

THE IMPACT OF THE EFFICIENCY OF ADMINISTRATION OF TERRITORIAL PLANNING PROCESSES ON THE DEVELOPMENT OF TERRITORIES: CASE STUDY OF PAGĖGIAI MUNICIPALITY, LITHUANIA

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Abstract

Recently, the opinion has been expressed that the phasing of the processes of preparation of territorial planning documents, depending on the institution that administers it, hinders the processes of preparation of territorial planning documents by established procedural actions. The aim of the article is to evaluate the impact of the efficiency of the administration of territorial planning processes on the development of territories. The object of the research is the complex and special territorial planning documents prepared in the territory of Pagėgiai municipality. Pagėgiai municipality was chosen because the preparation of planning documents in the municipality has slowed down recently, therefore it is important to assess the efficiency of administration of the prepared territorial planning document processes, possible impact on further territorial development, and provide recommendations to ensure more efficient and faster territorial development. During the research, it was established that during the period between the years 2010-2020 only 1 state-level territorial planning document was registered in the territory of Pagėgiai municipality (i.e. 0.69% of those registered in the Republic of Lithuania and 14.29% in Tauragė County). 7 (i.e. 0.52% of those registered in the Republic of Lithuania and 18.42% of those registered in Tauragė County) were registered in the municipality at the municipal level. Territorial planning documents were registered at the local level (i.e. 0.22% of those registered in the Republic of Lithuania and 5.4% in Tauragė County). The analysis of the processes of the prepared planning documents and the interviews of experts revealed that the planning procedures performed by the administering authorities are inefficient: not all the administering authorities consistently carry out the assigned procedures, delay or evaluating the planned decisions within the legal deadline. According to experts, the reason for the inefficient performance of procedures is the lack of human resources in the administering institutions or their inadequate competence. As a result, the improperly performed procedures of territorial planning documents have a negative impact on the planned territory, slow down its development, or the most suitable possible development direction of the planned territory has not been assessed. After performing a multi-criteria analysis of the prepared territorial planning documents, it was established that in the period under review, the most effective document of complex territorial planning was prepared in the territory of Pagėgiai municipality - "Adjustment of the detailed plan of the prepared territory in Vilnius st. 16 A, Pagėgiai". The rating indicator was 0.0806. The document of complex territorial planning "Adjustment of Pagėgiai city comprehensive plan" stood out with the lowest efficiency, the rating indicator was - 0.0676.

Key words: territorial planning, efficiency, administration.

Introduction

Territorial planning affects society as a whole, and the economic, ecological (Gustafsson et al, 2019) and territorial social development depend on it. Territorial planning is one of the most important instruments managed and planned by each state, which provides an opportunity to organize diverse activities in the planned territory in a coherent and efficient manner (Tiškus, 2010). It reflects the economic, social and cultural literacy of the country. Optimal territorial planning promotes the country's economic growth and has an impact on improving the well-being of the population (Darham, Mahasiswa, 2019) and economic development, investment attraction in the territory (Marks-Bielska and Kurowska, 2017; Marks-Bielska et al, 2020).

Recently, the opinion has been expressed in the society that the phasing of the processes and procedures for the preparation of territorial planning documents, depending on the institution that administers it, hinders the processes for the preparation of territorial planning documents through established procedural actions. The preparation processes of territorial planning documents are artificially delayed, the coordination procedures take much longer than provided for in the legal acts, and the legal acts regulating territorial planning are difficult to implement, which negatively impacts the administrative processes. For these reasons, the development of territories is slowing down, as territorial planning documents are being prepared for a longer period of time than is expected, which is why the investment in the planned development of territories is lost (Blotnis, 2018). Territorial planning processes need to be implemented in a way that does not become bureaucratic but

contributes to the country's territorial development (Martinez, 2017). According to A. Višnevskaja (2009), the processes of organizing territorial planning in Lithuania are partially inefficient, take longer than provided for in legal acts, are inflexible, and some of the functions of institutions are duplicated. Comparing the efficiency of the German, Polish and Lithuanian planning systems, it can be seen that according to the territorial planning policy, Germany is in the first place, Poland in the second place, and Lithuania in the third place, therefore it is necessary to improve the Lithuanian territorial planning system.

In order to create a harmonized and effective territorial planning system, it is necessary to ensure a legal framework that is fully harmonized at all levels of planning. In order to achieve effective territorial development, it is expedient to involve the whole society, and public and private sectors in the preparation and implementation of solutions in territorial planning documents (Maksin, 2014).

When planning territories, it is necessary to set priorities for the use of resources, assess each planned territory, and its peculiarities and determine the direction of development of the territory in the most efficient way. Effective space planning reduces damage to nature and society. Territorial planning must be inseparable from the sustainable and efficient development of territories (Ovchinnikova, 2016).

Territorial planning must meet the needs of society, but nature must also be preserved in a way that conserves and uses its resources sustainably. It is also necessary to reconcile planning with socio-economic development, taking into account scientific, social and political aspects - only then can territorial planning be effective, i.e. when all areas directly or indirectly affected by territorial planning are taken into account (Angers et al., 2020). L. Staiano et al. (2020), based on the example of South America, argue that territorial planning has a significant impact on land use and land cover change and that territorial planning must take into account the consequences of the decisions made for both the ecosystem and human well-being.

