Management of IT projects of public institutions: Possible solutions for streamlining Project Management

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Abstract

The organization and activity of public administration is subject to the standards established by law, according to which individual organizational units of ministries in the Slovak Republic are governed. The management of information and communication technologies is a specific area of management in the conditions of public administration, which requires high expertise, systematicity and a properly set legal environment. The aim of the contribution is to clearly identify the legislative framework for the management of IT projects of the public administration of the Slovak Republic during the implementation of selected operational programs in the department of government departments. In order to achieve the main goal of the presented professional article, we set sub-goals. The necessary partial tasks are to systematically define and explain concepts related to project management in public administration, to find out the requirements for its implementation and to find out to what extent the legislation affects the issue we are dealing with. The result of our area of research represents a logically complete framework of the legal environment of project management of public administration and takes on the nature of practical use in the creation of our dissertation.

Keywords: Project management, public administration, government, information technologies

JEL classification: M15, H12

1. Introduction

Project management is mainly the domain of the private sector, in which it has become an integral part. After the entry of the Slovak Republic into the union of European Union countries, individual government units receive financial resources for the development of various areas of social life. Non-refundable funding sources are applied in the form of operational programs, consisting of individual content-intensive projects. The
preparation, implementation and evaluation of projects requires compliance with clearly defined rules in the form of legal regulations that define the framework for the use of financial resources, clearly determine the methods of application of project management and deal with authorized persons handling finances and the organizational chart itself in the implementation of individual management processes. Determinants of legislation create the legal basis for the creation of any departmental project within the Slovak Republic, and it is therefore important to create a comprehensive overview of legal measures that condition the creation of project management within public institutions in Slovakia. The contribution consists of three chapters, which are logically arranged and form a single unit of the problem we are solving. In the first chapter, we focus on the theoretical definition of project management within the framework of public administration and the private sector. Legislative rules defining the management of IT projects within the ministries in Slovakia are part of the theoretical knowledge. The second part of the article is designed for the active use of methods in the solution of the investigation of the issue, and we determine in it also the used legal documents, secondary data and all other sources. We also describe sub-goals in solving the main goal of the work, as well as methodological elements with which we elaborated the selected research area. Results and discussion, the analytical part of the contribution, formulates the legal status of IT project management within the Ministry of the Interior of the Slovak Republic and its organizational components. It also consists of a comprehensive view of new forms and methods of project management of the ministry, the legal aspects of which are absent in the laws. In this way, we create a legislative overview of the investigated issue in the field of public administration of the Slovak Republic, which ensures a new direction of project management against the background of the legislative framework. The object of our investigation is the department of the Ministry of the Interior of the Slovak Republic and its advisory and analytical department, the Institute of Administrative and Security Analysis (ISBA). The reason for choosing the researched area is the importance of examining the legal environment of project management in the dynamic era of public administration, which constantly needs to innovate management processes. However, they must be introduced by respecting legal standards, which is what the article is also dedicated to.

2. Theoretical Bases of the Solved Problem

In connection with the issue of project management, it is necessary to theoretically define individual concepts so that we can comprehensively examine and analyse phenomena in the real functioning of a selected subject of the state administration of the Slovak Republic. Project management is a part of every company, which ensures the fulfilment of strategic goals. The state itself, i.e. its governing bodies, in the form of ministries, have several projects in their portfolio to achieve the desired outputs. However, the extensive scope of the project focus requires legislative frameworks for the implementation of complex processes, the result of which is the project as part of a selected specific transnational goal of the European Union or the state itself as the implementer of operational programs (Doležal, Krátký, 2016). Project management expresses a summary of partial tasks, processes through which it organizes, plans, monitors and evaluates activities to achieve specific goals of the selected entity. The project is a one-time event, so it is a unique phenomenon of the company. It has a precisely defined time schedule according to which
financial, material or human resources are allocated to achieve the desired outputs (Carrol, 2012).

