# STUDY OF THE ORGANISATIONAL SCHEME IN A COAL COMPANY Ewelina Włodarczyk<sup>1</sup>, Aurelia Rybak<sup>2</sup>

#### **Abstract:**

Motivation: One of the most important elements in each organization is its organizational structure, which will undoubtedly largely influence the way the company is managed. There are many types of organizational structures that are subject to continuous transformation due to economic development and progressive globalization. As a result, classical organizational structures are less and less present, while indirect structures are more and more often appearing. Moreover, in order for modern enterprises to compete effectively in the market, they must reach for modern management concepts, and thus their organizational structure should be flexible. Undoubtedly, one of the main problems of each company is the proper organization of logistic activities that would be compatible with the company's goals. Therefore, when treating logistics as one of the functions of an enterprise, internal units that perform logistical tasks should be incorporated into the company's organizational structure

Approach and results: The purpose of this article is, then, to show how logistics has been organized and integrated into the organizational structure in one of the most important coal companies in Poland. In order to achieve such a goal, JSW SA has been analysed in terms of the solutions applied for the last few years in the field of organization of the company, including in particular the position of logistics in its organizational structure.

Material and methods: The material of the paper has been taken from the review of online resources. The method of theoretical analysis has been used in the article.

Conclusions: In the analysed mining company, the impact of logistics development on the management of the company, i.e. centralization of logistics, was also noticed. Jastrzębska Spółka Węglowa selected in its organisational structure a separate unit – Material Logistics Facility, which was later transferred into the Production Support Facility.

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#### Introduction

The globalization and integration processes that take place in the world condition most changes taking place in a company's environment. An enterprise that cannot adapt to changing market conditions becomes unprofitable and doomed to collapse. Especially since the very production of cheap and high-quality products does not guarantee market success.

Possession of such production may be its basis, although the following are equally important: material and information flows in the logistics chain (Staniewska, 2010). Therefore, appropriate correlation of logistics in the organizational structure of an enterprise might be an important factor in improving material and information flows, which will allow the company's potential to be increased and used in a more effective way (Jedynak, 2015). The important thing is to choose whether or not logistics is an independent functional department or a subordinate one to other basic departments. The fundamental thesis regarding the shaping of the logistics concept in the organizational structure assumes the concentration of logistics in organizationally separated units, which will allow the coordination of processes not only in the sphere of logistics but in the entire enterprise.

In contrast with the decentralized organization of logistic tasks in many organizational units of the enterprise, their concentration may allow the reduction of conflicts between these entities, eliminate distortions in the information process flow or prevent discrimination of logistic functions against classical functional spheres in the enterprise (Blaik, Bruska, Kauf, & Matwiejczuk, 2013). There is also a thesis assuming that in order to be able to perform logistic tasks by the organisational units, the necessary adaptation can be done without organizational integration. Then it is necessary to use an extensive coordination instrumentation (Blaik, 2015; Blaik, 2017).

There are three approaches explaining the issues related to the inclusion of logistics in the company structure, i.e. the concept of single leg, the concept of the life cycle and the concept of situational. The first one assumes the integration of all logistic tasks within one logistics department, which will be directly subordinate to the member of the management board of the company. In turn, the concept of the life cycle assumes that the organizational structure of logistics in the company is formed in several stages

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with an increasing degree of concentration. After completing this process, the effect obtained is similar to the one-way approach, however, it takes much longer to implement this structure. The situational concept in a different way assumes shaping the organizational structure of logistics in an enterprise. It assumes that the efficiency of the organizational structure depends on many elements and situations determining the scope and manner of incorporating logistics into the organizational structure of the enterprise. It assumes that the efficiency of the organizational structure depends on many elements and situations determining the scope and manner of incorporating logistics into the organizational structure of the enterprise. Therefore, when implementing logistics, you should take into account the company's size, the technology of production, distribution, the intensity of streams of materials, products and information, the system structure, the number of logistic decision areas, or the scope and size of logistics costs (Persson, 1982).