The aim of the research is to evaluate the impact of the efficiency of the administration of territorial planning processes on the development of territories.

Methodology of research and materials

The study analyzes the processes of preparation and implementation of complex and special territorial planning documents prepared in the territory of Pagėgiai municipality, their impact on the planned territories. Pagėgiai municipality was chosen because according to the data of the Register of Territorial Planning Documents (hereinafter - TPDR), since 2010, only 3 state, 8 municipal, 81 local levels special and / or complex territorial planning documents have been registered in the territory of Pagėgiai municipality. However, during the last 5 years, only 2 states, 3 municipal and 16 local level special and / or complex territorial planning documents have been prepared in the territory of Pagėgiai municipality. As can be seen from the above-mentioned numbers, a slowdown in the preparation of territorial planning documents is observed in the territory of Pagėgiai municipality, therefore it is important to analyze the efficiency of administration of prepared territorial planning documents, its possible impact on further territorial development and provides recommendations to ensure faster and more efficient territorial development.

Pagėgiai municipality is an administrative unit of the territory in western Lithuania, bordering the municipalities of Tauragė, Jurbarkas, Šilutė districts and the Russian Federation, the center of the municipality is the city of Pagėgiai. The total area of the municipality is about 537 km², the municipality has 5 elderships: Lumpėnai, Pagėgiai, Vilkyškiai, Stoniškės and Natkiškės. According to the data of the State Enterprise Center of Registers, 2 towns, 1 township, and 99 villages were registered in the municipality.

The study performed a detailed statistical analysis of special and complex territorial planning documents prepared by Pagėgiai municipality in 2010–2020, and assessed the administration of the processes of territorial planning documents prepared in the territory of the municipality. During the analysis of the administrative processes for the preparation of the prepared territorial planning documents, the administrative processes and procedures for the preparation of the territorial planning documents prepared since 2015 were assessed. The sample of the study from 2015 has been determined taking into account that TPDRIS has been operating in Lithuania only since October 5, 2015, and it is currently the only source, where all approved spatial planning documents and their essential solutions can be found. The study identifies the problems arising in the field of territorial planning and their impact on the further development of territories. Specialists / experts of institutions administering territorial planning processes were interviewed in the 4th quarter of 2021 and the 1st quarter of 2022 using a structured interview method. Three of them work in Pagėgiai municipality administration and two - in Kaunas district municipality administration. The opinion of the drafters of territorial planning documents

was assessed by interviewing three specialists of UAB Kelprojektas. A total of 8 experts participated in the structured interview.

For statistical analysis, data were obtained from the TPDR. For a detailed evaluation of complex and special territorial planning documents, data were obtained from the Territorial Planning Document Preparation Information System (hereinafter - TPDRIS).

The aim of the multi-criteria analysis was to determine the most efficiently prepared territorial planning document in the territory of Pagėgiai municipality since 2015, in terms of administration of processes and procedures, and having a clear positive value for further development of the planned territory. PROMETHEE software was selected for the analysis and the following criteria were used (Table 1).

Table 1

Criteria for multi-criteria analysis to determine the most effective prepared territorial planning document
(Source: compiled by the authors)

Criterion	Justification of the criterion	Unit of measurement
Duration of preparation of the territorial planning document	The duration of the preparation of territorial planning documents affects the costs of the preparation of documents (material and / or human resources). The shorter the preparation time of the planning document, the more rational the preparation of the territorial planning document, and the more efficient the process. The solutions of the territorial planning document are determined taking into account the sustainable environment, and the conflict of interest is avoided which prolongs the preparation time.	Months (months)
Involvement of the public in the preparation of territorial planning solutions and proposals	Territorial planning becomes more effective when the public is involved in the process of drafting it and expresses its position on the issue. The received proposals help to form more efficient and environmentally acceptable solutions for the document being prepared, which will have a positive impact on the planned territory in the future.	Yes/No
Ecological, economic, and social well-being have been taken into account when planning the territories	Territorial planning becomes effective when all areas (natural resources, landscape, socio-economic links) that are directly or indirectly affected by territorial planning are taken into account, then territorial development becomes fully sustainable through the implementation of planned solutions.	Yes/No
An environmental impact assessment or selection has been carried out	Territorial planning becomes effective when the impact of the adopted decisions on the planned territory in the future is assessed; when planning the territories, it is necessary to take into account the consequences of the adopted decisions on land use and changes in its cover.	Yes/No
The development of engineering infrastructure is planned	In order to achieve effective territorial development by preparing territorial planning documents (comprehensive plans, special and detailed plans), which indicate the development directions of the territory when planning residential areas, it is necessary to provide for the development and redevelopment of engineering infrastructure.	Yes/No
Size of the planned territory	The size of the planned territory influences the efficient development of the territories. The larger the planned territory, the more effective the planning becomes in the future perspective because during the planning process it is possible	Hectares (ha)