Project management, according to Oinarov and Eshimova (2017), represents a complex scheme in the public administration system, which includes several specific stakeholders, political-power relations, state administration bodies, private companies and other subjects, including citizens themselves as end users of state services. The specifics of managing public administration projects is achieving public welfare, not profit. Financial resources are only obtained, acquired or allocated, but increasing their value is a sign of the private sector only. When planning the implementation of the project, the most suitable supplier is selected according to the established criteria, which are primarily finances, quality and speed of delivery of services and goods in the form of public procurement. All requirements are subject to Act no. 343/2015 Coll. on public procurement (Krchová, 2019). The management of public administration IT projects has an interdepartmental nature. IT management takes place cumulatively in several departments within their scope. The leading authority in the area of approving the project intentions of IT projects is the Ministry of Investments, Regional Development and Informatization of the Slovak Republic, which ensures the performance of this direction based on the determinants of the legal regulation, Act no. 95/2019 Coll. on information technologies in public administration and Decree no. 85/2020 Coll. on project management. Central public administration bodies performing project management must comply with the legal form of the given regulations, which apply generally to all departments. It is primarily governed by the Ministry of the Interior of the Slovak Republic and its organizational components, which also closely cooperate with the self-governing subjects of the country. A special role in the management of public administration projects is played by project managers together with the project team with a clearly set methodology and procedures for individual activities and processes specified in the project intent (Svozilová, 2016).

3. Data and methods

When processing the contribution, we used several scientific methods, through which we were able to fulfil the main goal of the article, to create a comprehensive overview of the legal environment of project management within the specific object of investigation, which was the Ministry of the Interior of the Slovak Republic. Individual partial tasks, especially in the form of secondary data analyses, enabled us to process a content-intensive topic. In the theoretical definition of the issue, we used the selection method to select the most suitable literature that meets the parameters of project management in public administration, and then we defined the basic legislative framework for the creation of the empirical part of the contribution. This logically arranged overview of the issue allowed us to further examine the individual components of project management within the selected entity of the state administration. In the third chapter, we primarily used the method of analysing documents and legislation of the state administration, in which we looked for connections with project management. We summarized the obtained data and created a logically complete summary of the issues of the legal environment within the project management of the Ministry of the Interior of the Slovak Republic, which contains new knowledge and proposals for supplementing the legal nature of selected legal regulations. The introduction of new management methods also requires
the amendment of the legislation in order to ensure the legality of the organization of individual procedural activities within the framework of the implementation of the project in the state administration body. Based on this idea, it was necessary to analyse and evaluate the status of laws in the field of project management, which is an integral part of public administration in Slovakia.

4. Results and discussion

By analysing the secondary departmental data of the Ministry of the Interior of the Slovak Republic, we found that project management is fragmented between several sections and departments of the organizational structure. The Centre for Methodological Management, one of the three branches of the ISBA, is responsible for setting up individual partial processes within project management, the goal of which is the maximum efficiency of the ministry’s project outputs. Individual operational programs consisting of projects are analysed between the departments in terms of feasibility from various input areas such as finance, material security or staffing during the development of proposals and the actual implementation of the projects. Currently, several reform plans with the use of European financial coverage fall within the competence of the Ministry of the Interior of the Slovak Republic. If we imagine the Operational Program Effective Public Administration as an example, in its strategic plans alone we record up to sixteen national projects within the given extensive program of the Ministry of the Interior, consisting of several processes that require properly set management. All procedural actions take place according to the legislative rules, which are determined in the decrees of the department and the laws of the Slovak Republic. The Methodical Management Centre is a department of the Institute of Administrative and Security Analysis, as an advisory body of the Ministry of the Interior of the Slovak Republic. The basic organizational structure consists of two departments. The first is the Department of Analysis and Forecasts, and the object of our investigation as the second department is the Centre for Methodological Management (CMR) (Figure 1).

