

# ASSUMPTIONS FOR THE CONSTRUCTION OF A PROJECT MANAGEMENT SYSTEM IN THE GÓRNOŚLĄSKO-ZAGŁĘBIOWSKA METROPOLIS

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**Abstract:** The article presents the assumptions for the construction of a project management system in the GZM Metropolis, which will contribute to raising the effectiveness of functioning of the Metropolitan Office. The proposed project management system will be adapted to reflect the specific character, the needs and the conditions for the functioning of the newly created organization, i.e. the GZM Metropolis.

**Keywords:** project management, organization efficiency, metropolis.

## 1. Introduction

The metropolitan union in the Silesian voivodeship was established on 1 July 2017 pursuant to an Agreement of 9 March 2017 on the Metropolitan Union in the Silesian Voivodeship. The main goal of the GZM Metropolis is to make use of the potential of member municipalities, stimulate the creativity of residents and inspire changes that will accelerate social and economic processes. This goal will be achieved, among others, through the implementation of projects and tasks with particular emphasis on the needs and problems of member municipalities, rational spatial planning, comprehensive management of sustainable development (Statute of the "Górnośląsko-Zagłębiowska Metropolis" Metropolitan Union). The tasks which are planned and implemented by the GZM requires a systematized approach taking into account the correct allocation of resources and the rational spending of funds.

The operation of the metropolis would benefit from a project management concept adapted to the needs and conditions for the functioning of the GZM. This approach will allow to correctly plan projects, implement them, and ensure their adequate monitoring and control.

In the context of these objectives, it is necessary to develop and implement a project management system. The purpose of this article is to present the assumptions for the construction of a project management system in GZM, which will contribute to raising the effectiveness of functioning of the Metropolitan Office.

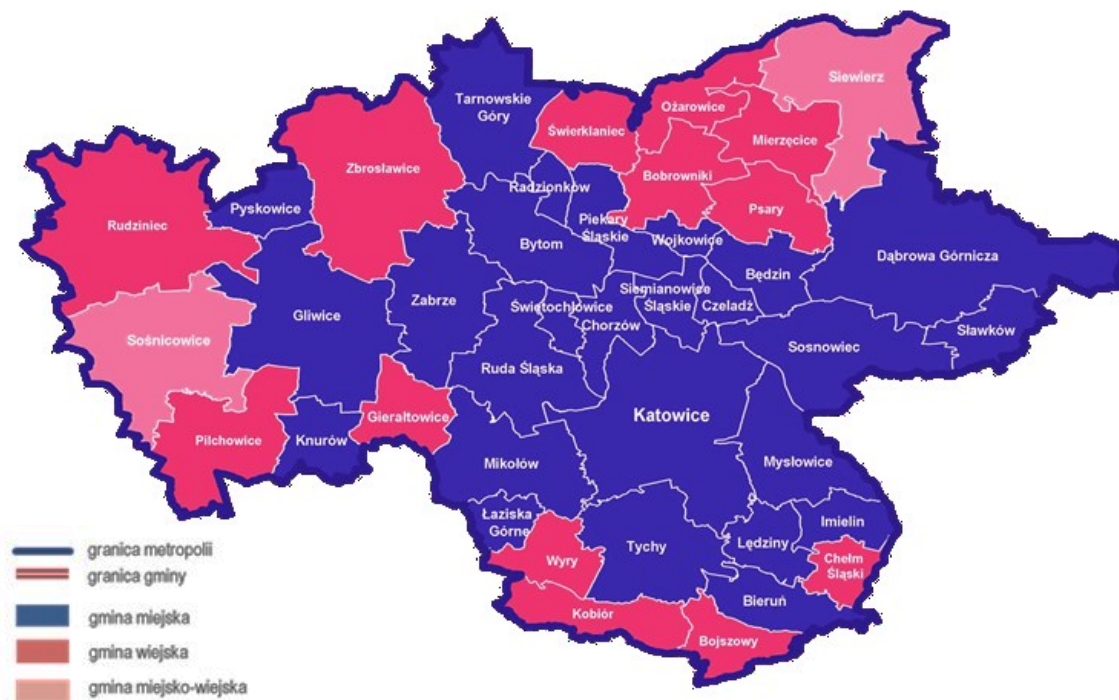
A study of literature has therefore been conducted to elaborate on public management, strategic management and project management in public administration. Furthermore, based on interviews, observations and desk research carried out in the Metropolitan Office, the main factors which affect the implementation of projects were identified.