	to comprehensively assess the planned territory and plan larger development directions. Meanwhile, the administrative costs of planning procedures remain the same as for planning a smaller territory.	
A re-coordination of the territorial planning document has been carried out	Re-coordination of the territorial planning document with the institutions prolongs the time of preparation of the territorial planning document being prepared, according to which the planned territory is negatively affected and its development is slowed down. The re-coordination of the solutions of the territorial planning document doubles the administration of procedures and the irrational use of human and material resources.	Yes/No
Automatic coordination of the territorial planning document has been performed or the last day of coordination has been agreed	Automatic coordination of territorial planning documents may have a negative impact on the further development of territorial plans, as the impact of the decisions of the planning document on the planned territory has not been assessed by the responsible authority. If the coordination is carried out on the last day, it is likely that the responsible authorities will not fully assess the planned solutions, which will make the development of the planned territory inefficient or even potentially unfavorable for the environment.	Yes/No
Areas of planning	Effective development of territories is when the planning of the territory takes into account as many planning areas as possible, the comprehensively planned territory has a positive impact on its development when planning investments and the development opportunities of the territory can be foreseen.	Units

The numerical values of the criteria were generated by evaluating the solutions of the prepared territorial planning documents obtained from TPDRIS and TPDR. The systematized data were combined into the decision analysis method PROMETHEE. In the course of the multi-criteria analysis, the directions of the criteria were determined, and they were selected taking into account the usefulness or uselessness of the criterion for the implementation of the set goal of the analysis (Table 2).

Table 2

Multi-criteria analysis data matrix and criteria directions. (Source: compiled by the author)

Planning document	Criterion*								
	1	2	3	4	5	6	7	8	9
	Min	Max	Max	Max	Max	Max	Min	Min	Max
Coordination of the detailed plan of the prepared territory in Vilniaus Str. 16 A, Pagėgiai	8.7	No	Yes	No	Yes	0.3	No	No	2
Coordination of Pagėgiai city comprehensive plan	17.1	No	Yes	No	Yes	668.5	No	Yes	5
The Rambynas Regional Park Planning Scheme (boundary and management plans)	23.7	Yes	Yes	No	Yes	4864.9	Yes	Yes	6
Engineering infrastructure development plan for the special state electricity power system synchronization project “Construction of 330 kV power transmission line Kruonis HPP – Bitėnai”	21.4	No	Yes	Yes	Yes	750.8	No	Yes	2
Engineering infrastructure development plan for the special state electricity system	21.4	No	Yes	Yes	Yes	1035.2	No	Yes	2

synchronization project “Construction of 330 kV power transmission line Darbėnai – Bitėnai”									
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*1- Duration of preparation of the territorial planning document; 2 - involvement of the public in the preparation of territorial planning solutions and proposals; 3 - ecological, economic and social well-being has been taken into account in the planning of the territory; 4 - environmental impact assessment or selection has been performed; 5 - development of engineering infrastructure is planned; 6 – the size of the planned territory; 7 - re-coordination of the territorial planning document was performed; 8 - automatic coordination of the territorial planning document has been performed or the last day of coordination has been agreed; 9 - planning areas

Based on the obtained results, the alternative selected to implement the goal / objective of the multi-criteria analysis, the recommended Q and P values of the software used, and the methodology for the evaluation of the criteria were selected (Table 3).

Table 3

Thresholds and priority functions used in multi-criteria analysis (Source: compiled by the authors)

Criterion	Q	P	Priority function
Duration of preparation of the territorial planning document	4.89	11.75	Linear
Involvement of the public in the preparation of territorial planning solutions and proposals	Yes/No	Yes/No	Normal
Ecological, economic and social well-being have been taken into account in the planning	Yes/No	Yes/No	Normal
An environmental impact assessment or selection has been carried out	Yes/No	Yes/No	Normal
The development of engineering infrastructure is planned	Yes/No	Yes/No	Normal
Size of the planned territory	1854,68	3873,86	Linear
A re-coordination of the territorial planning document has been carried out	Yes/No	Yes/No	Normal
Automatic coordination of the territorial planning document has been performed or the last day of coordination has been agreed	Yes/No	Yes/No	Normal
Areas of planning	1.66	3.86	Linear

After the research and the achievement of the research goal, the relevant research conclusions were formulated based on the obtained results.

Discussions and results

According to the data of the TPDR, from 2010 to 2020, 1 state level territorial planning document was registered in the territory of Pagėgiai municipality, which accounted for 0.69% of the state level planning documents registered in the Republic of Lithuania and 14.29% in Tauragė County (Table 4).

Table 4

Number of territorial planning documents registered in 2010-2020 by levels of territorial planning documents (Source: compiled by the authors using TPDR data)

State level			Municipal level			Local level		
The Republic of Lithuania	Tauragė County	Pagėgiai municipality	RL	Tauragė County	Pagėgiai municipality	The Republic of Lithuania	Tauragė County	Pagėgiai municipality
144	7	1	1340	38	7	35713	1473	80

The data presented in Table 4 show that 7 municipal territorial planning documents were registered in Pagėgiai municipality during the study period, these registered documents make up 0.52% of the municipal planning documents registered in the Republic of Lithuania and 18.42% in Tauragė County. 80 local level documents were registered in the municipality, which accounted for 0.22% of the local level territorial planning documents registered in the Republic of Lithuania and 5.4% in Tauragė County.