Figure 1: Organisational structure of ISBA MV SR

Source: authors, based on Collection of internal regulations of the ISBA Ministry of the Slovak Republic no. 1/2022

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Their primary task is the creation of analyses and forecasts in the field of investment planning and the issuing of methodological guidelines for the management of internal projects of the department. According to the Collection of internal regulations of the ISBA Ministry of the Slovak Republic no. 1/2022, the CMR consists of two units that deal with the management of projects of the Ministry of the Interior of the Slovak Republic. The process management department of the CMR mainly deals with the development of methodical project management procedures based on cost-benefit analysis in the sense of a process approach and ensures the methodical change management of entrusted projects in cooperation with other organizational units of the ministry. The CMR implementation unit mainly prepares project implementation plans, cooperates with other government departments of the Slovak Republic and is responsible for the implementation of entrusted programs and projects in the field of optimization of public administration and ministry processes. In 2022, ISBA drew up a document in which it clearly defined its future position in the field of project management of the Ministry of the Interior of the Slovak Republic. The basic idea was the creation of a strategy for the fulfilment of the department’s goals and vision aimed at the sustainability, economy and efficiency of the police force, the fire brigade, the digitalization of public administration, and the development of local governments in the Slovak Republic. Achieving the desired outputs requires the correct setting and use of project objectives within the department, which must be clearly defined (Figure 2).

**Figure 2: ISBA 2023 - Project management development concept**

![Diagram showing the hierarchy of Vision, Values, Goals, Strategy, Investments intention, and Projects]

Source: own processing according to ISBA 2021
As part of the project Optimization of processes in public administration, the Ministry of the Interior of the Slovak Republic implements seven activities, which must meet certain legal parameters during implementation. The implementation of IT projects is based on Act no. 95/2019 Coll. on information technologies in public administration and on amendments to certain laws. Section 2 para. 5 and 6, according to which it establishes the authorities of the central state administration and the department managed by them as the management authority and administrator of IT activities. In our case, the administrator is ISBA SR represented by CMR. The central communication infrastructure of the Slovak Republic is provided by the MIRII of the Slovak Republic according to §4 of this Act. §6 imposes the obligation of the IT management body to comply with the principle of transparency, the principle of proportionality and the principle of economy and efficiency, and that the costs incurred for information technologies are proportionate to their quality. This means that during the implementation of the project, only authorized costs of the project management entity must be incurred, which have been reviewed by other organizational components of the Ministry of Finance of the Slovak Republic as the control body for the performance of financial security of IT projects.

In 2020, the Office of the Deputy Prime Minister of the Slovak Republic for Investments and Informatization, currently MIRRI SR, issued Decree No. 85/2020 on project management, which establishes project management standards. Currently, every IT project directed by the Ministry of the Interior of the Slovak Republic is subject to a maximum time and financial horizon, without which the project cannot be implemented. The legal regulation also provides the project management body with precise procedures for project management. According to §6 of Decree 85/2020 Coll. about project management in the preparatory phase of the project is the creation of a project plan, which contains the justification of the project, the project objective and the project plan together with the project management committee (Figure 3).

Figure 3: Phases of project management of the Ministry of the Interior of the Slovak Republic

Source: own processing according to Decree 85/2020 Coll. on project management
The initiation phase primarily includes the identification and analysis of the main project activities, the project schedule and begins the public procurement steps. §8 The implementation phase of the project includes the creation and approval of the final product and then proceeds to handing over the product and updating it to the steering committee, which issues an acceptance protocol to the project client. The completion phase according to §9 deals with the project completion report, where the actual achieved results are compared with the desired project outputs. After meeting all the requirements of the customer, the project is successfully completed.

The third phase, “Implementation” of IT projects requires high cyber security, which is also conditioned by Act no. 69/2018 Coll. on cyber security. Cyber security is also carried out by the Ministry of the Interior of the Slovak Republic and its subordinate organizational component ISBA, namely the Centre for Combating Hybrid Threats, which identifies and evaluates areas potentially vulnerable to hybrid action and information operations and proposes ways to eliminate them. During the implementation of the activities of the National Project for the Optimization of Public Administration Processes, a wide range of IT projects are implemented, which are subject to strict cyber security and must meet European standards issued by the European Union Agency for Cyber Security in EU Regulation Article 56 paragraph 8 2019/881.

