-term economic growth.[33] *A maiori ad minus* part of this concept is also the orientation of economic policy to support the development of water management, as an inherent part of other sectors of the national economy. In the Slovak Republic, at the beginning of the privatisation period, the issue of water management development and planning was addressed mainly through the Water Management Plan, which was contained in Act No. 138/1973 Coll. on water (Water Act) as amended by later legal regulations.[34] However, the concept of the guideline water management plan was considered outdated at the beginning of 1991 due to its inefficiency and poor usability.[35] Therefore, the development of planning documents with a new content structure was initiated, namely Hydroecological River Basin Plans[36], the purpose of which was to protect the quality and quantity of water and their rational use, and Water Management River Basin Plans[37], as the basis for solving economic activities with water as a raw material.[3839] However, the effectiveness and efficiency of these concepts also required a high level of funding, where the European Union played an irreplaceable role among foreign investors, through the ISPA grant.[40] Based on this grant,

33 | Okáli 2004, 252.

34 | According to the provision No. 3 of Act No. 138/1973 Coll. on water (Water Act) as amended by later legal regulations, the Directive Water Management Plan of the Republic represented the basis for water management measures in all sectors of the national economy, for water management measures in spatial planning, the basis for water management decision-making, and was one of the bases for water management and for the development of long-term perspectives of sectors that had requirements for water resources or otherwise influenced water management or its quality. The state water management balance of surface and groundwater reserves and their quality was also part of the guideline water management plan.

35 | Its inefficiency was evidenced primarily by the Report on the State of the Environment of the Slovak Republic from 1992–1993, according to which the presented concept did not provide suitable measures to solve the 'most pressing' problems of the water management policy at that time, which included in particular the deficit of drinking water caused by insufficient wastewater cleaning, insufficient connection of the population to public water supplies and public sewerage systems, as well as numerous water losses (Ministry of the Environment 1994, 63–64).

36 | Hereinafter referred to as the HEP.

37 | Hereinafter referred to as the VHP.

38 | Ministry of the Environment of the Slovak Republic 2009, 1.

39 | These plans (which were replaced in 2000 by a comprehensive document entitled *General Protection and Rational Use of Water*) included several measures, involving not only the construction of water management infrastructure (e.g. the gradual construction of wastewater treatment plants for selected housing estates), but also the reconstruction of existing facilities (in 40 cities with over 10,000 inhabitants, more than 20% of the water supply network required reconstruction, and in 15 cities more than 10% of the water supply network was in a state of emergency). See also: Ministry of the Environment 1994, 65–67.

40 | This is the so-called pre-accession fund of the European Union, which is aimed at financing the development of transport and the environment. The basic assumption for this funding was the adoption of the European Agreement on Association with the European Union (Association Agreement), which was concluded for the purpose of economic, political, and cultural cooperation between the Slovak Republic and the European Union in 1993.

the Subtatra and Central Slovak water management companies received funds to finance a total of four projects related to the construction of public sewerage and streamlining wastewater treatment processes. The culmination of this case influenced the process of transformation of water management companies in the sense that it pointed out the impossibility of implementing the institute of privatisation, or rather the impossibility of omitting the obligation to notify the European Commission about the privatisation of financed companies, not only under the threat of stopping all ongoing payments, but also under the threat of excluding these companies from financing from European Union funds in the future.[41] As a result of this fact, there have been no further attempts to privatise water management companies in the Slovak Republic.

The third accession criterion was based on the need to harmonise the legislation of the Slovak Republic with European Union law. Similar to the first two criteria, this criterion has significantly influenced direction and concepts of water law in Slovakia. This fact was most clearly manifested at the beginning of the new millennium, when Directive No. 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water management was adopted, by which the European Union abandoned the perception of problems individually and opted for a comprehensive approach to the issue of water protection and use[42]. The introduction of this new approach undoubtedly had to be adopted by all member and 'candidate' states of the European Union (including the Slovak Republic). In a relatively short time, Slovak Republic adopted Act No. 442/2002 Coll. on public water supply and public sewerage systems and amending Act No. 276/2001 Coll. on regulation in network sectors, as amended by later legal regulations, as well as Act No. 364/2004 Coll. on waters and amending Act of the Slovak National Council No. 372/1990 Coll. on offences,

41 | This case consisted of the fact that at the time of financing, Subtatra Water Company, Inc. established Subtatra Water Utility Operating Company, Inc., and Central Slovak Water Company, Inc. established Central Slovak Water Utility Operating Company, Inc., with which lease and operation contracts were subsequently concluded. However, from the content of these contracts, it was clear from the beginning that this was the initial stage of privatisation. This was finally completed in May 2006, when the aforementioned companies announced the company called Veolia as the winner of the tender. In this regard, the European Commission took a position on a clear violation of the rules for providing funding from the ISPA grant, specifically the European Commission's exclusive right to reassess the amount of assistance provided from ISPA in the event that a 'significant change' occurs:
a) affecting the nature of the operation or its conditions of implementation, or providing undue advantages to a private or public entity, and
b) resulting either from a change in the nature of ownership of any part of the financed infrastructure, or from the termination or significant change of the operating framework (Havlíček 2007, 1–2).
As a result of these facts, the Ministry of Finance of the Slovak Republic finally suspended financing of these companies.

42 | Hereinafter also referred to as the EU Water Framework Directive.

as amended by later legal regulations[43].[44] The determining factors of water quality, in the sense of this new concept (in the interest of protecting and improving the quality of European waters), are the assessment of the ecological and holistic status of waters, the setting of environmental objectives,[45] and the proposal for the implementation of measures to achieve them (their financial provision, planning in river basins, a strategy for the elimination of pollution by hazardous chemical substances, informing the public, and introducing financial instruments related to water management services and water use.[46]) In view of the above, it can be briefly summarised that the implementation of this directive was manifested mainly through a change in the method of processing conceptual policies, implemented through the development of river basin management plans, which, after certain changes, are still applied today.[47]

3. The organisational aspect of providing water management services nowadays

3.1. Administrative and control authorities

The current legal regulation in the field of providing water management services is subject to regulation by several legal regulations, of which the aforementioned Water Act and Act No. 442/2002 Coll. on public water supply and public sewerage systems and amending and supplementing Act No. 276/2001 Coll. on regulation in network sectors, as amended by later legal regulations[48]. While the Water Act represents the basic legal framework for comprehensive water protection, the ZoVaK is the key legal regulation in the field of public water supply and public sewerage, the aim of which is to comprehensively define the relationships related to the establishment, development, and operation of public water supply and public sewerage systems in order to ensure the supply of drinking water to the population and other consumers, the discharge and treatment of municipal wastewater and the simultaneous satisfaction of the justified needs of society for water use, as well as the development and implementation of financing plans for