During the detailed statistical analysis of complex and special territorial planning documents prepared in the territory of Pagėgiai municipality, it was noticed, that the amount of both special and complex territorial planning documents prepared in the analyzed period is unstable, changing every year (Figure 1).

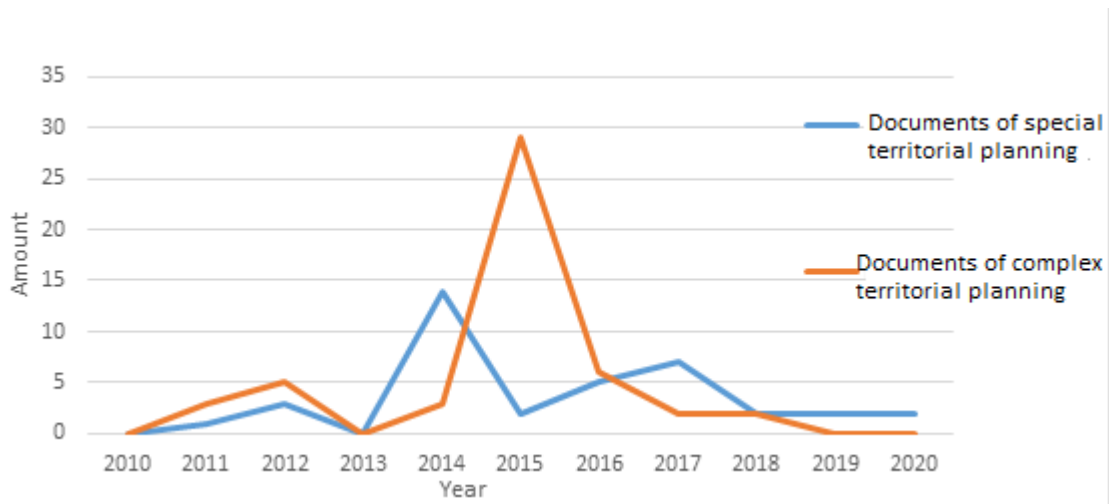


Fig. 1. Volumes of preparation of territorial planning documents in Pagėgiai municipality in 2010 - 2020 (Source: compiled by the authors based on TPDR data)

The data shown in Figure 1 show that the volume of complex territorial planning documents prepared in the municipality in 2015 increased significantly compared to the previous and subsequent years, and the volume of special territorial planning documents was one of the smallest. Taking into account such volumes of preparation of territorial planning documents it can be concluded that 2015 is distinguished by the fact that the territory of the municipality developed the most at that time. Meanwhile, in 2010 and 2013, no special or complex territorial planning documents were prepared in the territory of Pagėgiai municipality, i.e. the development of municipal territories was practically non-existent. In 2014, the need for special territorial planning documents increased the most, when separate activities and their development were planned in the territory of the municipality. During the rest of the period, the volumes of special and complex territorial planning documents in Pagėgiai municipality were very similar and no major differences were observed.

Since the beginning of TPDRIS operation in the territory of Pagėgiai municipality, 7 territorial planning documents have been prepared in the system, of which 3 are complex territorial planning documents, 4 – are special territorial planning documents.

During the research, one of the most characteristic analyzed territorial planning documents prepared in the territory of Pagėgiai municipality, the preparation and administration of which had a negative impact on the development of territories is the level planning of the complex plan “Correction of the detailed plan of the land plot in Pagėgiai, Vilniaus Str. 16A”. During the preparation of this territorial planning document, the planning procedures took about six months, due to the discontinuation of the detailed planning process. The reason for the termination of the planning document was that one of the two tasks was incorrectly formulated in the decision made by the order of the Director of Pagėgiai municipality to start preparing the detailed plan adjustment and setting the tasks, which read as follows: “inaccuracy is observed in this formed task, i.e. the use of the land is not specified correctly. Based on the description of the content of the land use method established for the land plot: “Territories of communication and engineering communications service objects” (Dėl pagrindinės ..., 2005). Thus, the institution administering the preparation of the territorial planning document,

in this case, the Pagėgiai municipality administration, during the preparatory phase, following the procedures established in legal acts, introduced the above-mentioned factual error in the wording of the tasks. The occurrence of this error has slowed down the development of the redeveloped area, as the preparation of the planning document has been delayed by repeating the planning process. The preparation of the planning document became inefficient in terms of the administration of the procedures, as the administration of the preparatory phase procedures was repeated, which required additional material and human resources. Also, all this negatively affected the development of the territory, it slowed it down, as the plot of land to be formed was demolished, the construction of a new building, a shopping center and a short-term parking lot, and protective greenery was the needs of the population are also being met, but unfortunately, this has not been the case. The planned development of the territory has slowed down, for the reason previously identified, as a result of which it has had a negative effect on the economic side of the development of the territory, i.e. business entities and their plans to build a shopping center were unbalanced, and the social needs were delayed as well as the installation of protective greenery was delayed for ecology. It can be seen that the whole mentioned situation also negatively affected the implementation of the decisions of the Comprehensive Plan of Pagėgiai City, slowing it down, as the decisions of the Comprehensive Plan also provided for the development of protective greenery and commercial development in the planned territory. That such situations have a negative impact on the development of territories was confirmed by the opinions of experts expressed during the interviews, when the interviewed specialists of the Pagėgiai municipality administration stated that *“the administration of territorial planning processes and procedures has an impact on the development of territories. Decisions or shortcomings identified during the administration may have a direct negative impact on the further development and opportunities of the territory. Only proper administration of territorial planning processes and procedures ensures sustainable development of territories and rational urbanization”*.