The purpose of this article is to show how logistics has been organized and integrated into the organizational structure in one of the most important coal companies in Poland. In order to achieve such a goal, JSW SA has been analysed in terms of the solutions applied for the last few years in the field of organization of the company, including in particular the position of logistics in its organizational structure.

### Methodology of research

In practice, the integration of logistics into the organizational structure of an enterprise cannot be limited only to the problem of concentration of logistic tasks within an organizational unit, but also:

- to estimate the importance of logistics in its management there are three types of logistic functions in the company's management in the literature of the subject, namely:
  - o providing a services function that involves the implementation and control of logistics processes;
  - o a new function, superior to other functions, having a cross-sectional character and referring to the coordination of logistic tasks performed in individual organizational units of the enterprise. In this sense, logistics is a connector whose task is to provide horizontal connections in the company;
  - o a new function related to general corporate management tasks. In this sense, it expresses the logically oriented management of the enterprise. In other words, it is about integrating the management of all processes and activities to ensure efficient and effective flow of materials and finished products. In order to perform this function, logistics should be incorporated into the business management system, and its goals should become the main objectives of the company (Matwiejczuk, 2017).
- decide in which type of company organization structure logistics should be included.
- determine the degree of concentration / dispersion of processes and logistic activities i.e. whether they will be implemented in one unit or through several organizational units of the company. The problem of concentration of these processes and activities can be solved in two ways. Namely, one can concentrate logistic activities and processes in one organizational unit that already exists in the enterprise, or concentrate them in one independent, newly created unit under the name "logistics".
- define the level of centralization / decentralization of logistic decisions centralization of decision-making powers in the field of logistics usually taking place in enterprises in which there is a small number of areas of activity and a small number of production sites, and production is largely homogeneous. In turn, decentralization in this area may take place in enterprises with diversified production and more production places, in which production units have a high degree of independence. However, mixed solutions are most commonly used, which include both elements of decentralization and centralization (Kisperska-Moroń, 2000).

The functions presented above result directly from the evolution of logistics. Thus, the way of business management was undoubtedly influenced by the development of logistics (Matwiejczuk, 2014). Analysing the changes taking place over the past several decades in mining enterprises in Poland, it can be noted that the development of logistics has also significantly influenced the management of mining enterprises.

Jastrzębska Spółka Węglowa SA is a specific type of enterprise that has a multi-department structure. It consists of the company's headquarters and several entities called mines, which is included in its organizational chart. Employees are hired through the company's headquarters, however, they are assigned to a specific mine. On the other hand, mining planning and, as a result, human resource management takes place in separate mines separately, however, under the supervision of the company's headquarters.

In addition, the company is the parent company in the JSW Capital Group, which consists of JSW SA and its subsidiaries located in Poland. This structure of the company means that management of a mining enterprise may involve many problems that are not encountered in standard organizational structures. Therefore, in order to improve the flow of goods and information processes within the mining enterprise, logistics should be incorporated in such a way as to harmonize with the existing organizational structure.

The analysed company also undertook to incorporate logistics into the organizational structure assuming a significant centralization of logistic decisions. In turn, logistic activities and processes are performed in several entities. In 1995, in the organizational structure of JSW SA there was a separate entity dealing with material logistics for other production plants and it was called "Zakład Logistyki Materiałowej" (Material Logistics Facility)

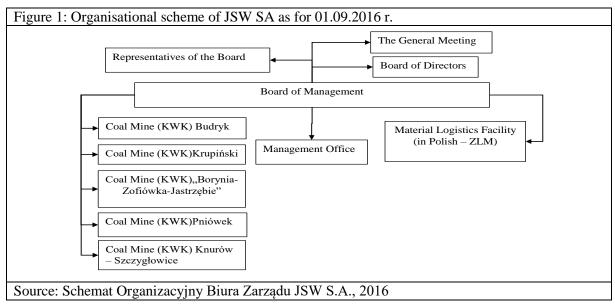
It was responsible for: providing supplies of materials, machinery and equipment necessary to carry out the production and investment tasks of the JSW SA's mines, meeting the quality, environmental, quantity and economic requirements at the right time, as well as other functions. Therefore, in the case of procurement logistics and production logistics, most logistic decisions are made at the central level, while procurement planning is performed separately at individual mining plants. Mines are obliged to submit their demand in a timely manner to the unit created for this at the company's headquarters.