## 2. Establishment and functioning of the GZM

Górnśląsko-Zagłębiowska Metropolis is a metropolitan union in the Silesian Voivodeship, established on the basis of the Upper Silesian Conurbation pursuant to the provisions of the Act of 9 March 2017 on the Metropolitan Union in the Silesian Voivodeship. The Metropolis was officially launched on 1 January 2018 as a union of 41 municipalities and communes (fig. 1) comprising:

- 26 municipalities, i.e.: Bytom, Będzin, Bieruń, Chorzów, Czeladź, Dąbrowa Górnicza, Gliwice, Imielin, Katowice, Knurów, Lędziny, Łaziska Górne, Mikołów, Mysłówice, Piekary Śląskie, Pyskowice, Radzionków, Ruda Śląska, Siemianowice Śląskie, Sławków, Sosnowiec, Świętochłowice, Tarnowskie Góry, Tychy, Wojkowice, Zabrze;
- 13 rural communes, i.e.: Bobrowniki, Bojszowy, Chełm Śląski, Gierałtowice, Kobiór, Mierzęcice Ożarówice, Pilchowice, Psary, Rudziniec, Świerklaniec, Wiry, Zbrosławice;
- 2 rural municipalities: i.e. Sośniowice and Siewierz.

A metropolitan union performs the following tasks: shaping the spatial order, stimulating social and economic development within the metropolitan union, planning, coordinating, integrative and developing public mass transit, including road, railway and other, rail transport, as well as promoting urban mobility, overseeing tasks in metropolitan passenger transit, cooperating in the routing of national and regional roads within the metropolitan union, promoting the metropolitan union and its area. Apart from these, the metropolitan union is competent in the implementation of public tasks pertaining to the scope of the municipality, powiat or voivodeship self-government, or in coordinating the implementation of these tasks pursuant to a memorandum of understanding entered into with a self-government unit or an association of self-government units (the Act of 9 March 2017 on the Metropolitan Union in the Silesian Voivodeship).



**Figure 1.** Members of the GZM. Source: GZM documentation.

The directions for operations implemented by the GZM are laid down in the Strategic Operations Plan for 2018-2022 approved by the Assembly<sup>1</sup> in November 2018 roku (<http://bip.metropoliagzm.pl>). The document contains a list of measures aimed to transform the members of the GZM into a modern and cohesive area, friendly to its residents.

This task is financed from the revenues generated by the GZM, which consist of: 5% of the personal income tax paid by the residents of the union, membership contributions paid by the member municipalities and communes, revenues generated by the budgetary units of the metropolitan union, and payments made by the budgetary establishment of the metropolitan union; revenues generated by the metropolitan union; subsidies granted under the state budget, subsidies granted under local government budgets, inheritance, provisions and donations made to the metropolitan union and other funds specified otherwise.

To ensure the efficient implementation of the tasks stipulated by the act (the Act of 9 March 2017 on the Metropolitan Union in the Silesian Voivodeship), the following official bodies of the metropolitan union were established: the Assembly and the Management Board of the metropolitan union. The Metropolitan Office is the organizational unit appointed to complete the tasks set by the Assembly and the Management Board. One of the primary tasks of the Office is to create adequate organizational, technical and administrative conditions to organize the work of individual bodies of the Metropolitan Union.

<sup>1</sup> The assembly is the executive and control body of the metropolitan union. It is formed by delegates of the municipalities comprising the association, one for each municipality. These delegates are municipality governors, mayors or city presidents, or their authorized representatives.

### 3. Formulation of a research problem

The goal of GZM is to make use of the potential of member municipalities, stimulate the creativity of residents and inspire changes that will accelerate social and economic processes. Thus formulated, the objective will be accomplished, among others, through the implementation of projects and tasks. The current environment of contemporary public organizations is characterized by a high level of uncertainty, complex and multi-aspect problems related to the management of relations with stakeholders. Despite this, public organizations from all over the world are expected to increase their effectiveness while providing higher-quality services for the community. This forces them to search for new methods of public management, ones that will facilitate the effective implementation of tasks in a turbulent environment. Public organizations are often judged for their effectiveness and efficiency. Efficiency is an ambiguous notion. For the purpose of this study, efficiency is understood as the institutional efficiency of the metropolitan office. This assumes efficiently working and substantively prepared clerks, correct organizational structures, correctly selected methods, procedures and operational standards, the application of effective management instruments, expected accessibility and quality of public services (Przywojska, Podgórnjak-Krzykacz, 2017). The pursuit of effectiveness in public organizations is manifested by public management concepts, i.e. the concept of traditional public administration, New Public Management (NPM), New Public Governance (NPG), Neo-Weberian State (NWS). Furthermore, the efficiency of operation of public organizations can be improved by applying instruments of strategic management and a project approach.