Another characteristic document of complex, local level territorial planning prepared in the territory of Pagėgiai municipality, by which the administration of preparation processes and procedures had a negative impact on the development of territories, was the “adjustment of the comprehensive plan of Pagėgiai City”. In the process of preparation of the planning document, the procedures of the preparation phase lasted the longest (almost one year), which was caused by the delay of the preparation of the planning document, which hindered the preparation process and slowed down the development of the planned territory (Table 5).

Table 5

Duration of the phases of preparation of the territorial planning document “Adjustment of the Comprehensive Plan of Pagėgiai City” (Source: compiled by the authors using TPDRIS data)

Title of the territorial planning document	Duration of the preparatory phase	Duration of the preparatory phase	Duration of preparation for the final phase
"Adjustment of the Comprehensive Plan of Pagėgiai City"	1 month and 27 days	11 months and 1 day	4 months and 6 days

It is important to mention that in the process of preparation of the above-mentioned territorial planning document, the administration of the preparatory phase procedures was quite rational in terms of time, i.e. took up to 2 months, which was influenced by the efficient administration of the planning organizer's procedures. Evaluating the procedures performed by the administrative institutions in the process of preparation of the planning document it was established, that as many as 12 institutions administering the procedures, including the administration of the planning organizer - Pagėgiai municipality, participated in the planning process. The analysis of the procedures performed by the managing authorities showed that the issuance of planning conditions took on average about 6 working days, during which not all managing authorities submitted planning conditions to the prepared document, therefore an automatic response was provided after the deadline for submission of planning conditions generated by the system. For this reason, it can be said that this procedure of preparing a territorial planning document has become partially inefficient, and for the above-mentioned reasons, planning territories have not been fully assessed in the preparation of planning decisions. During the

structured interview, the specialists of Pagėgiai municipality administration stated that *"during the planning, the set goals of the preparation of the planning document are implemented, but in the process of preparation there are shortcomings that prevent the prepared planning document from being as effective as possible - delay of procedures, long preparation time"*. Therefore, based on the situation described above and the results of the interviews, it can be stated that the identified delays in the procedures (in this case, the preparation of planning conditions) have had a negative impact on the development of the planned territory.

The procedure for coordinating the planned solutions in the process of preparing the "Adjustment of the Pagėgiai City Comprehensive Plan" took an average of 8-9 working days. During this procedure, the two managing authorities did not evaluate the planned solutions, and the system automatically reconciled the solutions after the deadline. It is also important to mention that one of the institutions coordinating the solutions - the State Enterprise Lithuanian Road Administration - coordinated the solutions with a remark stating that a road protection zone must be established for the planned territory, which did not exist. However, after inspecting the prepared planning document within 10 working days, the State Territorial Planning and Construction Inspectorate under the Ministry of Environment established that the planning document complied with the established requirements, and administrative procedures were performed without violating the preparation of the planning document.

Thus, in the process of preparation of the planning document analyzed above, untimely or completely non-performed procedures had a negative impact on the development of the planned territory. Considering that the goal of the "Adjustment of Pagėgiai City Comprehensive Plan" is focused on the landscape, natural frame, and urban territory adjustment, expanding them, the failure of the institutions administering the procedures negatively affected the urban development, ecological balance, and landscape formation of the planned territory.

The authorities did not fully comply with the planning requirements, which did not substantially assess the existing landscape and its specificity, and therefore the decisions that have been or will be redeveloped in the future do not ensure positive actions for the redevelopment of the site's ecological environment, balance, landscape, its uniqueness or urbanism. During the interview, such assumptions were confirmed by the specialists of Kaunas District Municipality Administration, stating that *"planning processes and procedures have an impact on the further development of territories, only properly performed procedures have a positive impact on planned territories, as to provide planning conditions, to assess the compliance of decisions or requests with the higher level territorial planning document. If it is found that the draft planning document contradicts the higher level territorial planning document or the interests of third parties are violated, the planning conditions may not be issued, the territorial planning document may not be prepared, the process of the planned document would negatively affect the development of the planned territory"*.

"Summarizing the detailed analysis of the procedures for the preparation of the above-mentioned territorial planning documents, it can be stated that the most common problems in the process of preparation of the planning document are related to complaints, inadequate legal regulation, problems in coordination and publicity of documents lack expertise, lengthy and complex procedures, lack of smooth inter-institutional cooperation and conflicts of interest. According to the specialists of Kaunas District Municipality Administration, *"the most common problems in the process of preparation of the territorial planning document are related to complaints and / or mandatory requirements. Then the document preparation process is suspended until the received complaints are examined and all interested parties are satisfied. It is often the case that complaints are transferred to the courts, which requires additional resources due to the costly and lengthy court proceedings."*

To avoid these identified problems and litigation, the interviewed experts suggest providing additional information to stakeholders, familiarizing them with the current situation and seeking and proposing alternative solutions acceptable to all stakeholders, and greater oversight of territorial planning processes.

