

PUBLIC-PRIVATE PARTNERSHIP AS A RESPONSE TO PUBLIC PROCUREMENT IN ECONOMIC SECTORS

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Abstract: To identify the main differences prevailing in public-private partnership agreements included in individual sectors of the economy.

The study is based on a comparison of 135 public-private partnership contracts concluded until the 31st of July 2019 in various economic sectors. The components of PPP proceedings were analysed that is type of entity, voivodship, duration of the contract period, implementation status, legal basis for the selection of the private partner, and gross investment expenditure. The data has been compiled by sector, which allows a broader view of the PPP aspect as a specific form of public procurement implementation. Descriptive statistics, standardization of variables and Spearman's rho correlation coefficient were used to conduct the study.

The most diverse voivodships are the Masovian voivodship and the Pomeranian voivodship, in which PPP covers as many as 9 different areas. In all sectors, except for energy efficiency, where the only legal basis was PPP in PZP (Article 4. paragraph 2), there was diversity in the choice of a private partner. As for the type of contracting entity, municipalities are the only contracting entity in the following sectors: education, water and sewage management, housing, revitalization.

There are many PPP analyses in the literature on the subject, but they do not refer to the sector analysis including the main components of the contracts included in the PPP.

Keywords: public-private partnership; sector orders.

1. Introduction

The main elements of Poland's economic development are undoubtedly the development of infrastructure and the standard of services rendered in line with social expectations. One of the tools for their implementation may be a public-private partnership (PPP). The need for PPP development is emphasized by the provisions of the "Strategy for Responsible Development". The strategy identifies the need to integrate the private sector's experience in infrastructure management and maintenance, project preparation and implementation, as well as private capital in the implementation of public tasks. Society expects wider accessibility and better

quality of services offered by the public sector (Strategy for responsible development until 2020, 2017).

PPP is an opportunity for Poland's faster development, by providing high quality public infrastructure, along with its financing. Private partner, by investing in the provision of public services, provides resources enabling the introduction of new management and organizational solutions, higher standards of service provision or technical and technological solutions, aimed at reducing the cost of providing public services. PPP may also contribute towards an increase in the efficiency of the use of the European Union (EU) funds, through the implementation of projects combining the EU and private funds.

The purpose of this study is to identify the main differences prevailing in public-private partnership agreements, included in individual sectors of the economy. The results of this study provide a narrow picture of the problem being analysed; however, they can be used for sectoral comparative analysis with the results for PPP contracts in other countries. The study aimed to verify the main trends and directions that distinguish the use of individual components in the studied sectors.

2. Public-private partnership as an innovative form of implementation of public tasks

Public-private partnership involves joint implementation of a venture, based on the division of tasks and risk between the public entity and the private partner (Journal of Laws 2017.0.1834). PPP is one of the most popular innovative procurement models in the field of reorganizing public procurement, especially for large public investments (Ng et al., 2013). Public entities specify final goals, but do not specify in advance how they are to be achieved (Yesomble, 2007).

PPP is the cooperation of public and private entities, aimed at implementing projects or providing services, traditionally provided by public entities (Brzozowska, 2010). This cooperation is based on the assumption, that each party is able to fulfil its own tasks entrusted to it more efficiently than the other party. The parties complement each other in this way, dealing with the very part of the joint task they perform best (Moszoro, 2010). Thanks to the division of tasks, responsibility and risk under the PPP, it is possible to achieve the most economically effective way of creating infrastructure and providing public services (Cenkier, 2009). The described activities cannot be based primarily on public funds. The private party has the right to receive benefits or other advantages from the venture or cash payment from the public entity (Frączkiewicz-Wronka, 2009).

The European Union has avoided the issue of creating a legal definition of public-private partnerships in the initial period. It was only in December 2013, that the General Regulation on the EU Cohesion Policy for 2014-2020 introduced an official definition of public-private partnerships for the first time into the legal order of the European Union. In accordance with art. 2 point 24 of the General Regulation 2014-2020, “public-private partnership means a form of cooperation between public authorities and the private sector, the purpose of which is to increase the efficiency of infrastructure investments or other public service operations by sharing risk, using specialized knowledge of the private sector or obtaining additional sources of capital”.

The Commission has identified four key tasks for the private sector in the PPP systems:

1. providing additional capital.
2. providing alternative management and implementation skills.
3. providing added value to the consumer and the general public.
4. ensuring better identification of needs and optimal use of resources.

In traditional public procurement, unlike in public-private partnerships, the distribution of responsibilities between the parties is uneven. PPP enables the division of project-related responsibilities, which allows better ordering and know-how, for both the customer and the supplier (Krtalic, Kelebuda, 2010).