Over the years, many changes have been made in the organization and management of JSW SA, therefore various units responded to the distribution in individual years. In this article, only the last 3 years have been analysed in terms of changes in the organizational structure of logistics in the company.

#### **Results and discussion**

The material of the paper has been taken from the review of online resources. The method of theoretical analysis has been used in the article.

In 2016 five (bituminous) coal mines were part of Jastrzębska Spółka Węglowea SA: Borynia-Zofiówka-Jastrzębie, Budryk, Knurów – Szczygłowice, Krupiński and Pniówek, in which coking coal and coal are mined for energy purposes and there is also Zakład Logistyki Materiałowej (Material Logistics Facility) as shown in Figure 1.



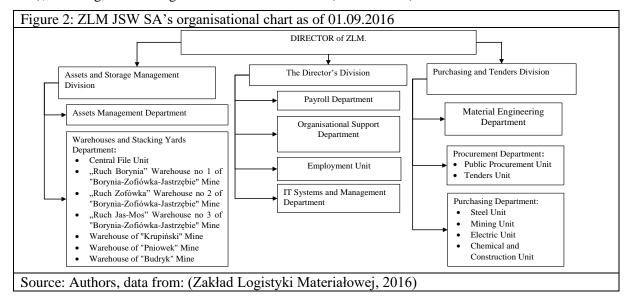
According to the Statute, the Company's governing bodies are the Board of Management, Board of Directors and the General Meeting. Significant changes to the organizational scheme of the Management Board Office were introduced on 1 September 2016. At that time, the organizational structure was

flattened. Competences were combined, the number of team managers and office directors was limited, and representatives were assigned to the president of the board.

In the Division of the President of the Management Board, a widely understood Office for Human Resources Management was created with two teams: the Human Resources Development Team and the Personnel and Remuneration Strategies Team. The office was to coordinate the entire employment policy in the Company - starting from employment, through development, motivational remuneration system and promotions. In addition, the Audit and Control Office was also reconstructed in the department of the President of the Management Board. On the other hand, the Division of the President of Employment and Social Policy coordinated and was responsible for relations with the social side and also cooperated with the Office of Human Resources Management in the area of conducting negotiations with trade unions. The office consisted of: the Labour Costs Reporting Team and the Assets Management Team - transferred from the President of the Management Board. In the vertical division of the Deputy President for Technical Affairs, a lot of changes have been made, namely, there were four teams made out of the previous eight teams. Thus, the number of managers was reduced, the competences and areas of the teams' activities were centralized. The occupational health and safety area was allocated to the President of the Board, and organizationally to the President for Technical Affairs. In turn, the area of investment controlling in the JSW Group was transferred to the financial matters division - to the Controlling Office. The main changes in the President of the Financial Matters Department were related to the Controlling Office. There were two of the four teams - the Cost and Investment Controlling Team and the Planning and Analysis Team. One team in the Finance Office was also liquidated. The Investor Relations Team was, in turn, assigned to the Office of the Chief Accountant. In 2016, the Trade Division was also reconstructed in the structures of JSW. A forwarding office was created with two teams - the forwarding of Coke and Coal Forwarding. The Coke and Carbon Based Trading Office with two teams – the Coke for Metallurgy Sales Team and the Carbon Based and Heating Coke Sales Team. As a part of this division there was also a Coal Trading Office with two teams - the Coking Coal and Steam Coal Team. The Sales Strategy Team and Market Analysis Team were directly subordinate to the President of the Board for Sales. Before this change, the subsidiary company Polski Koks was responsible for the area of sales.