43 | Hereinafter referred to as the Water Act or ZoV.
44 | This Act replaced the previous legal regulation contained in Act No. 184/2002 Coll. on water and on amendments to certain acts (Water Act), as amended by later legal regulations.
45 | See also: Lazorčáková 2024, 115–131.
46 | General part of the explanatory report to Act No. 364/2004 Coll. on water and on the amendment to Act of the Slovak National Council No. 372/1990 Coll. on offences, as amended (Water Act), as amended by later legal regulations.
47 | River basin management plans are developed both for sub-basins and for the Vistula and Danube River basins (the so-called Water Plan of the Slovak Republic).
48 | Hereinafter referred to as the ZoVaK.

the renovation of public water supply and public sewerage systems.[49] This is related to the definition of the organisational basis for the provision of water management services, which is regulated by five parts of ZoVaK.

According to this legislation, the central state administration body in the field of water infrastructure is the Ministry of the Environment of the Slovak Republic. Its competences include, in particular, managing the performance of state administration carried out by district offices in the regional seat and district offices in the area of public water supply and public sewerage; developing, approving, evaluating, and updating the development plan for public water supply and public sewerage for the territory of the Slovak Republic (including the timetable for its implementation); publishing the approved development plan on its website; ensuring technical standardisation tasks; directing and ensuring the financing of research in the area of public water supply and public sewerage; determining professional requirements for persons who may operate a public water supply or public sewerage; and ensuring the implementation of professional competence tests for operators of public water supply and public sewerage, etc.[50] In the water infrastructure sector, local government bodies, specifically district offices in the regional seat and departments of environmental care of these offices, also significantly participate in the implementation of these tasks. The scope of competence of district offices in the regional seat in this area includes establishing a plan for the development of public water supply and public sewerage systems for the territory of the region; decision-making on the declaration and cancellation of compulsory administration, as part of supervision; checking the technical and technological condition of public water supply and public sewerage systems; and issuing decisions on protection zones. As for district offices, they, for example, decide whether a water supply or sewerage system is considered a public water supply or public sewerage system; monitor the fulfi[51]; issue opinions on risk management of the drinking water supply system for the Public Health Authority or the Regional Public Health Authority or opinions on changes in

49 | General part of the explanatory report to Act No. 394/2009 Coll. amending and supplementing Act No. 442/2002 Coll. on public water supply and public sewerage systems and amending and supplementing Act No. 276/2001 Coll. on regulation in network industries, as amended.

50 | For more information, see the provision no. 36 para 3 of Act No. 442/2002 Coll. on public water supply and public sewerage systems and on amendments and supplements to Act No. 276/2001 Coll. on regulation in network industries, as amended by later legal regulations.

51 | For the sake of completeness, it should be noted that in the case of imposing sanctions for committing an offence or administrative delict, the ZoVaK favours imposing fines, which is a manifestation of the application of the polluter pays principle. This principle, the legal basis of which is Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, is based on the assumption that the person who causes environmental damage is obliged to bear the costs necessary to eliminate such damage and to restore the state of the environment or to prevent future environmental damage (Košičiarová et al. 2009, 23).

the monitoring program for the Public Health Authority or the Regional Public Health Authority.[52]

Territorial self-government units, specifically higher territorial units and municipalities, also have jurisdiction over the provision of water management services. While higher territorial units in this area 'only' comment on the regional development plan, the scope of municipalities is much more diverse.[53] Specifically, municipalities in the water management infrastructure sector:

- ensure conditions for supplying residents with drinking water from the public water supply, for draining and disposing of wastewater through public sewerage from its residents and other persons in the municipality, for emptying the contents of domestic cesspools in the municipality, for emergency drinking water supply, for alternative drinking water supply and wastewater disposal;
- ensure the development of public water supply and public sewerage systems corresponding to the needs of the municipality;
- decide on imposing an obligation on the owner of a building or land to connect to the public sewer system;
- by a generally binding regulation, temporarily restrict or prohibit the use of drinking water for other purposes, if this is necessary to ensure the supply of drinking water in the municipality during times of shortage;
- issue generally binding regulations on the method of alternative water supply and alternative wastewater disposal, and on the disposal of cesspool contents according to local conditions;
- issue an opinion for the district office in proceedings for a permit for special water use, change or cancellation, for a permit to construct, change or cancel a water structure and to put it into operation or decommission it;
- impose fines;
- ensure the supply of drinking water to residents;
- identify the population without access to drinking water or with limited access to drinking water, including vulnerable and marginalised groups, and determine the reasons for their insufficient supply of drinking water;
- assess the possibilities for improving the drinking water supply and inform the persons mentioned in the previous point about them; and

52 | For more information, see the provision no. 36 para 5 of Act No. 442/2002 Coll. on public water supply and public sewerage systems and on amendments and supplements to Act No. 276/2001 Coll. on regulation in network industries, as amended by later legal regulations.

53 | The competence of municipalities in the area of public water supply and public sewerage is a delegated competence, carried out on the basis of the delegation principle. As a result, the state continues to be responsible for the activities carried out by the municipality in this area, which is reflected not only in the area of control but also in methodological guidance and financing. For more information, see the provision No. 71 of the Constitution of the Slovak Republic No. 460/1992 Coll. as amended by later legal regulations.

| implement measures to ensure the supply of drinking water to vulnerable and marginalised groups.[54]

In connection with the issue of managing entities in the water infrastructure sector, the Regulatory Office for Network Industries[55] cannot be omitted, the activities of which are regulated by Act No. 250/2012 Coll. on regulation in network industries, as amended by later legal regulations. As already indicated, the area of price regulation carried out by the ÚRSO also includes the area of water management. Specifically, these involve the production and supply of drinking water through public water supply systems, the drainage and treatment of wastewater through public sewerage systems, the abstraction of surface water from watercourses, the exploitation of the hydropower potential of watercourses, the abstraction of energy water from watercourses, and the regulation of connection to public sewerage systems.[56] Price regulation of the listed activities is carried out by determining the method of calculating the maximum price, based on the Decree of the Regulatory Office for Network Industries No. 323/2022 Coll. which establishes price regulation of the production, distribution, and supply of drinking water through public water supply systems and the discharge and treatment of wastewater through public sewerage systems and certain conditions for carrying out regulated activities in the water management sector. The ÚRSO not only carries out price regulation of the so-called water and sewage services, but also, according to the provision No. 9 letter (b) point 5 of Act No. 250/2012 Coll. on regulation in network industries, as amended by later legal regulations, also carries out supervision and control in this area.