The benefits of implementing PPP practices apply to both sides and include improved cost-effectiveness, quality, efficiency, risk assessment and transparency throughout the entire procurement process (Majamaa et al., 2008). Although the potential of innovative procurement methods is usually considered to be the most inventive, the decision to choose an innovative procurement procedure is most often justified by financial savings that can be achieved (Uyarra et al., 2014). Finances, as the dominant criterion, often lead to solutions that are not suitable for real service users. In this way, they cause financial losses to be borne by the ordering party and the suppliers, due to higher adjustment and lower life cycle costs, due to user dissatisfaction (Satish, Shah, 2009).

The Innovation Partnership (IP) is a significant change, introduced in the Act from 29th January 2004, Public Procurement Law, by the amendment of 28th July 2016. It allows for loosening of rigid rules for detailed description of the subject of the contract, which may become outdated in the course of performing the public contract. This mode allows for a selection of more than one offer and conclusion of contracts with many contractors. Thus, in some cases, an innovation partnership may be an option for concluding a framework agreement, which can also be concluded with the appropriate application of the provisions on the innovation partnership mode (Journal of Laws of 2016, item 1020).

The transfer of innovative solutions, more efficient resource management and new management models – these are some of the main advantages of PPP projects. This form of investment gives public entities a tool to achieve public goals, while private partners allow for long-term investments under cooperation with a fully reliable partner, guaranteeing the

“banking” of the project with an agreement based on cooperation and mutual relations, defined by the division of tasks and risk, outlined under the PPP contract. In principle, the private party should also obtain measurable benefits from participation in the project (European Commission, 2003).

3. Public-private partnership in the implementation of the tasks of the economy sectors

It is estimated, that maintaining the current pace of infrastructure development in Poland requires the involvement of capital worth PLN 1.5 trillion by 2030. Investment needs concern many key sectors of the Polish economy. One of these sectors is the environmental protection sector. There are plans to build 21,800 km of sewerage network, including 16,900 km after 2015 and the modernization of 4,200 km of sewage network, including 3,500 km after 2015. As part of the railway sector, 8,500 km of railway lines are planned for redevelopment. According to data, at the end of 2015, to cover the existing deficit in the housing sector, it is necessary to build half a million apartments (Government Policy regarding the development of public-private partnership, 2017). A significant modernization of inland roads is also planned, with costs ranging from PLN 24.6 billion to around PLN 90.6 billion. Over PLN 200 billion will be needed to implement road assumptions for 2014-2023 (National Road Construction Program for 2014-2023..., 2015). Moreover, it should be emphasized, that the budgets of public entities do not have sufficient financial resources to implement projects in the field of economic (e.g. transport, environment, energy) and social (e.g. health, education, culture, sport and tourism) infrastructure. It is, therefore, necessary to involve private funds more in the implementation of investments and the provision of public services, to which PPP is the answer.

Government policy, regarding the development of PPP, applies to all sectors of public services, that may be the subject of PPP, which can be used, in particular, to carry out public tasks in sectors such as: environmental protection (water and sewage management, waste management), transport (road, rail, stations, logistics centres, ports), education (e.g. schools, kindergartens, nurseries, universities, research facilities), urban infrastructure (e.g. revitalisation, parking lots, housing), culture, sport, tourism and recreation, health care (infrastructure, equipment), administrative and public buildings (e.g. courts, town halls), ministerial buildings, museums, police stations, fire brigades), telecommunications and IT infrastructure (e.g. broadband networks), energy efficiency (e.g. thermal insulation of buildings, modernization of heating systems) and others.