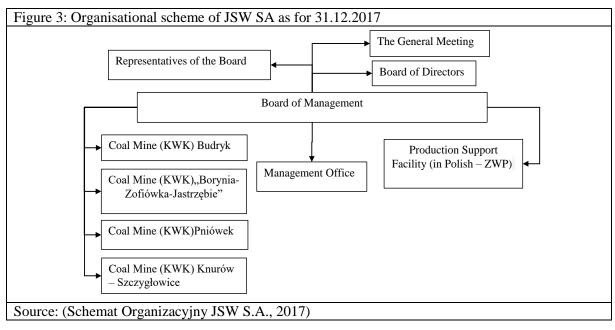
As it was already mentioned, the Material Logistics Facility was in charge of providing supplies of materials, machinery and equipment necessary for the implementation of production and investment tasks of JSW SA mines, which was directly reporting to the President of the Management Board for Purchasing.

Figure 2 shows the organisational chart of the Material Logistics Facility of JSW SA as of 07.02.2016. Part of the Department of Material Logistics (in Polish ZLM) was also the Shared Services Centre (subordinate to the Management Board of JSW SA, hence it is not included in the ZLM's organisational chart) which consisted of: Finance and Payroll Unit (in Polish UF), Material Accountancy Unit (in Polish UM), Planning, Controlling and Costs Unit for ZLM (in Polish UP).



From September 2016 to 31 December 2017 there were further changes introduced into the organisational structure of JSW (Figure 3).

Notably the most important were the transfer of Krupiński Mine to the Spółka Restrukturyzacji Kopalń (Mine Restructuring Company) as well as replacing the Material Logistics Facility with Production Support Facility, whose structure has been shown in Figure 4. Changes were also implemented in the Management Office structure. In the Board Division there were created: the Security Office, the Office of the Integrated System of Management and Risk Management, the PR and Communication Office with the Spokesperson. Moreover, as of 2016, this consisted of the Organisation and Management Office, the Legal Office, the Audit and Control Office, the Purchasing Office, including the Tender Team. As it was before in the case of ZLM, the newly established Production Support Facility was reporting to the Purchasing Office. In turn, the Office for Human Resources Management was moved to the President's Division for Employment and Social Policy. In this division there was also a change of the name from the Office for Employment, Payroll and Social Policy into the Office for Employment, Payroll and Assets Management. In turn, in the Division of the President for Technical Matters there were removed the Investment and Mines Development Office, leaving only the Production Office and finally there were the following offices were added: the Security of Coal Production, the Processing and Quality of Coal as well as Environmental Protection and Mining Damage. The Office of Stock Market Relations was added to the Division of the President for Technical Matters. In the Division of the President of the Board for Sales there were changes implemented too. The Division consisted of: the Sales Office (three teams: the Coking Coal and Steam Coal Team and the Carbon Based and Heating Coking Sales Team) and the Forwarding Office (with two teams: Coking Coal Forwarding Team and Coking Coal and Coal Accounts Team). Moreover, there was another Division created, i.e. the Division of the President for Strategy and Development consisting of the Investment, Strategy and Development Office as well as the Corporate Supervision Office.