Since the beginning of its activity, the GZM has completed many projects, among others: free commute for children and adolescents up to the age of 16, free commute for drivers on days with elevated air pollution levels, Metropolitan Transport, Metropolitan Bicycle, and others. These enterprises required significant financing and the coordination of activities from many people and institutions. Numerous interviews, extensive observations and desk research carried out at the Metropolitan Office to examine the factors which have negative impact on the effective and efficient completion of these projects have pointed to:

- The absence of procedures for the opening, planning, implementation and monitoring of projects.
- The absence of a formally appointed project manager.
- Difficulties in the integration of project participants due to their different professional experiences (experiences gained during their work in public and business organizations).
- Difficulties in communication among project participants due to the fact that individual participants use different terminologies and different elements of project management methodologies, standards and tools.

- The absence of unified project management tools.
- The absence of tools for gathering and storing knowledge derived from projects.
- Lack of access to current knowledge on the progress of individual projects.

It is therefore necessary to create an adequate approach to project management in the Metropolitan Office, in order to combine a vision of the future with the past experiences, while limiting uncertainty and risk in project implementation.

However, the efficiency of project management requires the synchronization and coordination of measures. This approach requires an ordered and homogeneous approach to project management, which is attained, among others, by implementing standards pertaining to the methodology and technique of project management.

A review of available literature has pointed to the absence of a holistic approach to the management of a public organization consisting in a metropolitan union. A study of literature (Prawelska-Skrzypek, Jałocha, 2014; Jałocha, 2014; Dolata, 2013, 2014; Jaskanis, Marczevska, Darecki, 2015) has indicated that the main problem associated with project management in public organizations in Poland is the tension between the officious, rigid structure of work in functional teams and the work of project teams. Another notable feature is the absence of units which coordinate the implementation of individual projects.

Therefore, in order to ensure the efficient operation of a management system of a public organization, the Metropolitan Office, it is necessary to develop a project management system. A project management system should ensure the effective and efficient implementation of individual projects, and therefore to ensure the efficient functioning of the organization as a whole. Some of the measurable benefits of the project-centered approach in the metropolitan office include:

- ensuring the cohesion of project objectives with the objectives of the organization,
- applying uniform project management standards and tools,
- selecting the right employees and seeing that they perfect their competences (in connection with a personal strategy),
- exchanging knowledge and experiences by applying standardized project management tools, standardized software, common training programs, etc.

#### **4. Conditions for the construction of a project management system in GZM**

In order to ensure the efficient implementation of projects, a project management system was proposed for the Metropolitan Office, one that would take into account the specific character of this organization. The documents proposed must comply with the following documents:

- Organizational Regulations of the Metropolitan Office of the Górnośląsko-Zagłębiowska Metropolis (GZM). Appendix 2 to resolution No. 127/2018 of the Management Board of Górnośląsko-Zagłębiowska Metropolis dated 28 June 2018.
- Statute of the "Górnośląsko-Zagłębiowska Metropolis" Metropolitan Union. Appendix to resolution No. V/1/2018 of the Assembly of the Górnośląsko-Zagłębiowska Metropolis of 16.02.2018.
- Act of 9 March 2017 on the Metropolitan Union in the Silesian Voivodeship, Journal of Laws of 2017, item 730.
- The Public Procurement Act of 29 January 2004, Journal of Laws of 2004, No. 19, item 177, Journal of Laws of 2017, item 1579, 2018.
- Disposition no. 43/2018 of the President of the Management Board of the Górnośląsko-Zagłębiowska Metropolis of 23 July 2018 on the adoption of regulations for the grant of public procurement, to which the provisions of the Public Procurement Act, including any annexes thereto, shall not apply.
- Other acts and regulations regulating the functioning of local government units.

In order to develop a project management system, it is therefore necessary to review any applicable good practices and methodologies in the scope of project management. Project management methodologies can be classified into two groups of methodologies and standards: classic methodologies and standards and agile methodologies and approaches. The first group of methodologies and standards includes, among others PMBoK (*Project Management Body of Knowledge*), PRINCE2 (*Projects in Controlled Environments*), PCM (*Project Cycle Management*) and IPMA (*International Project Management Association*), (Wirkus, 2013, pp. 183-208). Agile methodologies and approaches include: SCRUM, Prince2 Agile etc. Furthermore, there are industry and company methodologies developed by expert associations from specific industries, and major business organizations.

Methodologies, standards and approaches to project management and good practices facilitate project management, pointing to correct procedures, i.e. correct methods of preparing a plan for a project and correct methods of implementing it.