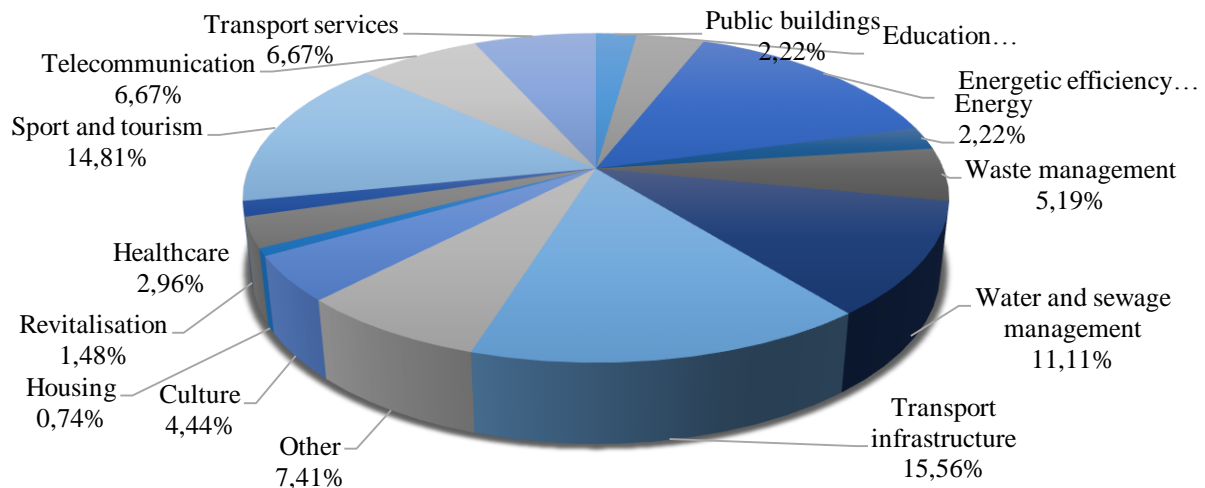


Figure 1. Structure of concluded procedures by sector. Own study based on: PPP project database with signed contracts – July 2019 published by the Public-Private Partnership Platform http://www.ppp.gov.pl/Aktualnosci/Strony/Bazy_projektow_PPP.aspx, 07.08.2019.

Figure 1 presents the structure of proceedings on the Polish PPP market in a system illustrating the activity of individual sectors of public tasks. Between 2009 and the first half of 2019, PPP projects were concluded in fifteen sectors (including “other”), where 45.19% of all (61) concluded contracts took place in three leading sectors (transport infrastructure with twenty-one contracts, sport and tourism with twenty contracts and energy efficiency also with twenty contracts). Fifteen contracts were concluded in the area of water and sewage management and less than ten contracts were concluded in other sectors. Particular attention should be paid to the very frequent repetition of proceedings in the field of sport and tourism, which was mainly due to the large number of small concession projects.

In the regional context, the implementation of PPP projects can have a positive impact on the creation of new jobs and the development of local entrepreneurship. In the macroeconomic perspective, the development of PPP will contribute to an increase in the number and value of investments and public services rendered, which will translate into an increase in public satisfaction. The PPP can bring measurable benefits to public entities and final recipients of services for specific projects. In turn, properly implemented partnerships can, in the long run, help reduce the costs associated with the provision of services by the public sector.

To sum up, public entities tried to apply the PPP model in a very wide range – in virtually all areas of public services; however, with varying degrees of intensity. A positive aspect of this was the accumulation of multiple experiences by the public sector. However, looking at this aspect from another perspective, a certain inconsistency in the development of the PPP market should be noticed. It might be noted, that the public sector did not have well thought-out sectoral strategies in the area of infrastructure.

4. Research methodology

The study is based on a comparison of public-private partnership agreements concluded in various economic sectors. These sectors include: public buildings, education, energy efficiency, energy, waste management, water and sewage management, transport infrastructure, culture, housing, health care, revitalisation, sport and tourism, telecommunications, transport services and others, which could not be classified in the above sectors. The entire analysis is based on a hundred and thirty-five PPP proceedings, concluded up to the 31st July 2019, collected by the Ministry of Investment and Development (MI&D). The development and monitoring of PPP databases is carried out in accordance with the activities set out in the Government Policy in the field of PPP development and in accordance with the amended PPP Act, setting out new rules for monitoring these investments. The database of PPP projects with signed contracts presents all PPP contracts identified by the MI&D, which have been concluded in Poland since the PPP Act of December 2008, the Act on concessions for construction works or services of 2009 (repealed) and the Act on contract concessions for construction works or services of 2016 (PPP Platform, 07/08/2019).

The following components of PPP proceedings were analysed: type of entity, voivodeship, duration of the contract period, implementation status, legal basis for the selection of the private partner, gross investment expenditure and the remuneration model. The above data have been compiled by sector comparison, which allows for a broader view of the PPP aspect as a specific form of public procurement implementation.

The analyses presented in this study were based on the available literature, articles and reports. Descriptive statistics, standardization of variables and Spearman's rho correlation coefficient were used to conduct the study. The results of the analyses are presented in the next part of the article.

5. PPP characteristics by sector

5.1. Type of public entity

Looking at the regional structure of the PPP market, there are clear differences in the level of activity between provinces. The Masovian Voivodeship is the clear leader in all forms of concluded contracts (26 contracts). By the end of the first half of 2019, at least 12 proceedings were concluded in six voivodeships. In addition to the Mazovia, this group includes: Silesia (20 contracts), Pomerania (16 contracts), Lower Silesia (15 contracts), Lesser Poland (13 contracts) and Greater Poland (12 contracts).