Currently, the Ministry of the Interior of the Slovak Republic is investigating a new systematic management of projects based on business architecture, which requires several changes in the ISBA structure. Accepting new one's measures to ensure the continuity and effectiveness of project management within IT technologies is subject to the creation of a new architectural framework within the public administration of the Slovak Republic. By analysing the documents of the Ministry of the Interior of the Slovak Republic, we found that they record the shortcomings of the architectural framework, which must be addressed in the form of adopting new measures (Table 1).

Table 1: The main problems of public administration architecture

<table>
<thead>
<tr>
<th>Problem</th>
<th>Problem description</th>
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<tr>
<td>Failure to follow the cycle method for architecture development</td>
<td>Law no. 95/2019 Coll. defines the basic duties of public authorities in the field of architecture as well as the basic processes in architecture. Based on this law, a process has been established that confuses the recommended order of phases for the development of architecture.</td>
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<tr>
<td>Fragmentation of documentation</td>
<td>UPVII decree no. 85/2020 Coll. defines basic duties, processes, inputs and outputs in project management. However, on the basis of this law, processes were created in which the documentation, and therefore also the description of the architecture, which is the output of the projects, is kept separately by the management bodies, while no conventions or standards are followed during its creation (due to the absence of these conventions and standards).</td>
</tr>
<tr>
<td>Absence of reference materials</td>
<td>The above-mentioned problems are closely related to the absence of strategically important management regulations (methodologies, frameworks, manuals) that should be issued and administered by the management body.</td>
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Source: own processing according to Guideline no. 12/2022/oSBAA-1 MIRRI SR, 2022
When examining Decree no. 85/2020 Coll. on project management, the generally accepted standard of project management according to the PIRNCE 2 methodology is clearly determined. These are projects in controlled environments, the complexity of which is expressed in the ability to manage a wide range of projects of various sizes, which clearly correspond to the activities of the state’s governmental bodies. Project outputs of change requests are created in accordance with the currently valid generally accepted information technology management standard ITIL - Information Technology Infrastructure Library, if these outputs contain the required range of project outputs already implemented.

An effective horizontal structure with communication of results and confirmation of the correctness of decisions to management is essential for project management, i.e. management only makes decisions, sets goals and strategies. Of course, he has at his disposal all the documents for such decisions. Other competences are managed exclusively by competent employees of the organizational branch of the Ministry of Internal Affairs of the Slovak Republic according to Act no. 552/2003 Coll. about work in the public interest. By the fact that it will be necessary to create appropriate jobs according to the new organizational structure, within §5 par. para. 1 and 2 of this law, a selection procedure will take place, on the basis of which new senior staff will be hired to perform project management of the new ISBA organizational unit. By hiring new employees, or current employees will be trained for new job positions, under certain circumstances, if this is stipulated by Act no. 215/2004 Coll. on the protection of classified information, senior employee, department director or The National Security Office of the Slovak Republic will carry out a security check of a certain level according to §3 of this law.

The legislative part of the changes in the framework of project management of Decree 85/2020 Coll., in which we found through analysis that there is currently no starting point for the introduction of portfolio IT project management (P3O) as a new form generally accepted within countries EU. P3O is an abbreviation expressing three components of the organization, whose task is the methodical guidance of project management. P3O stands for Portfolio, Program and Project Organization. Individual departments of the offices carry out processes to achieve the desired outputs of a whole range of project management. In the field of economics, the cost of projects and its return in the form of effective management play an important role. ISBA, however, expects a slight increase in costs, as new project and program manager jobs will be created during the introduction of a new form of project management. However, their role in the future will be to ensure a high degree of project feasibility, which will make it unnecessary to return funds from operational programs, as this fact is currently part of the government branches of the state.