To assess the efficiency of the administration of territorial planning processes according to the established criteria of multi-criteria analysis (Table 1), the most efficient territorial planning document in terms of process and procedure administration has been established in Pagėgiai municipality since 2015 and has a clear positive value for further development of the planned territory. After performing the criteria ranking test, it was determined that in the territory of Pagėgiai municipality the territory planning document of complex planning "Adjustment of the detailed plan of the prepared territory in Vilniaus Str. 16 A, Pagėgiai" with the criteria ranking of 0.0806 was most effectively prepared (Figure 2).

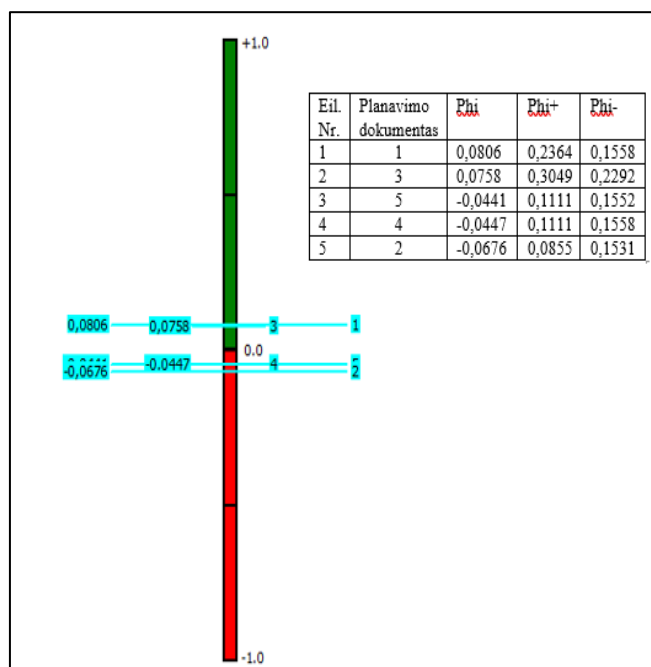
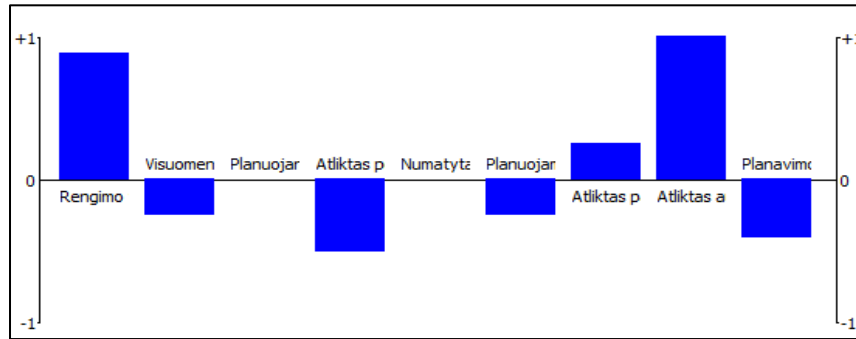


Fig. 2. PROMETHEE ranking test: 1 - adjustment of the detailed plan of the prepared territory in Vilniaus Str. 16 A, Pagėgiai; 2 - adjustment of the Comprehensive Plan of Pagėgiai City; 3 – The Rambynas Regional Park planning scheme (boundary and management plans); 4 - the engineering infrastructure development plan of the special national electricity system synchronization project “Construction of the 330 kilowatt electricity transmission line Kruonis PSHP – Bitėnai”; 5 - engineering infrastructure development plan for the special national electricity system synchronization project “Construction of the 330 kilowatt power transmission line Darbėnai – Bitėnai” (Source: compiled by the authors using PROMETHEE software)

According to the data presented in Figure 2, another territorial planning document was prepared quite effectively - “The Rambynas Regional Park planning scheme (boundaries and management plans)” (ranking indicator - 0.0758), which did not differ significantly in its efficiency from the mentioned before. The complex territorial planning document “Adjustment of the Comprehensive Plan of Pagėgiai City” prepared in the territory of Pagėgiai municipality had the lowest efficiency, the ranking indicator was -0.0676. In detailing the effectiveness of the prepared territorial planning documents, the analysis identified the criteria that positively influenced the process of preparing the planning document. The prepared complex territorial planning document “Adjustment of the detailed plan of the prepared territory in Vilniaus Str. 16 A, Pagėgiai” was positively affected by only three criteria, i.e. those criteria with values greater than 0 (Figure 3).

As can be seen from the presented figure, the efficiency of the planning document was determined by the short preparation time, the lack of re-coordination of the planned solutions, and the lack of automatic approvals. It was also found that the criteria related to the assessment of engineering infrastructure and ecological, economic, and social well-being did not affect the efficiency, while the other remaining criteria hurt the efficiency of the preparation of the assessed planning document.