In addition to the ÚRSO, another supervisory and control body is the Supreme Audit Office of the Slovak Republic[57], which is not a public administration body, but a constitutional body, as it is separately regulated within the third title of the second section of the Constitution of the Slovak Republic No. 460/1992 Coll., as amended by later legal regulations.[58] The NKÚ is an independent body that carries out control over the management of budgetary funds, state property, property rights, and state receivables.[59] Since the majority of water and sewerage systems

54 | The provision No. 36 para 7 of Act No. 442/2002 Coll. on public water supply and public sewerage systems and on amendments and supplements to Act No. 276/2001 Coll. on regulation in network industries, as amended by later legal regulations.
55 | Hereinafter referred to as ÚRSO.
56 | The provision No. 11 para 4 of Act 250/2012 Coll. on regulation in network industries, as amended by later legal regulations.
57 | Hereinafter referred to as the NKÚ.
58 | Issues related to the scope, status, and internal organisation of the Supreme Audit Office of the Slovak Republic (including the basic principles and conditions for the performance of audit activities) are regulated in more detail in Act No. 39/1993 Coll. on the Supreme Audit Office of the Slovak Republic, as amended by later legal regulations.
59 | Art. No. 60 of the Constitution of the Slovak Republic No. 460/1992 Coll. as amended by later legal regulations.

are currently owned by municipalities and cities, the NKÚ carries out relatively numerous audits and inspections of water companies in order to ensure their efficiency, economy, and effectiveness. However, its control activities are not limited only to the area of determining the actual state of financial management, but also to the area of corrective measures (in the event of irregularities being detected). In the authors' opinion, this body is an irreplaceable part of the system of external control of water companies, as it significantly contributes to the development of water infrastructure, as well as to the deepening of the principle of transparency.

3.2. Water companies

In addition to the managing and supervisory entities, the organisational base of the water management infrastructure is also made up of managed entities, which are undoubtedly water companies, which are predominantly owned by municipalities and cities (as can be seen from the previous chapter). There are several water companies operating in the Slovak Republic, with the largest including:

- Bratislava Water Company, Inc. (BVS);
- Trnava Water Company, Inc. (TAVOS);
- North Slovak waterworks and sewers, Inc. (SEVAK);
- Central Slovak Water Supply Company, Inc. (StVPS);
- Eastern Slovak Water Company, Inc. (VVS); and
- West Slovak Water Company, Inc. (ZsVS).

The largest among the listed companies is Eastern Slovak Water Company, Inc. (VVS), whose territorial jurisdiction includes the entire Košice and Prešov regions, as well as part of the Banská Bystrica region (Revúca district). This company is not only often called 'the largest' but also 'the most modern'. This is evidenced by the fact that it was the first in the Slovak Republic to introduce the method of water disinfection using UV radiation. However, its pioneer status remains today, as on 30 October 2024, it launched a unique project in the village of Sveržov. This is a container wastewater treatment plant without sewerage using the unique WTR technology for septic tank water treatment.[60] This technology can be applied in any municipality with a population of up to 2,000, as it is a synergy of the aspects of financial simplicity and time efficiency.[61]

In connection with water companies, it is important to note the civic association called the Association of Water Companies[62], which was established at the beginning of 2004 as a response to the need for a comprehensive approach to solving the 'most pressing' problems related to the issue of providing water

60 | Eastern Slovak Water Company, Inc., 2024.
61 | Ibid.
62 | Hereinafter referred to as AVS.

management services by water companies in the Slovak Republic. Within the scope of the AVS (which currently has 14 full and 2 extraordinary members)[63], includes in particular:

- association of business entities actively operating in the field of providing water management activities related to the operation of public water supplies and public sewerage systems with the aim of actively contributing to the protection of public health (production and supply of drinking water) and environmental protection (collection, discharge, and treatment of wastewater and sludge processing) and other entities (authors' note – extraordinary members);
- performance of advisory activities for members of the association;
- cooperation with relevant state authorities, public administration bodies, and other relevant entities in the legislative process concerning the legitimate interests of the association, submitting its own legislative proposals aimed at adopting justified changes in the framework of building a suitable legal environment for the activities of the association's members, as well as creating conditions conducive to understanding or agreement between entities and institutions in such cooperation; and
- cooperation with similar professional associations operating in the Slovak Republic and the member states of the European Union, and developing activities that implement actions aimed at exchanging information and experience on the results of fulfiling the program objectives of cooperating entities, etc.[64][65]

4. Material and technical aspects of providing water management services

4.1. Ownership and operation of public water supply and public sewerage systems

With regard to the (already mentioned) complexity of the approach to the issue of public water supply and public sewerage systems, the ZoVaK not only establishes the organisational structure, rights, and obligations of drinking water consumers and wastewater producers, but also the rights and obligations of owners and operators of public water supply and public sewerage systems (including regulation of

63 | An extraordinary member is a person who owns public waterworks or public sewers but does not operate them.
64 | Article 3, point 3.1 of the statutes of the Association of Water Companies.
65 | Similar professional associations with which the Association of Water Companies cooperates include, in particular, the European Union of National Associations of Water and Wastewater Service Providers (EurEau), the Association of the Water and Sewerage Sector of the Czech Republic – SOVAK ČR, the Hungarian Water Association (Mavíz), etc.

their mutual relations). In particular, according to the provision No. 3 para 3 of the first sentence of the ZoVaK, the owner of public water supply and public sewerage systems may only be a public law entity for reasons of public interest.[66] If the construction of public water supply systems and public sewerage systems is provided by legal entities that are not public law entities, the condition for issuing a zoning decision is on the transfer of ownership of the structure in question between its owner and a public law entity, and the condition for issuing a building inspection decision is a contract on the transfer of ownership of the public water supply system or public sewerage system between the owner of the structure and a public law entity.[67] For the sake of completeness, it should be added that no incumbrance, lien, or rights with similar content and effects may arise on a public water supply or public sewerage system in favour of a person other than a public law entity – except for the lien to secure bank loans when financing investment projects through European Union funds, the state budget, and other public funds, the lien to secure the receivables of the provider of a non-refundable financial contribution, and the lien to secure bank loans to finance the establishment and renovation of public water supply and public sewerage systems.[68]

However, the favouring of a public law entity does not apply to the operator of public water supply and public sewerage systems. For these persons, ZoVaK places emphasis on fulfilling the trade requirements that operators must have at the time of operating public water supply and public sewerage systems, which is closely related to the requirement of integrity and professional competence.[69] However, in certain cases, ZoVaK allows the operation of water management infrastructure to be carried out by an operator whose trade license for the performance of these activities has expired. In these cases, the operator is obliged (for reasons of public interest) to carry out this activity through a so-called professional representative until a new operator is secured, which may not exceed a period of 90 days.