In the case of cyber security, it is primarily based on Act 69/2018 Coll. on cyber security. Employees working in the IT field ensure the software requirements for the protection of cloud storage components where important data is stored under the supervision of the Government’s CSIRT, which manages computer threats at the national level.

The problem of the current management of projects according to the mapped process activities (Operational Program Effective Public Administration) within the Ministry of
Internal Affairs of the Slovak Republic was the inefficient solution of adhoc deficiencies, while there is a lack of clear implementation plans that would address the department’s strategic goals. Another existing problem is that projects are created on the basis of free financial resources without defined needs and the final effect of the project. Within the legislative content of Decree 85/2020 Coll. on project management, the main task of the project is to establish priority areas of outputs with clearly determined methodological procedures for achieving them. It is precisely the absence of the creation of a project team in the legal rules that reflects the failure of projects from a time point of view, which significantly affects the course of departmental project activities. As part of a faster implementation portfolio, it is necessary to ensure horizontal project management, as the vertical model creates lengthy processes limiting the implementation phases of the project as such.

In Act no. 95/2019 Coll. on information technologies in public administration and in Decree no. 85/2020 Coll. about project management, it is evident that activities related to top-down project management are currently taking place, that is, the approval of any activities and processes within the project takes place in weekly to monthly phases, which clearly disrupts the continuous management of projects within the department. The department’s project organizational unit must be equipped with a comprehensive solution that improves the collection, storage, access, analysis and dissemination of data with sufficient summary and in-depth research capabilities while maintaining the rigor of project management, management methodology and human resources discipline.

In the issue of the legal definition of the management of IT projects of the public administration, which we have solved, we have created a comprehensive overview of the issue of legislative capture of the project management of the Ministry of the Interior of the Slovak Republic, which is currently carried out by the ISBA as its expert and analytical unit of the department. In the concept of the institute, the facts of effective management of IT projects are clearly determined, but the legislative part has shortcomings, which are, for example, the creation of a project team, horizontal management of 3PO or the qualification requirements of the institute’s project employees. Before introducing the new management model, the new organizational structure of the ISBA must be amended and the authorized persons appointed for the performance of the institute’s new management positions, of which the office portfolio will be an inseparable component.

Project management is primarily governed by Decree No. 85/2020 Coll. on project management, the foundations of which are dated by the Office of the Deputy Prime Minister for Investments and Informatization from 2020. The format of the legal regulation is currently the basis of MIRII SR, whose task is to modify the given regulation.

4. Conclusion

In conclusion, we note the clear fulfilment of the main goal of the contribution, which is an expression of the legal status of the management of IT projects of public administration, the specific object of our investigation of the Ministry of the Interior of the Slovak Republic, and we managed to create a comprehensive overview of the current structures of legislation and methodological guidelines for project management, in which we also point out shortcomings in introduction of new forms and methods of management within the legally determined parameters. The problem of the current legal position is the
absence of a definition of the project team in Act no. 95/2019 Coll. on information technologies in public administration and Decree no. 85/2020 Coll. on project management. Two basic legal regulations in the field of public administration project management must be amended to include new procedural elements that are an integral part of innovative project management based on the business architecture/P3O layer of management, which is based on the Axelos PRINCE2 methodology.

It is necessary to coordinate project management between individual departments to fulfil continuity in the implementation of projects that have an inter-departmental nature, as the approval of sub-processes is currently complicated and ultimately unnecessarily time limited. The current situation in organizational charts needs to add horizontal project management, i.e. j. to delegate powers to lower management levels, which will ensure a more time-efficient implementation of individual project activities at the departmental level, and another necessary change is to adopt legislative amendments for its implementation. This means extending powers to employees who largely contribute to the process activities of project application in order to reduce the time-consuming nature of implementing projects into practice, which poses a threat to the fulfilment of the strategic goals of the selected governing body. Such a complex problem affects a wide range of legal regulations, which we have characterized and described in the contribution, thereby expressing the importance of the legal field of project IT management of the public administration of the Slovak Republic.

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11