Rengimo – Prepared
 Visuomeninis – Public
 Atliktas (?) – carried out, performed drafted... (žiūrint kas)
 Numatyta – Foreseen, Planuotas - Planned

Fig. 3. Criteria determining the effectiveness of the territorial planning document “Adjustment of the detailed plan of the prepared territory in Vilniaus Str. 16 A, Pagėgiai” (Source: compiled by the author using PROMETHEE software)

Assessing the criteria of the second most effective territorial planning document “The Rambynas Regional Park planning scheme (boundaries and management plans)” determining its efficiency, it was found that three criteria also had a positive effect on efficiency, but slightly different from the above: public involvement in the planning process, the size of the planned territory and the number of planning areas (Fig. 4).

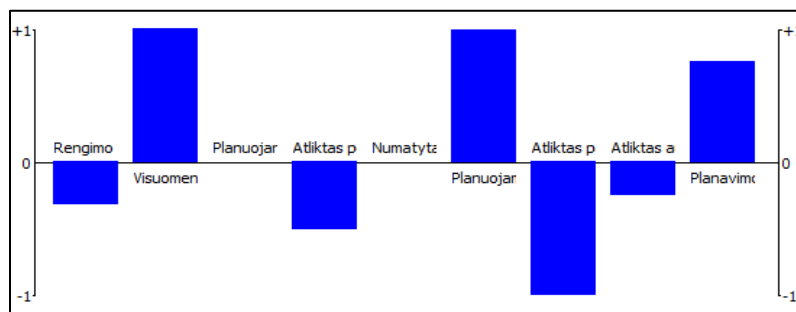


Fig. 4. Criteria determining the effectiveness of the territorial planning document “The Rambynas Regional Park planning scheme (boundaries and management plans)” (Source: compiled by the authors using PROMETHEE software)

When detailing the importance of the criteria, it was found that the re-coordination of the planned solutions had the most negative impact on the planning document, which delayed the planning process and required additional resources, as a result of which, the preparation time was extended. Other criteria that negatively affect the efficiency of the planning document were as follows: no environmental impact assessment was performed and automatic coordination of the planned solutions was performed. Only two criteria determining the efficiency of the territorial planning document “Adjustment of the Comprehensive Plan of Pagėgiai City” with the worst efficiency were identified: no re-coordination of the formed solutions was performed and many areas are planned in the planning process (Figure 5).

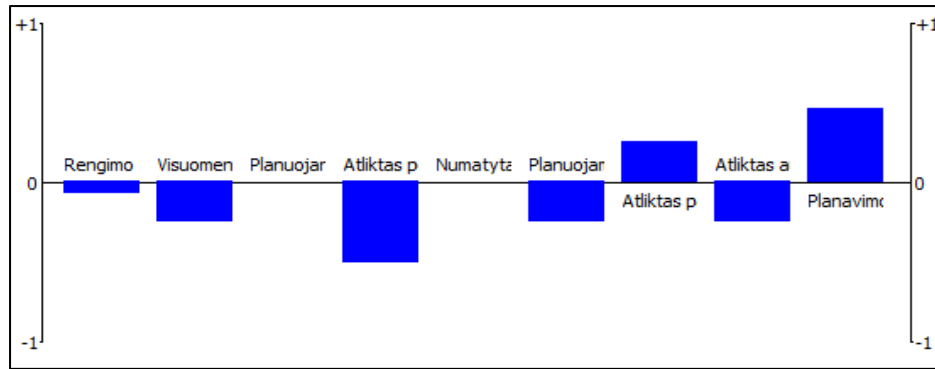


Figure 5. Criteria determining the effectiveness of the territorial planning document “Adjustment of the Comprehensive Plan of Pagėgiai City” (Source: compiled by the author using the PROMETHEE program)

Also, when evaluating the prepared planning document, it was established that two criteria (engineering infrastructure and ecological, economic and social welfare) did not affect the efficiency of the document preparation, the remaining criteria had a negative impact on the efficiency of the planning document. As already mentioned, this planning document was assessed as the least effective of all the analyzed territorial planning documents prepared in Pagėgiai municipality.

Conclusions and proposals

1. After the analysis of complex and special territorial planning documents prepared in Pagėgiai municipality in 2010-2020, it was established that 1 state, 7 municipal and 80 local level territorial planning documents were registered in the territory of Pagėgiai municipality during the analyzed period. In detail, it was found that in 2015, the volume of complex territorial planning documents in Pagėgiai municipality increased significantly compared to the previous and subsequent years, and the volume of preparation of special territorial planning documents was set to be one of the smallest. Meanwhile, in 2010 and 2013 in Pagėgiai municipality, no territorial planning documents were prepared at all. However, in 2014 there was a significant increase in the volume of preparation of special territorial planning documents.

2. The analysis of the administrative processes for the preparation of complex and special territorial planning documents prepared in the territory of Pagėgiai municipality revealed that the planning procedures performed by the administering authorities are partially inefficient, as not all administering authorities harmonize in this case, the planned solutions are not fully assessed and approved automatically. The reason for the inefficient performance of procedures is the lack of human resources in the administering institutions - i.e. there is a shortage of specialists or their inadequate competence. According to experts, non-performed or improperly performed procedures negatively impact the planned territory, slow down its development and do not ensure the possible and most suitable direction for the planned territory. The most common problems in drafting a planning document are the coordination and publication of documents, unjustified redundant requirements from other institutions, lack of specialists and their expertise, lengthy and complex procedures, lack of smooth inter-institutional cooperation, and conflicts of interest.