The above provisions (along with the 'pitfalls' of the ongoing privatisation process) have been translated into current application practice in various ways, or rather models of operational-ownership relationships, specifically:

66 | According to the provision No. 3 para 3 of Act No. 442/2002 Coll. on public water supply and public sewerage systems and on amendments and supplements to Act No. 276/2001 Coll. on regulation in network sectors, as amended by later legal regulations, a subject of public law is a municipality, a legal entity established under a special regulation, in whose business only municipalities or associations of municipalities, or an association of these legal entities and municipalities, participate in the property participation.

67 | The provision No. 3 para 2 of the first sentence of Act No. 442/2002 Coll. on public water supply and public sewerage systems and on amendments and supplements to Act No. 276/2001 Coll. on regulation in network industries, as amended by later legal regulations.

68 | The provision No. 3 para 2, last sentence of Act No. 442/2002 Coll. on public water supply and public sewerage systems and on amendments and supplements to Act No. 276/2001 Coll. on regulation in network industries, as amended by later legal regulations.

69 | Professional competence is verified by an examination by the Ministry of the Environment of the Slovak Republic, or a legal entity authorised by it. If the applicant successfully passes this exam, he/she will be issued a certificate of professional competence.

- the municipality as the owner and the water company as the operator (a typical example is the city of Komárno, whose infrastructure is operated by the company KOMVaK);
- municipality and water company as the owners, the owning water company also as the operator (e.g. Orava water company, Inc. Dolný Kubín);
- municipalities, water companies, and some business entities as the owners, the owning water company also as the operator (e.g. North Slovak waterworks and sewers, Inc., Žilina); and
- water company as the owner, another water company as the operator (this model is present, for example, in the case of Trenčín waterworks and sewers, Inc., Trenčín and Trenčín water management company, Inc., Trenčín).

From the above, it follows that the owner of water management infrastructure can also be in the position of the operator. In such a case, however, the owner is obliged to meet all the requirements that the ZoVaK imposes on the operator, i.e. the requirement of a trade and the associated professional competence and integrity. Conversely, if the owner does not meet the requirements related to the operator, the owner is obliged to provide an operator for their infrastructure, based on a lease agreement (specifically a lease and operation agreement).[70]

4.2. Water management infrastructure in numbers and its evaluation

According to the most recently published report on the state of the environment of the Slovak Republic in 2022, the number of residents supplied with water from public water supplies in 2022 reached 4,902,720, which represented 90.27% of the total population of the Slovak Republic. In 2022, there were 2,449 independent municipalities that were supplied with water from public water supplies, and their share of the total number of municipalities was 84.74%. Regarding public sewerage, the number of residents living in houses connected to public sewerage in 2022 reached 3,856,104, representing 71% of the total population. 1,190 municipalities had a built public sewerage system (41.18% of the total number of municipalities in the Slovak Republic).[71] This situation, in the authors' opinion, is a consequence of several factors that were (and still are) present in the territory of the Slovak Republic, specifically historical-political and economic-ecological factors.

Historical-political factors need to be perceived not only through the already mentioned transformation of the centrally planned economy into a market economy, but also in broader contexts, i.e. in the context of the division

70 | In the case of the construction of a new public water supply or sewerage system, this contract is also the basis for issuing a building inspection decision by the building authority.
71 | See also: Ministry of the Environment of the Slovak Republic 2023, 24, 31.

of Czechoslovakia (including its consequences, e.g. in the form of instability of payment ties between the Czech and Slovak Republics), and the related inherited structure and orientation of the Slovak economy from the period when Slovakia was an integral part of Czechoslovakia (Slovakia's orientation towards primary production).

Economic-ecological factors represent a synergy of requirements for good water status and increasing the standard of living of the population, while simultaneously maximising the use of water potential. As for the requirement to increase the standard of living of the population, in the field of water management infrastructure, this needs to be perceived through unlimited access to high-quality drinking water, which is also ensured by Drinking Water Monitoring Programs. The Plan for the Development of Public Water Supply and Public Sewerage Systems, which is being developed in six-year cycles starting in 2015, has an irreplaceable place in this area.[72]

Despite numerous reconstructions, constructions, and increasing percentages of connections to public water supply and public sewerage systems, the authors are of the opinion that the state of the current infrastructure cannot be described as satisfactory. This is especially true with regard to the European Union Biodiversity Strategy to 2030, which aims to bring nature back into our lives and is an integral part of the European Green Deal. While in the case of public water supplies, it is realistic to consider ensuring sufficient clean water for everyone (taking into account the long-term good quality of drinking water and the growing percentage of connections to public water supplies), the share of discharged and treated wastewater from agglomerations with over 2,000 inhabitants still does not reach the required level (although the percentage is gradually increasing). Furthermore, in the case of agglomerations with under 2,000 inhabitants, this percentage is very low. Despite several strategic documents, the intended measures are financially demanding, which is related to the requirement for the availability of financial resources, which has long been considered a risk factor for the development of water management infrastructure.[73]

4.3. Financing water infrastructure

Financing of water management infrastructure, especially the development and modernisation of public water supply and public sewerage systems, is multi-source in the context of the Slovak Republic. The first basic source is the provision of financial resources by the State, with these resources often allocated based on the needs of individual regions. State support is implemented mainly through the

72 | In 2015, Commission Directive (EU) No. 2015/1787 of 6 October 2015 was adopted, amending Annexes II and III to Council Directive 98/83/EC on the quality of water intended for human consumption.
73 | Ministry of the Environment 2023, 6.

Environmental Fund.[74] This fund is one of the most important tools for supporting environmental projects, including the construction, reconstruction, and modernisation of public water and sewerage systems. It provides subsidies and preferential loans for municipalities, cities, and other entities that implement projects to improve water management. The State provides financial resources for specific projects in the field of water management also through ministries (e.g. the Ministry of the Environment of the Slovak Republic, the Ministry of Agriculture and Rural Development of the Slovak Republic, and the Ministry of Investments, Regional Development and Informatization of the Slovak Republic) in accordance with the Development Plan for Public Water Supply and Public Sewerage Systems for the territory of the Slovak Republic.[75] These subsidies are aimed mainly at smaller municipalities that do not have sufficient resources. Likewise, the State can also announce one-off or thematic calls to support projects in the field of water management, for example, to address emergency situations or adapt to climate change. In addition, the State also co-finances projects supported for this purpose, primarily from European Union sources, in order to reduce the financial burden on municipalities and cities.