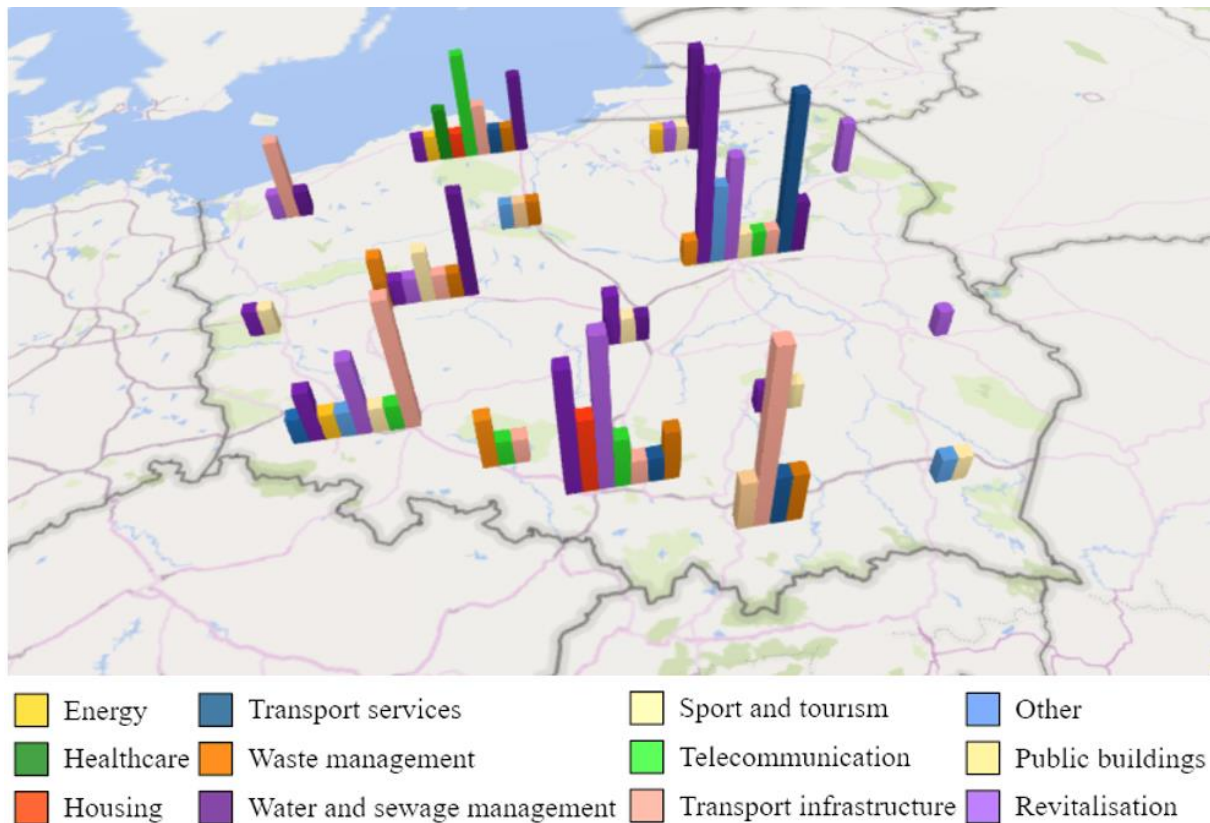


Figure 2. Location of proceedings by sector. Own study based on: PPP project database with signed contracts – July 2019 published by the Public-Private Partnership Platform http://www.ppp.gov.pl/Aktualnosci/Strony/Bazy_projektow_PPP.aspx, 07 August 2019.

When analysing the location of proceedings (Figure 2.), particular attention should be paid to a very large diversity of voivodeships in terms of the dominant sector. The most diverse voivodeships are the Masovian Voivodeship and the Pomeranian Voivodeship, in which PPP covers as many as nine different areas. In Mazovia, contracts relate to areas such as education, energy efficiency, water and sewage management, transport infrastructure, culture, sport and tourism, telecommunications, transport services and the area containing other contracts, not classified to the above areas. Whereas, in the Pomeranian Voivodeship, PPP has developed in such areas as: energy efficiency, energy, waste management, water and sewage management, transport infrastructure, health care, revitalisation, transport services and other areas. One contract regarding sport and tourism was concluded in the Lublin region, two contracts regarding sport and tourism were concluded in the Podlaskie Voivodeship. Lubuskie and Podkarpackie voivodeships concluded only one contract in two sectors. Subsequently, Lubuskie in the areas of energy efficiency and telecommunications and Podkarpackie in culture and telecommunications.

5.2. Legal basis for choosing a private partner

The most popular legal formula, applied when choosing a private partner since 2009, was a concession, used in several varieties. In total, the concession model was used in eighty-six proceedings (63.7% of all completed proceedings). The assumption of the public party initiating the concession proceedings is to shape the provisions of the future contract in such a way, that the private party bears the majority of the economic risk associated with the implementation of the project. The concession model means, that all or most of the remuneration received by a private party comes from sources other than the public entity's budget. Most often, this remuneration is the fees incurred directly by the infrastructure users, paid as part of the project or services provided by the infrastructure operator, and less often other benefits. In the concession model, the private party also bears, in principle, the main part of the expenditure necessary to implement the project.