3. After multi-criteria analysis, it was established that the most effective territorial planning document in the territory of Pagėgiai municipality could be considered the territorial planning document of complex planning “Adjustment of the detailed plan of the prepared territory in Vilniaus Str. 16 A, Pagėgiai” with criteria ranking of 0.0806. In the territory of Pagėgiai municipality, the complex territorial planning document “Adjustment of the Comprehensive Plan of Pagėgiai City” was prepared, and the ranking indicator was -0.0676.

4. To avoid problems in the preparation of territorial planning documents identified during the study, which negatively affect the effectiveness of territorial planning and create preconditions for litigation, it is proposed to provide additional information to stakeholders, seek detailed information, and alternative solutions acceptable to all stakeholders’ supervision of the administration of territorial planning processes.

References

1. Blotnis, K. (2018) Formavimo ir pertvarkymo projektas: procedūrų aprašymas. <https://www.miestopletra.lt/index.php/publikacijos/13-visi-straipsniai/teritoriju-planavimas/30-formavimo-ir-pertvarkymo-projektas-proceduru-aprasymas> (in Lithuanian).
2. Darham, O.; Mahasiswa, I. (2019) Cohesion territorial planning as strategic management essentials for handled sungai penuh increased citizen. https://www.academia.edu/39321192/MAKALAH_TERRITORIAL_PLANING_AND_MANAGEMENT_STRATGEI_K_4_A.
3. Dėl pagrindinės žemės naudojimo paskirties žemės sklypų naudojimo būdų turinio, žemės sklypų naudojimo pobūdžių sąrašo ir jų turinio patvirtinimo: Lietuvos Respublikos žemės ūkio ministro ir Lietuvos Respublikos aplinkos ministro įsakymas. 2005 m. sausio 20 d., Nr. 3D-37/D1-40. Nauja redakcija nuo 2015-04-17. Valstybės žinios, 2005-01-29, Nr. 14-450, i. k. 1052330ISAK37/D1-40 (in Lithuanian).
4. Gustafsson, S.; Hermelin, B.; Smas L. (2019) Integrating environmental sustainability into strategic spatial planning: the importance of management. <https://doi.org/10.1080/09640568.2018.1495620>.
5. Marks-Bielska, R.; Kurowska, K. (2017) Institutional efficiency of communes in Poland in respect of space management. <https://www.sgem.org/index.php/elibrary?view=publication&task=show&id=4233>.
6. Marks-Bielska, R.; Wojarska, M.; Lizinska, W.; Babuchowska, K. (2020) Local economic development in the context of the institutional efficiency of local governments. file:///C:/Users/Vartotojas/Downloads/22261-Article%20Text-87971-1-10-20200629.pdf.
7. Maksin, M. N. (2014) Planning system for sustainable territorial development in Serbia. https://www.academia.edu/34954103/Planning_system_for_sustainable_territorial_development_in_Serbia.
8. Martínez, D. (2017) Hacia un nuevo régimen de ordenamiento territorial: desafíos para el sector energético Towards a new regime in territorial planning: challenges for the energy sector. https://www.academia.edu/39875875/Hacia_un_nuevo_r%C3%A9gimen_de_ordenamiento_territorial_desaf%C3%ADos_para_el_sector_energ%C3%A9tico_Towards_a_new_regime_in_territorial_planning_challenges_for_the_energy_sector.
9. Ovchinnikova, N. (2016) Analysis of Territorial Planning and Prospects for Further Development of Urban Districts and Settlements in Rostov Region. https://www.matec-conferences.org/articles/mateconf/abs/2017/20/mateconf_spbw2017_01004/mateconf_spbw2017_01004.html
10. Staiano, L.; Sans, G. H. C.; Baldassini, P.; Gallego, F.; Texeira, M. A.; Paruelo, M. A.; Putting the Ecosystem Services idea at work: Applications on impact assessment and territorial planning. <https://www.sciencedirect.com/science/article/pii/S2211464520300920>.
11. Tiškus, G. (2010) Bendrojo ir specialiojo teritorijų planavimo strategija ir praktika. *Lietuvos architektų sąjunga*. <http://www.architektusajunga.lt/nuomones/bendrojo-ir-specialiojo-teritoriju-planavimo-strategija-ir-praktika/> (in Lithuanian).
12. Teritorijų planavimo dokumentų rengimo ir teritorijų planavimo proceso valstybinės priežiūros informacinė sistema. *Infoplanavimas*. <https://www.tpdri.lt/web/guest/home> (in Lithuanian).
13. Teritorijų planavimo dokumentų registras. <http://www.tpdr.lt/> (in Lithuanian).
14. Višnevskaja, A. (2009) Daugiatikslių verbalinė analizė sprendžiant teritorijų planavimo uždavinius. *Mokslas- Lietuvos ateitis*. p. 109-111. <https://journals.vgtu.lt/index.php/MLA/article/view/10673/9051> (in Lithuanian).

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