A significant source of financing for the modernisation and renovation of water management infrastructure is funds from the European Union. Slovakia, as a member state of the European Union, has access to various European structural and investment funds, which are intended to improve infrastructure, including water management. According to published information from the new programs, four calls with a total allocation of almost 210 million euros have been directed towards these purposes so far. At the same time, calls for phased projects were announced, continuing from the 2014–2020 programming period, for a total amount of 90 million euros. Two integrated calls have also been announced specifically for residents of municipalities from the Atlas of Roma Communities, within which it is also possible to support activities in the area of water and sewerage in the amount of 51 million euros.[76]

The Cohesion Fund and the European Regional Development Fund are intended primarily for these purposes. The Cohesion Fund is aimed at supporting environmental and infrastructure projects in EU member states that have lower GDP per capita.[77] In Slovakia, the Cohesion Fund finances projects for the construction and

74 | Support is implemented within the scope of the Water Protection and Use specification, with the following activities possible for 2024: Activity BV1 – Construction of a public water supply system, Activity BK1 – Wastewater treatment plant – construction, expansion, reconstruction or intensification, Activity BK2 – Sewerage network – construction, expansion or reconstruction, Activity BK3 – Construction of public sewerage, Activity BKV – Implementation of a water supply and sewerage system in one line, Activity BVO – Implementation of water retention measures in the country (see Environmental Fund 2024).

75 | For more information on the Development Plans for Public Water Supply and Public Sewerage, see: Ministry of the Environment of the Slovak Republic 2024.

76 | See also: Ministry of Investments, Regional Development and Informatisation of the Slovak Republic, 2024.

77 | Oleš & Hudcovský 2024.

modernisation of sewage systems, wastewater treatment plants, and the expansion of water supply networks. The aim is to achieve compliance with EU environmental directives. The European Regional Development Fund[78] supports regional development and investments in infrastructure, including water management projects. It focuses on improving the availability of drinking water, reducing water losses in distribution systems, and increasing the capacity of wastewater treatment plants.

The main instrument for implementing environmental programs supported by these funds is the Operational Program Environmental Quality.[79] European funds enable the implementation of large-scale projects that would otherwise not be possible due to limited national resources. Projects financed by European funds must meet strict sustainability and efficiency criteria, while their aim is also to protect the environment and improve the quality of life of residents.

Given that in the Slovak Republic, ownership of public water supply and public sewerage systems is limited to municipalities, legal entities with their exclusive ownership interest, or their associations, they must also participate in modernisation and construction. For these purposes, they use their own budgetary resources or use resources from loans and borrowings. In addition, they also use the profit from operating public water supply and public sewerage systems, accumulated from payments for water supply and wastewater disposal, for these purposes.

The construction, modernisation, and renovation of public water supply and public sewerage systems can also be implemented through so-called public-private partnerships[80],[81] with the contractual basis being a concession agreement. Based on it, a private law entity undertakes to carry out the construction, modernisation, or maintenance of a public water supply or public sewerage system, which will be owned by a municipality or a legal entity with exclusive ownership of the municipality, while the private law entity will have the right to operate the given water supply or sewerage system during the concession period and receive profits for it.[82]

Finally, financing of water management infrastructure can be achieved through the regulation of environmental taxes and the regulation of other payment obligations. Funds could be provided by the introduction of a water tax. Income tax would be the revenue of a local government that could only be used for protecting the water base and improving the service.[83]

The financing of public water and sewerage systems in Slovakia faces several challenges that affect the efficiency and sustainability of these services. First of all, it is a lack of financial resources on the part of the owners of public water supply

78 | For more information on the European Regional Development Fund, see: Fact sheets on the European Union, 2024.
79 | For more information on the Operational Program Environmental Quality, see: Ministry of the Environment of the Slovak Republic, 2015.
80 | Hereinafter referred to as PPP.
81 | See also: Liu, Clegg & Pollack 2024, 467–506.
82 | Pokorný & Černá 2024, 665–671.
83 | Nagy Z 2019, 174.

and public sewerage systems – municipalities or legal entities with exclusive ownership of municipalities, or their associations. Many municipalities and cities struggle with limited budgets, which complicates investments in the modernisation and maintenance of existing infrastructure. Insufficient funding can lead to a deterioration in the quality of services and an increased risk of accidents. In addition, another problem is Slovakia's heavy dependence on European funds. Slovakia relies heavily on financing from European funds, which can be problematic given the complex project approval processes and the need to meet strict criteria. A reduction in the availability of these funds could significantly affect the country's ability to invest in water infrastructure.

Another challenge is the condition of the public water supply and public sewerage infrastructure. Many parts of the water and sewage systems are outdated and require extensive renovations or replacement. This represents a significant financial cost that may be unaffordable for some municipalities. Likewise, state regulation of prices for water supply and wastewater disposal (including related services) has an impact on the possibilities of financing their renovation. Water and sewerage fees are regulated, which limits the ability of providers to generate sufficient revenue to cover investment needs and operating costs. Finally, increasing environmental requirements and standards for the protection of water resources require further investments in ecological solutions, which may increase financial pressure on operators and owners of water and sewer systems.

What are the prospects for further development of financing for the construction, modernisation, and renovation of public water supply and public sewerage systems? There is undoubtedly a need to continue the effective use of European funds. These funds will be a key to meeting environmental goals and improving the quality of services. However, it is necessary to increase the efficiency of drawing down these funds, as this is not sufficient. In addition, it is essential to increase investments in ecological solutions. With the growing emphasis on sustainability and environmental protection, it is expected that the funding will be directed towards projects that promote resource efficiency, emission reduction, and water resource protection. This may include investments in water recycling technologies and reducing losses in distribution systems. Another challenge is the need to intensify cooperation with the private sector. Public-private partnerships can provide additional sources of financing and expertise needed to implement large infrastructure projects. Such partnerships can help bridge the gap between needs and available public resources.

Moreover, regulators will need to relax the intensity of price regulation for water supply and wastewater disposal and related services. It is expected that regulators will need to adapt pricing policies to enable sustainable financing of water services without negatively affecting accessibility for the population. This may include revising tariff structures and introducing incentives for efficient water management. Finally, it will also be essential to invest in new technologies, such

as smart grids and advanced monitoring systems, which can increase operational efficiency and reduce costs. These innovations can also help identify leaks and optimise water consumption. These factors indicate that financing of public water and sewerage systems in Slovakia will need to be flexible and innovative in order to respond to changing needs and challenges in the field of water management.