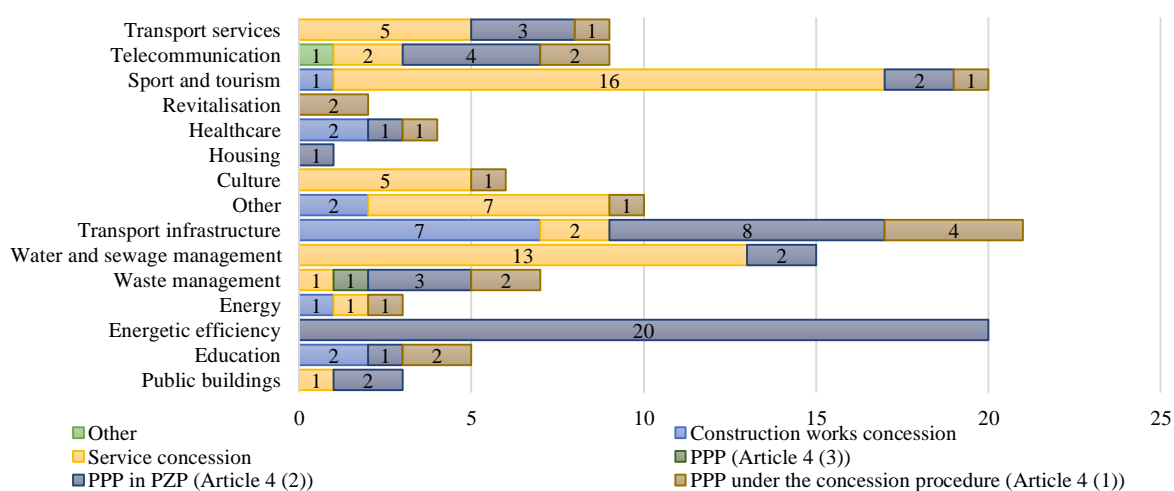


Figure 3. Legal basis for choosing a private partner. Own study based on: PPP project database with signed contracts - July 2019 published by the Public-Private Partnership Platform http://www.ppp.gov.pl/Aktualnosci/Strony/Bazy_projektow_PPP.aspx, 07 August 2019.

Over time, the role of a PPP, regulated in the Act on Public Procurement (currently 48 contracts concluded), is gradually increasing. In this type of contract, the private partner's remuneration comes entirely or mainly from the so-called availability fees, paid by the public entity. This means, that public entities fail to completely avoid budgetary burdens, but they are spread over a multi-annual period. In the traditional model, they would be accumulated in a relatively short period of implementation of the investment phase (maximum two to three years). In the context of risk allocation between the parties, the demand risk, which is the most important long-term business risk related to the PPP project, is transferred to the public entity. For a private partner, this fact significantly reduces investment risk and can, therefore, be considered a major factor in the growing popularity of the PPP, compared to concession formulas.

Analysing the data contained in Figure 3, it should be noted, that in all sectors, except for energy efficiency, where the only legal basis was PPP within the Public Procurement Law (Article 4. paragraph 2), there was diversity. Service concessions dominated in the sport and tourism sector (sixteen contracts), water and sewage management (thirteen contracts) and transport services. In the transport infrastructure sector, two dominant forms of private partner selection should be noted: concession for construction works (33.3%) and PPP within the Public Procurement Law (Article 4. paragraph 2) (38.1%).

5.3. Type of contracting entity

Municipalities are, by far, the most active public entities operating in the PPP sphere. In the period under review, they implemented a total of ninety contracts (combining all types of municipalities and associations of municipalities) (68.18% of all contracts completed in that period). Among them, the leading ones were urban municipalities, that initiated forty proceedings (30.30% of all proceedings).