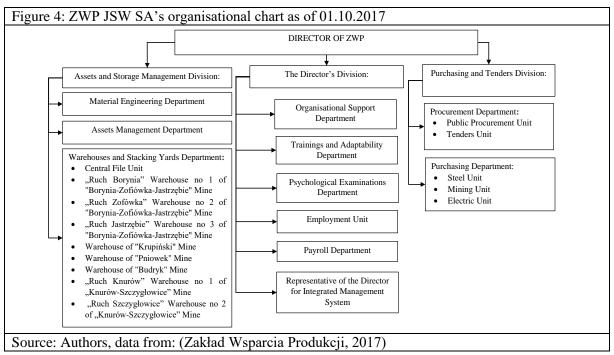


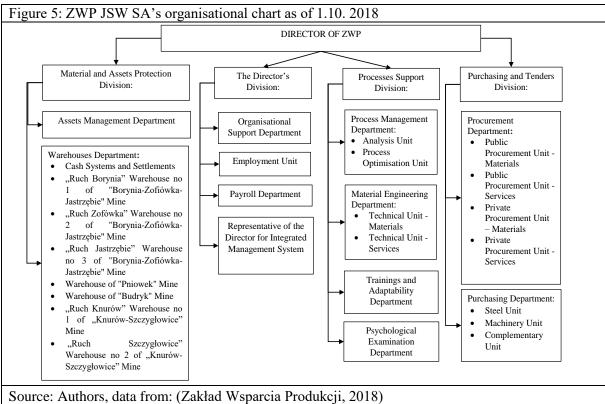
The newly created Support Facility, as ZLM before, was primarily responsible for efficient operation of supply logistics, production logistics and recycling logistics in JSW SA. On the other hand, JSW manages distribution of products directly through its specialised teams in the Division of the President of the Board for Sales as well as the support of POLSKI KOKS FORWARDING & SHIPPING AGENCY Sp. z o.o. , i.e. a company in the capital group of JSW.

There were further changes implemented into the structure of ZWP and the Management Office in 2018. Firstly, the Purchasing Office was liquidated in the President of Management Board Division. Moreover, in the Division of the President of the Board for Sales there was added the Marketing and Sales Planning Office consisting of the Sales Planning and Analysis Team and Sales Support Team. Additionally, the teams forming the Trade Office were transferred into the Coking Coal Team, the Steam Coal and other Products Team and Coke Team. At present, the Forwarding Office consist of the Coal and Coking Coal

Team and the Sidings Servicing Team. There were changes in the Office of the President for Strategy and Development, where there are now three offices, i.e. the Investment and IT Office, the Strategy and Development Office and the Corporate Governance Office.

Figure 5 presents the current organisational chart of ZWP after the implementation of changes.





ZWP is still primarily responsible for supply, production and recycling logistics.

Logistic activities performed in ZWP include, among others: analysing the material needs of JSW SA's plants, cooperation with JSW SA's plants and organizational units in the field of material and investment purchase planning, preparation and conduct of proceedings for the supply of materials, assessment of suppliers and acquisition of new ones, coordination of material supplies, work of warehouses and coal

yards, and keeping adequate levels of stock, as well as organizing tender procedures for the sale or disposal of waste from JSW SA's plants.

At the same time the distribution of products is primarily organised by JSW directly through its specialised teams from the Division of the President of the Board for Sales with the support of JSW SHIPPING Sp. z o.o.

#### Conclusion

Each enterprise is a complex organization whose management method may differ, inter alia, depending on the adopted organizational structure. In addition, the need for companies to continuously adapt to new market conditions and the desire to obtain or maintain competitive ability forces companies to be able to provide a comprehensive and systematic approach to material and information flows. All the more so because nowadays these flows go beyond a single company and contribute to the formation of connections between enterprises creating chains or networks. Thus, economic development and the progress of globalization are influenced by for the development of logistics, and hence for changes in the organizational structures of enterprises.

In the analysed mining company, the impact of logistics development on the management of the company, i.e. centralization of logistics, was also noticed. Jastrzębska Spółka Węglowa selected in its organisational structure a separate unit – Material Logistics Facility, which was later transferred into the Production Support Facility. This unit is responsible for overall logistics decisions in the field of supply logistics, production logistics and secondary management logistics. Furthermore, up till 2017 there was an additionally selected Purchasing Office reporting directly to Vice-President of the Management Board for Sales, which was supervisory to, first, the Material Logistics Facility, and later – the Production Support Facility.

Moreover, in order to increase the standardization of the quality of their services and as a certificate for suppliers and service recipients of the analysed enterprise, the Integrated Management System was implemented. Therefore, logistics activities are supported by SZYK2, a modern IT system as well as B2B electronic platforms.

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