Based on the above, it can be concluded that public resources are the main tool for financing the construction, modernisation, and renovation of public water supply and public sewerage systems in Slovakia. Related to this is the issue of state aid and its admissibility. Fundamentally, state aid must comply with competition rules and European Union regulations.[84] Specific rules apply in this area, ensuring a balance between supporting public services and protecting competition.

According to Article 107 of the Treaty on the Functioning of the European Union[85], State aid that distorts or threatens to distort competition is generally prohibited. However, there are exceptions for services of general economic interest, which include water services, such as drinking water supply and wastewater collection. Member states may provide state aid to finance these services if this is necessary to ensure their availability, quality, and affordability for the population. However, this aid must be proportionate and must not exceed the costs necessary to provide the service. If state aid is provided to finance services of general economic interest, it must meet the so-called Altmark criteria.[86] These include a clearly defined public service obligation, transparent calculation of compensation, and selection of the service provider based on efficiency.[87]

In the conditions of the Slovak Republic, assessing compliance with the conditions for the admissibility of state aid in connection with the provision of public resources for the purposes of construction, modernisation, and renovation of public water supply and public sewerage systems is a little easier. First, the law directly defines that it is a service in the public interest. In addition, by law, public water supply and public sewerage systems must be owned by municipalities or legal entities with the exclusive participation of municipalities or their associations, i.e. they will still be public entities. If these infrastructures were also implemented by a private entity, the transfer to municipalities or legal entities, with the exclusive participation of the municipality or their associations, must take place before their final approval. Taking these aspects into account, the above-mentioned Altmark criteria for the admissibility of state aid will generally be met.

In conclusion, it is necessary to mention the application of the polluter pays principle and the principle of full cost recovery in connection with the operation of public water supply and public sewerage systems. The principles of 'polluter pays' and 'full cost recovery' play a key role in the management of water services,

84 | García Coso 2024, 226.
85 | Hereinafter referred to as TFEU.
86 | Klasse 2013, 35–51.
87 | Sokol & Staničić 2019, 803–833.

and their implementation is enshrined in the EU Water Framework Directive[88], specifically in Article 9. These principles are designed to promote the sustainable use of water resources and ensure a fair distribution of the costs of water services. The 'polluter pays' principle requires that those who cause pollution or damage to water resources bear the costs of removing or restoring them. The principle of full cost recovery represents the requirement to cover all costs associated with the provision of water services. This principle ensures that the prices for water services reflect the true costs of providing them, thereby promoting efficient water management and system sustainability.[89]

In the context of the Slovak Republic, these principles are enshrined in national legislation, and their implementation affects the pricing of water management services and the protection of water resources. The 'polluter pays' principle is regulated in the Water Act. The law establishes obligations for entities that pollute water to bear the costs of removing it or mitigating its impacts. Entities that discharge wastewater or pollute water sources are required to pay pollution charges.[90] These fees are intended to finance measures to protect water and improve the quality of water resources. The amount of fees depends on the quantity and type of pollutants. Polluters may be required to implement technical measures to minimise their impact on water resources, such as installing wastewater treatment plants.

The principle of 'full cost recovery' is reflected in the conditions of the Slovak Republic, particularly in the area of price regulation. Prices for water management services (water supply and wastewater disposal) are regulated by the ÚRSO. This regulation is intended to ensure that prices cover all costs associated with providing services. Prices include operating and maintenance costs, infrastructure investment costs, and environmental costs such as water resource protection. Social affordability is also taken into account when setting prices to ensure that services remain affordable for all residents. This may lead to some compromises in fully applying the cost recovery principle. However, state subsidies and European funds also serve these purposes, and these funds help to alleviate the financial pressure on consumers and balance the compromises in applying this principle.

5. Future perspectives

The insufficient funding of water management services has long been a perceived shortcoming of the industry itself and local governments. This deficiency was also pointed out in the recent NKÚ report on the results of the inspection of selected water companies from 2024, according to which only two companies used adequate

88 | Hereinafter referred to as WFD.
89 | See: Unnerstall 2006, 29–42; Mylopoulos & Fafoutis 2012, 161–176.
90 | See: Maslen 2017, 54.

profit to implement the restoration plan. There are also problems with the creation and use of a special-purpose reserve, which has become a legal obligation of companies based on the legislative initiative of the NKÚ SR.[91] The achieved level of necessary restoration is not the result of management and regulator activity only in the controlled period but in many cases is the result of long-term non-systematic work in the field of restoration and the use of resources intended for both restoration and development activities.[92] In addition to insufficient funding, the inspection pointed out many other problems, including, for example, a high proportion of water losses (from 25% to almost 33%), different application practices (which result in different interpretations of the provisions of the ZoVaK), insufficient state supervision and oversight carried out by the Ministry of the Environment of the Slovak Republic and district authorities (for the period from 2021 to 2023, not a single inspection of theirs was directed towards the area of checking the status of the renovation of water infrastructure or the creation and use of a special-purpose financial reserve), etc.[93]

In response to the identified shortcomings (as well as to the so-called 'Bond Program of Guaranteed Yields' of the Eastern Slovak Water Company), the Ministry of the Environment of the Slovak Republic began preparing an extensive amendment to the ZoVaK in September of this year, which was submitted to the Government of the Slovak Republic for discussion on 30 October 2024.[94] This amendment contains a total of 13 amendment points, one of the most significant being the establishment or introduction of the state's pre-emptive right in water companies. The question of the appropriateness of the proposed legislation is, from the authors' point of view, quite controversial. While on the one hand the proposed concept undoubtedly speaks of an effort to 'follow the trend' of more advanced countries of the European Union, as well as the United States of America, and Canada (in which the area of water management infrastructure is entrusted to the public sector), on the other hand these countries are much more economically stable and independent than the Slovak Republic, which naturally creates controversy about the ability of the Slovak Republic to effectively financially support the water management sector. Even if we take into account that this deficiency can be bridged through foreign investments (especially from the European Union), in

91 | Supreme Audit Office of the Slovak Republic 2024, 3.
92 | Ibid.
93 | Ibid.
94 | The essence of this program (which, according to the Ministry of the Environment of the Slovak Republic, points to a preference for profit over long-term development of water infrastructure) is the 'exchange' of shares of villages and cities for securities in the form of bonds. In this context, the Eastern Slovak Water Company guarantees villages and cities a return with a fixed interest paid once a year at the level of 6% p.a, as well as the right of repurchase (return exchange for shares). Even though this program seems 'risky' (given the danger of weakening or losing shareholder influence), the opposite is true. When participating in this project, villages and cities must retain at least one share. See also: East Slovak Water Company 2024.

the authors' opinion, there is still a high risk of the abuse of power, which, given the past and current political dimension prevailing in the territory of the Slovak Republic, cannot be ignored.[95] Despite the aforementioned impossibility of stating the suitability or unsuitability of the proposed initiative, the authors agree that this concept demonstrates the 'lessons learned' from the adverse consequences of the privatisation of water companies, which resulted in neglect of water infrastructure and a significant increase in prices.