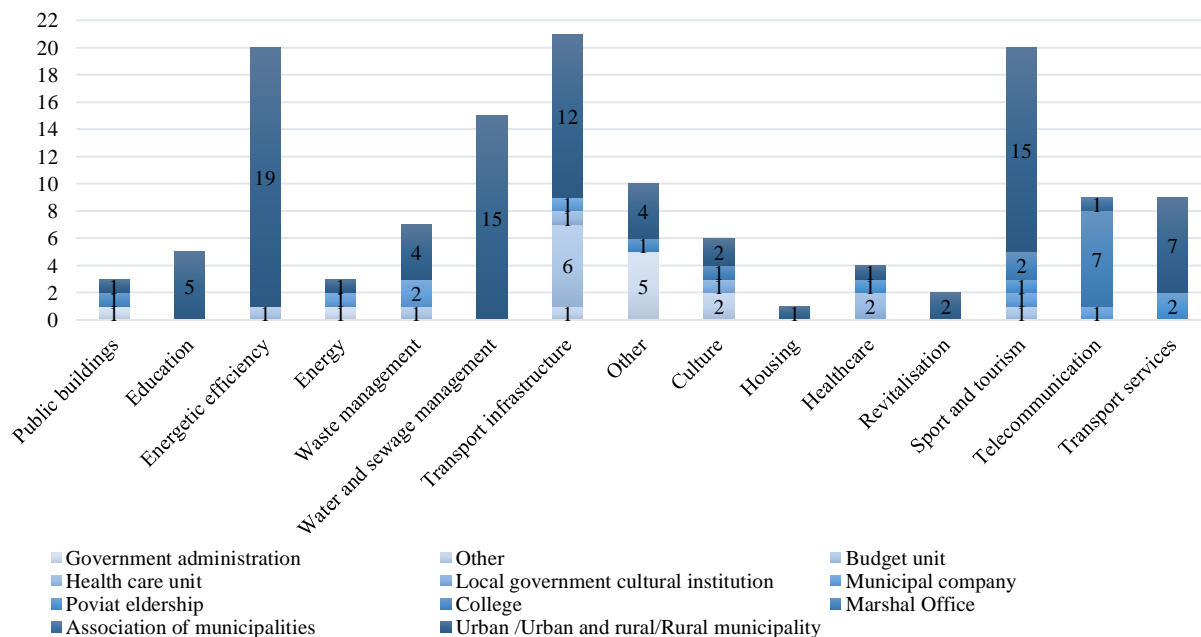


Figure 4. Figure 4. Type of contracting entity. Own study based on: PPP project database with signed contracts – July 2019 published by the Public-Private Partnership Platform http://www.ppp.gov.pl/Aktualnosci/Strony/Bazy_projektow_PPP.aspx, 07 August 2019.

As for the type of contracting entity, taking into account the sectors of the economy (Figure 4), municipalities are the only contracting entities in the following sectors: education, water and sewage management, housing, revitalisation. Municipalities also play a dominant role in the energy efficiency sector (95%), transport services (78%), sport and tourism (75%), waste management (57%) and transport infrastructure (57%).

The confirmation of the dominance of self-governments on the Polish PPP market is also the activity of higher-level self-government bodies (county and marshal offices) and entities associated with local governments, e.g. municipal companies or budgetary units. In the period

from 2009 to the end of the first half of 2019, entities completed a total of thirty-eight PPP proceedings (28.15% of all contracts). Taking into account the sectoral division, local governments dominated in contracts concluded in the telecommunications sector (89%) and culture (67%).

The central government administration acted passively as an initiator of PPP proceedings. The government's activity in identifying potential PPP projects did not translate into the number of concluded contracts. In total, according to data collected at the end of the first quarter of 2019, only seven contracts were implemented: one for public buildings, one for energy and five classified as others.

5.4. Duration of the contract

PPP contracts implemented in Poland in individual areas have a very wide range of contractual periods. This is due to, among others, the inclusion, within the PPP, of contracts which scope is limited solely to the management, maintenance and operation of public sector facilities. Such contracts are usually of a short-term nature. The second group of PPP contracts consists of those, that cover the construction of new facilities or modernization of existing infrastructure. Such contracts usually last for up to a few years. Due to a costly investment, the private entity needs a much longer operating phase to generate revenue.

Table 1.

Duration of the PPP contract

	N (important)	Average	Median	Standard deviation	Min	Max
Public buildings	3	234.33	279.00	99.801	120	304
Education	5	189.60	240.00	120.419	60	300
Energy efficiency	20	156.50	168.00	37.107	96	218
Energy	3	200.00	180.00	34.641	180	240
Waste management	7	251.86	254.00	101.124	120	360
Water and sewage management	15	92.40	36.00	125.526	6	396
Transport infrastructure	21	196.43	144.00	120.021	96	480
Culture	6	130.00	120.00	45.166	60	180
Housing	1	144.00	144.00	x	144	144
Health care	4	268.00	270.00	106.283	172	360
Revitalisation	2	171.50	171,50	38.891	144	199
Sport and tourism	20	105.10	102.00	76.847	12	324
Telecommunication	8	127.75	120.00	34.162	90	180
Transport services	9	36.00	36.00	21.494	10	78
Other	9	94.89	26.00	122.593	12	360

Note. The values given in the table are expressed in months. Own study based on: PPP project database with signed contracts – July 2019, published by the Public-Private Partnership Platform http://www.ppp.gov.pl/Aktualnosci/Strony/Bazy_projektow_PPP.aspx, 07 August 2019.

Table 1. provides information on the structure of the PPP contract period in specific economic areas. Analysing the average duration of the PPP contract, the longest contracts were concluded in the healthcare sector (268 months), waste management (251.86 months) and public buildings (234.33 months). The shortest contracts concerned an area of water and sewage management (92.4 months) and those classified as other (94.89 months). Due to the small

number of contracts concluded in individual sectors and the large standard deviation (from 21 months to even 125 months), the median will be the appropriate measure for the structure analysis. Analysis of the results indicates, that the sectors in which 50% of contracts lasted the longest were the sectors of public buildings (279 months), health care (270 months), waste management (254 months) and education (240 months). The shortest contracts (according to the median) were concluded in the area of transport services (36 months), water and sewage management (36 months) and other (26 months).