In an organization like the Metropolitan Office, it would be difficult to apply a different project management methodology or standard. Any project management system developed should be adapted to the specific character, condition and needs of the Metropolitan Office.

The project management system should support the planning and implementation of projects in the Metropolitan Office. The system is assumed to include:

1. A project management model.
2. The roles of individual project management participants.
3. Project management procedures.

For the GZM Metropolitan Office, the project management model should include four stages:

1. Project initiation and definition.
2. Project planning.
3. Project implementation, monitoring and control.
4. Project closure.

For each of the stages of the model, a procedure should be developed, specifying the roles and obligations of individual participants of the project management process in the Metropolitan Office. The following entities should be the primary participants of the project management process in the Metropolitan Office:

- The Management Board of GZM, which will be in charge of securing the finances for the implementation of the project.
- A Steering Committee which will be responsible for achieving the objectives of the project.
- A Project Manager, who will be authorized and obligated to conduct ongoing project management.
- A Project Team which will be in charge of implementing individual tasks as part of the project.
- A Project Office which will offer substantive-administrative services, including providing advice, tips, assistance in project management tools.
- Project Review Committee, the main purpose of which will be to assess any project initiatives reported.

A procedure for initiating and defining the project should be developed as part of stage one. Initiating and defining a project assumes the search, formulation and notification of ideas in the form of project initiatives. The possibility of submitting project initiatives in the metropolitan office should be offered to a wide group of people and institutions, not only the employees of the office, but also the residents, member municipalities and other institutions and organizations based within the GZM. Any project initiatives submitted should be reviewed by an appointed body – the Project Review Committee, based on predetermined project review criteria. Based on the review of project initiatives, the Management Board of the GZM should make a decision to open selected projects, and should appoint a Project Team and a Project Manager.

At the second stage, the project planning procedure should be supplemented with two procedures which are particularly important from the point of view of the metropolitan office, i.e. project stakeholder management and project risk management. The purpose of project planning is to create a plan of all tasks to be completed, their deadlines and costs. A plan is a document which is used to run a project, measure its actual progress relative to its expectations, and is updated in progress, as successive pieces of information about the progress of project works are received. A project plan should include the following elements:

1. Justification for the implementation of the project.
2. Main and detailed objectives of the project.
3. Stakeholder management plan.
4. Communication plan.
5. Scope of the project.
6. Project schedule, including a specification of the milestones.
7. Responsibility matrix for individual tasks.
8. Project budget.
9. Risk management plan.
10. Economic analysis of the project.

At stage three, the project implementation, monitoring and control procedure should consider the possibility of introducing changes into the project. The project implementation and controlling stage cover implementation of tasks arising from the plan, and controlling of compliance with the plan to accomplish the project objectives. This stage should particularly include the following tasks:

- coordination and control of the work of the team and any subcontractors,
- acceptance of completed works,
- ongoing reporting of the progress of the project,
- ongoing coordination of the project, due to changes taking place in its implementation.

A change may appear during the control and monitoring of the project, which may be reported by any participant or stakeholder of the project (both internal and external project stakeholders).

At the last stage, the project should be closed. This stage aims at completing any tasks related to the formal closure of all measures in all areas of the project. This stage should particularly include:

- formal closure and settlement of the project,
- review of the project (financial, technical, qualitative, etc.),
- accumulation and distribution of knowledge and experiences obtained in the course of the project, particularly by drawing up a final report from the project.

In order to depict the proposed project management system for the Metropolitan Office, a process map should be developed for each stage of the project management model. They describe the temporal progress of tasks in reference to individual participants of the project management process. Due to the sheer size of the process maps, i.e. a large number of task elements and a large number of participants, it is not possible to present them in this study.



## 5. Summary

The development and implementation of a project management system should contribute to improving the functionality of the Metropolitan Office.

In order to improve the efficiency of this system, organizational and material changes should be introduced. As regarding organizational changes, an organizational unit, i.e. a Project Office, should be created in the Metropolitan Office. As regarding material changes, a dedicated IT tool facilitating the process of project management should be implemented.

The project management system implemented in the Metropolitan Office must be adapted to its specific nature, its needs and its operating conditions. In order to develop this system, an analysis of methodologies, standards and approaches to project management should be conducted. This will allow to select these elements from individual approaches, which will contribute the most to ensuring the efficiency of the organization.

The proposed project management system should include: the model, the roles and procedures of project management. The implementation and application of such a system in the Metropolitan Office should contribute to the effective management of each project, and to achieving its objectives in a timely manner.

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