Another, no less important, challenge for the future in this area is the adoption of Directive (EU) No. 2024/1203 of the European Parliament and of the Council of 11 April 2024 on the protection of the environment through criminal law, which replaces Directives 2008/99/EC and 2009/123/EC, which the Member States of the European Union are obliged to transpose into their national laws by 21 May 2026. The implementation of this Directive will change the application practice in the sense that the criminal dimension of illegal water abstraction in the context of the Slovak Republic will not be assessed through the factual basis of theft, but through the new factual basis of illegal abstraction of surface and groundwater, which in the case of natural persons is also associated with a higher prison sentence (three years compared to the current two).[9697] Despite the prevailing tendencies of 'softening criminal law', in the opinion of the authors, this Directive is a clear benefit, with regard to strengthening the element of (not only individual, but also general) prevention, which is an immanent part of the complex measures aimed at preserving the most favourable possible living environment for future generations.

6. Conclusion

The fall of socialist ideologies in 1989 not only initiated social changes, but also political and economic changes. An important tool in promoting these changes was the institution of privatisation, which assumed a rapid change of the previously existing state ownership structures to private ownership relations. In addition to the attribute of speed, the institute of privatisation in the conditions of today's

95 | The authors' distrust in the stability of political power in this area is deepened by the fact that the announced amendment was submitted for discussion by the Government of the Slovak Republic without prior commenting (i.e. without public participation), which, given the principle of transparency, cannot be assessed otherwise than negatively.

96 | For more information, see Art. No. 3 para. 2 letter (m) in conjunction with Art. No. 5 para. 2 letter (e) of Directive (EU) No 2024/1203 of the European Parliament and of the Council of 11 April 2024 on the protection of the environment through criminal law, replacing Directives 2008/99/EC and 2009/123/EC.

97 | For the sake of completeness, it should be noted that Act No. 300/2005 Coll. The Criminal Code, as amended by later legal regulations, also regulates in provision No. 219a the specific factual nature of the unauthorised production, use or storage of a meter verification mark or a meter security mark, through which criminal liability is inferred for actions consisting (also) in unauthorised interventions in water meters.

Slovak Republic was also characterised by the attribute of extensiveness, as almost all production enterprises and shops owned by the state since 1948 (including water management enterprises) were subject to it.

Despite the fact that the process of transformation of water management companies began relatively late, shortly after the start of the new millennium, there was a change in ownership structures and the transfer of decision-making power over water management companies from the State to municipalities and cities, which can be described as a 'return' to the natural state, which assumes more efficient provision of drinking water, wastewater treatment and sewerage by the municipality as an entity that should be (in accordance with the principle of transparency) as close as possible to the citizens. However, this transformation has pointed to several shortcomings, especially the issue of political inconsistency, price instability, the unpreparedness of municipalities for the increase in the agenda, and inefficient financing. Even though these shortcomings have been largely overcome through the Slovak Republic's membership in the European Union, the water sector reform (initiated by its privatisation) cannot be described as effective. The reason is primarily the issue of financing, which significantly intersects with the state of today's water management infrastructure. In particular, even though the quality of drinking water in the Slovak Republic has been at a high level for a long time, the same statement cannot be made in relation to the percentage of residents connected to public water supplies and public sewers. Moreover, even the technical condition of the water management infrastructure cannot be described as satisfactory. Taking into account the above facts, as well as the rate of transformation of the attribute of modernisation and renewal of water management infrastructure, it is therefore reasonable to express concerns about the ability of the Slovak Republic to fulfill the strategic documents of the European Union in the field of the environment, which assume more effective protection and use of water in order to achieve climate neutrality by 2050.

The aim of this paper was to conduct a deeper investigation and understanding of the administration and management of water services in the Slovak Republic by using basic scientific and theoretical methods. The authors are of the opinion that this paper represents a suitable source of knowledge about the development and status of the provision of water management services in the Slovak Republic, which is capable of initiating or deepening informed dialogue in society and represents a suitable basis for comparison with the status of water management infrastructure in other countries.

Bibliography

1. Antimonopoly Office of the Slovak Republic (2008), Analýza postavenia podnikateľských subjektov vo vodárenskom sektore, Antimonopoly Office of the Slovak Republic, Bratislava.
2. Bilišňanský M (2017) Vybrané aspekty cenovej regulácie v konaní pred Úradom pre reguláciu sieťových odvetví, *STUDIA IURIDICA Cassoviensia,* 5(2), pp. 60–74.
3. Concept for the transformation of state-owned water and sewerage enterprises, approved by Government Resolution No. 35 of January 17, 2001.
4. Eastern Slovak Water Company, *Dlhopisový program garantovaných výnosov ™*, https://dlhopisyvvs.sk/ [02.11.2024].
5. Eastern Slovak Water Company, *VVS, a.s. sa stala opäť priekopníkom, ako prvá uviedla do života unikátny project,* https://tinyurl.com/zwadr3a8 [30.10.2024].
6. Environmental Fund, *Úvodná stránka,* https://envirofond.sk/ [06.12.2024].
7. European Union, *Prístupové kritériá (kodanské kritériá)*, https://tinyurl.com/bdeua24t [10.09.2024].
8. Factsheets on the European Union, *Európsky fond regionálneho rozvoja (EFRR)*, https://tinyurl.com/bfjh2kht [06.12.2024].
9. García Coso E (2024) Derecho de la competencia de la UE y mercado interior de la energía. *CUADERNOS DE DERECHO TRANSNACIONAL* 16(1), pp. 226–250, https://doi.org/10.20318/cdt.2024.8422.
10. General part of the explanatory report to Act No. 364/2004 Coll. and on the amendment of Act of the Slovak National Council No. 372/1990 Coll. on offences, as amended (Water Act).
11. General part of the explanatory report to Act No. 394/2009 Coll., amending and supplementing Act No. 442/2002 Coll. on public water supply and public sewerage systems and amending and supplementing Act No. 276/2001 Coll. on regulation in network industries, as amended.
12. Government policy statement of January 17, 1995.
13. Havlíček R (2007) *Spôsob privatizácie vodární vylučuje pomoc z fondov EÚ,* Priatelia Zeme-CEPA, Ponická Huta.
14. Husár J (2013) Hospodárska politika a hospodárske právo, *STUDIA IURIDICA Cassoviensia* 1(1), pp. 64–80.
15. Jakab R (2019) Administratívnoprávne dôsledky ústavnoprávnej ochrany vôd, *STUDIA IURIDICA Cassoviensia* 7(1), pp. 61–67.