5.5. Value of investment outlays or services

Another important feature of PPP, that should undoubtedly be discussed in the sector considerations, is the value of gross investment outlays or services.

Table 2.

Gross investment outlays or services for PPP orders

	N (important)	Average	Median	Standard deviation	Min	Max	Total
Public buildings	3	53.53	52.53	35.21	18.82	89.23	160.58
Education	5	16.08	1.15	33.58	0.40	76.14	80.40
Energy efficiency	20	16.65	10.46	15.45	1.58	56.41	332.90
Energy	3	11.25	13.80	8.04	2.25	17.71	33.76
Waste management	7	202.16	14.00	329.91	2.50	782.78	1415.14
Water and sewage management	15	11.44	3.21	20.16	0.15	62.50	171.55
Transport infrastructure	20	30.85	6.95	45.43	0.62	150.00	617.03
Culture	6	22.00	10.61	27.40	0.23	67.00	131.99
Housing	1	5.74	5.74	x	5.74	5.74	5.74
Health care	4	51.72	5.35	95.33	1.50	194.67	206.87
Revitalisation	2	314.91	314.91	248.71	139.04	490.77	629.81
Sport and tourism	20	21.18	4.09	56.31	0.05	246.00	423.65
Telecommunication	9	184.00	80.00	188.93	1.10	458.36	1655.96
Transport services	9	11.64	0.58	24.28	0.21	73.99	104.73
Other	9	5.93	0.95	7.97	0.15	24.50	53.41

Note. The values given in the table are expressed in PLN million. Own study based on: PPP project database with signed contracts - July 2019, published by the Public-Private Partnership Platform http://www.ppp.gov.pl/Aktualnosci/Strony/Bazy_projektow_PPP.aspx, 07 August 2019.

Table 2. contains information on the structure of gross capital expenditure or services for PPP contracts in individual economic areas. Analysing the average PPP investment outlays, according to agreements concluded in the sectors, the highest investments were, on average, in the area of revitalisation (PLN 314.91 million), waste management (PLN 202.16 million) and telecommunications (PLN 184 million). The average capital expenditure was the lowest in the area of housing (PLN 5.74 million) and those classified as other (PLN 5.93 million). Due to the small number of contracts concluded in individual sectors and the large standard deviation (from 7.97 to 329.91 million), the median will be the appropriate measure for the structure analysis. The analysis of the results indicates, that the sectors, in which 50% of contracts had the highest investment outlays, were the sectors of revitalisation (PLN 314.91

million), telecommunications (PLN 80.00 million) and public buildings (PLN 52.53 million). While the lowest outlays (according to the median) were incurred in the area of transport services (PLN 0.58 million), education (PLN 1.15 million) and others (PLN 0.95 million). On the other hand, looking at the total investment outlays incurred in PPP, the sectors, in which the largest investment outlays were incurred, are telecommunications (PLN 1655.96 million) and waste management (PLN 1415.14 million).

In order to find the relationship between the contract period and the value of investment outlays or gross services, Spearman's rho correlation coefficients were calculated. A statistically significant relationship ($p < 0.01$) was obtained at 0.57, which means, that it was a high correlation (according to J. Guilford's classification $0.5 < \rho \leq 0.7$). Therefore, it can be concluded, that the increase in investment outlays or gross services is strongly associated with the increase in the duration of the contract.

6. Conclusions

Looking at the prospects for PPP development in Poland, it should be noted that, after 2020, the pool of EU funds may be much smaller, which, in turn, will force local governments to look for alternative sources of financing for local investments. Such activities require both the local authorities and the government to introduce an information policy that could promote this form of cooperation more effectively.

Mazovia is the clear leader in all areas of the concluded contracts (twenty six contracts), and the most diverse voivodeships are the Masovian Voivodeship and the Pomeranian Voivodeship, in which PPP covers as many as nine different areas. However, one agreement regarding the area of sport and tourism was concluded in the Lublin region.

It should be noted, that in all sectors, except for energy efficiency, where the only legal basis for choosing a private partner was PPP within the Public Procurement Law (Article 4, paragraph 2), there was diversity. Service concessions dominated in the sectors of sport and tourism, water and sewage management and transport services. In the transport infrastructure sector, two dominant forms of choosing a private partner should be noted: concession for construction works and PPP within the Public Procurement Law (Article 4, paragraph 2).

As for the type of contracting entity, municipalities are the only contracting entities in the following sectors: education, water and sewage management, housing and revitalisation. Municipalities also play a dominant role in the sectors of energy efficiency, transport services, sport and tourism, waste management and transport infrastructure. The activity of senior self-government bodies is also the confirmation of the dominance of local governments on the Polish PPP market. Local governments dominated in contracts concluded in the telecommunications

and culture sectors. The central government administration acted passively as the initiator of PPP proceedings – only seven contracts concluded.