16. Jakab R (2023) Prohibition of cross-border water transport in the conditions of the Slovak Republic and its legal consequences, *Journal of Agricultural and Environmental Law* 18(35), pp. 49–63, https://doi.org/10.21029/JAEL.2023.35.49.

17. Jankuv J (2022) Historický vývoj a súčasná podoba práva životného prostredia Euopskej únie v kontexte vplyvu medzinárodného práva životného prostredia, *STUDIA IURIDICA Cassoviensia* 10(1), pp. 12–30.

18. Klasse M (2013) The Impact of Altmark: The European Commission Case Law Responses, in: Szyszczak E & Gronden J W (eds.) *Financing Services of General Economic Interest*, T. M. C. Asser Press, Hague, pp. 35–51.

19. Košičiarová S et al. (2009) *Právo životného prostredia*, Eurokódex. Žilina.

20. Lazorčáková T (2024) EUROPEAN GREEN DEAL: SUCCESS OR FAILURE? *STUDIA IURIDICA Cassoviensia* 12(2), pp. 115–131.

21. Liu L X, Clegg S R & Pollack J (2024) What have we learnt about PPPs?, in: Clegg S R, Ke Y , Devkar G, Mangioni V & Sankaran S (eds.) *Handbook on Public–Private Partnerships in International Infrastructure Development*, Edward Elgar Publishing Limited, Cheltenham, pp. 467–506.

22. Maslen M (2017) *Právna úprava starostlivosti o vody v Slovenskej republike*, Leges, Praha.

23. Ministry of Investments, Regional Development and Informatization of the Slovak Republic, *Minister investícií Raši: Na vodovody a kanalizácie máme aktuálne vyhlásené výzvy za viac ako 350 miliónov eur,* https://tinyurl.com/3ht3y8ux [06.122024].

24. Ministry of the Environment of the Slovak Republic (1994), RSpráva o stave životného prostredia Slovenskej republiky v roku 1992-1993, Ministry of the Environment of the Slovak Republic, Bratislava.

25. Ministry of the Environment of the Slovak Republic (2009), odný Plán Slovenska, Ministry of the Environment of the Slovak Republic, Bratislava.

26. Ministry of the Environment of the Slovak Republic (2021) DPlán rozvoja verejných vodovodov pre územie Slovenskej republiky na roky 2021 – 2027, Ministry of the Environment of the Slovak Republic, Bratislava.

27. Ministry of the Environment of the Slovak Republic (2023), RSpráva o stave životného prostredia Slovenskej republiky v roku 2022, Ministry of the Environment of the Slovak Republic, Bratislava.

28. Ministry of the Environment of the Slovak Republic, *Operačný program Kvalita životného prostredia*, https://www.op-kzp.sk/ [06.12.2024].

29. Ministry of the Environment of the Slovak Republic, *Verejné vodovody a verejné kanalizácie,* https://tinyurl.com/33w4z2n8 [06.12.2024].

30. Morvay K (2005) Všeobecno-teoretická expozícia stratégie transformácie, in: Morvay K et al. (eds.) Transformácia *ekonomiky: skúsenosti Slovenska,* Ústav slovenskej a svetovej ekonomiky Slovenskej akadémie vied, Bratislava, pp. 7–26.

31. Myant M & Drahokoupil J (2013) *Tranzitivní ekonomiky: Politická ekonomie Ruska, východní Evropy a střední Asie,* Academia, Praha.

32. Mylopoulos N & Fafoutis C (2012) Full cost recovery in the urban residential sector according to the Water Framework Directive, *Urban Water Journal* 9(3), pp. 161–176, https://doi.org/10.1080/1573062X.2011.652131.

33. Nagy Z (2019) The question of water and management of water resources from the point of view of domestic environmental financial regulations, *Journal of Agricultural and Environmental Law* 14(26), pp. 162–176, https://doi.org/10.21029/JAEL.2019.26.162.

34. Okáli I (2004) Rozvojová stratégia a ciele hospodárskej politiky, *Ekonomický časopis* 52(3), pp. 239–254.

35. Oleš T & Hudcovský M (2024) Impact of Cohesion Funds on Convergence Club's Economic Growth, *Growth and Change* 55(4), https://doi.org/10.1111/grow.12739.

36. Olsen J (2003) Europeanization, in: Cini M & Pérez-Solórzano Borragán N (eds.) *European Union Politics,* Oxford University Press, Oxford, pp. 333–349.

37. Pokorný J & Černá M (2024) PPP Projects Information and Methodical Support (CZ and SK Comparison), in: Obermayer N & Bencsik A (eds.) *Proceedings of the 25th European Conference on Knowledge Management* 25(1), ECKM, Veszprem, pp. 665–671, https://doi.org/10.34190/eckm.25.1.2372.

38. Seman T, Jakab R & Tekeli J (2020) *Správne právo hmotné Všeobecná časť*, Univerzita Pavla Jozefa Šafárika v Košiciach, Košice.

39. Sokol T & Staničić F (2019) Usluge od opjeg gospodarskog interesa u pravu Europkeia unie i hrvatski regulatoryni okvir u svetsnim upravnim odstvodnim, *Zbornik Pravnog fakulteta u Zagrebu* 69(5-6), pp. 803–833, https://doi.org/10.3935/zpfz.69.56.08.

40. Statutes of the Association of Water Companies.

41. Supreme Audit Office of the Slovak Republic (2024), Správa o výsledku kontroly 2024. Inspection in selected water companies, Supreme Audit Office of the Slovak Republic, Bratislava.

42. Unnerstall H (2006) The Principle of Full Cost Recovery in the EU-Water Framework Directive--Genesis and Content. *Journal of Environmental Law* 19(1), pp. 29–42, https://doi.org/10.1093/jel/eql038.

43. Vincúr P et al. (2001) *Hospodárska politika*, SPRINT, Bratislava.

44. Wallace H (2000) The Domestication of Europe and the Limits to Globalisation, in: *The IPSA World Congress*, Quebec, 1-5 August 2000.