The median analysis of the duration of the contract indicates, that the sectors, in which 50% of contracts lasted the longest, were contracts in the areas of public buildings, health care, waste management and education. Whereas the shortest contracts (according to the median) were concluded in the areas of transport services, water and sewage management and others.

Areas, in which 50% of contracts were characterized by the highest investment outlays, were: revitalisation, telecommunications and public buildings. Whereas the lowest outlays (according to the median) were incurred in the areas of transport services, education and others. On the other hand, looking globally at investment outlays or gross services, the sectors, in which the largest investment outlays were incurred, are: telecommunications and waste management.

In the regional context, the implementation of PPP projects can have a positive impact on the creation of new jobs and the development of local entrepreneurship. PPP has a chance for the best development in the housing sector, especially housing construction for rent, with regulated rents. The difference between the regulated rent and the amount covering costs and ensuring profit is paid in the form of an availability fee. The next promising sectors are: defence and energy sectors. The greatest demand for PPP projects will probably appear at the most capital-intensive investments, and thus, above all, in transport, such as highways, tunnels, viaducts. These are complex technical and high-expenditure projects. An important area is also the urban sphere, related to services for residents. The private sector, thanks to PPP, transfers know-how, which translates into an improvement in the quality of everyday life. In larger cities, public service standards are rising and are high, but in smaller towns, there is often only one supplier. Citizens have no alternatives, but if there are private partners, the situation changes drastically.

References

1. Brzozowska, K. (2010). *Partnerstwo publiczno-prywatne w Europie. Cele, uwarunkowania, efekty*. Warszawa: CeDeWu.
2. Cenker, A. (2009). *Partnerstwo publiczno-prywatne jako metoda wykonywania zadań publicznych*. Warszawa: Oficyna SGH.
3. Frączkiewicz-Wronka, A. (2009). *Zarządzanie publiczne – elementy teorii i praktyki*. Katowice: Wydawnictwo Akademii Ekonomicznej im. Karola Adamieckiego.
4. Krtalic, S., Kelebuda, M. (2010). *The role of the public-private partnership in providing of public goods: Possibilities and constraints*. Fifth International Conference of the School of Economics and Business in Sarajevo (ICES2010). Proceedings, 1-19.

5. Majamaa, W., Junnila, S., Doloid, H., Niemistö, E. (2018). End-user oriented public-private partnerships in real estate industry. *International Journal of Strategic Property Management*, 12(1), 1-17.
6. Moszoro, M. (2010). *Partnerstwo publiczno-prywatne w sferze użyteczności publicznej*. Warszawa: Wolters Kluwer.
7. Ng, S.T., Wong, J.M.W., Wong, K.K.W. (2013). A public private people partnerships (P4) process framework for infrastructure development in Hong Kong. *Cities*, 31, 370-381.
8. Platforma PPP, <http://www.ppp.gov.pl>, 07.08.2019.
9. *Polityka Rządu w zakresie rozwoju partnerstwa publiczno-prywatnego* (2017). Załącznik do uchwały nr 16/2017 Rady Ministrów z dnia 26 lipca 2017 r., (RM-111-83-17).
10. *Program Budowy Dróg Krajowych na lata 2014-2023 (z perspektywą do 2025 r.)* (2015). Załącznik do uchwały nr 156/2015 Rady Ministrów z dnia 8 września 2015 r.
11. Satish, D., Shah, P. (2009). A Study of Public Private Partnership Models. *IUP Journal of Infrastructure*, 7(1), 22-38.
12. *Strategia na rzecz odpowiedzialnego rozwoju do roku 2020 (z perspektywą do 2030 r.)* (2017). Warszawa: Ministerstwo Rozwoju, Departament Strategii Rozwoju, ISBN 978-83-7610-615-1.
13. UKE (2018). *Raport o stanie rynku telekomunikacyjnego w Polsce w 2017 r.*, <https://bip.uke.gov.pl/raporty/raport-o-stanie-rynku-telekomunikacyjnego-w-2017-roku,20.html>, 16.05.2019.
14. Ustawa z dnia 19 grudnia 2008 r. o partnerstwie publiczno-prywatnym, Dz.U.2017.0.1834.
15. Ustawa z dnia 22 czerwca 2016 r. o zmianie ustawy – Prawo zamówień publicznych oraz niektórych innych ustaw, Dz.U. z 2016 r. poz. 1020.
16. Uyarra, E., Edler, J., Garcia-Estevez, J., Georghiou, L., Yeow, J. (2014). Barriers to innovation through public procurement: A supplier perspective. *Technovation*, 34, 10, 631-645.
17. Yescombe, E.R. (2007). *Public-private Partnerships: Principles of Policy and Finance*. Amsterdam: Elsevier.