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OPINION

from Colonel Assoc. Prof. Eng. CONYU GRIGOROV CONEV Ph.D.,
Associate Professor in Armament and Technology Design Department in Artillery,
Air Defense and CIS Faculty at the National Military University "Vasil Levski"
Shumen 1 Karel Shkorpil str.

of dissertation developed by Eng. Mariyan Iliev Rahnev,

on the topic: **"NETWORK-CENTRIC APPROACH IN MODELING AND
OPTIMIZATION OF CONTEMPORARY TRANSPORT TECHNOLOGIES
IN LOGISTICS"**

for the conferment of educational and scientific degree "Doctor of Philosophy
(PhD)" in the field of higher education 5. Technical sciences, professional field:
5.13. General Engineering , PhD program in the scientific specialty "Engineering
logistics"

1. Actuality and significance of the developed scientific problem

The aim of the thesis presented for opinion is to investigate the possibility of using a network-centric approach in modeling and optimizing combined transport technologies in logistics.

The subject of the dissertation is the concept of construction, development and implementation of combined transport technologies in logistics supply chains.

The subject of research is the construction of an integrated Eurasian transport system through the use of combined transport technologies.

The relevance of the problem solved in the dissertation is determined, above all, by the growing globalization. In this aspect, the adoption of the integral approach and the application of the relevant tools in the management of material flows from the place of their origin, through all phases of movement (supply, production, distribution) to the end user is the most expedient solution for the achieving a higher degree of integration in the management of logistics activities at company and inter-company level. This provides opportunities for better coordination in the actions of individual participants in the supply chain, increases the efficiency of logistics solutions and rationalizes the use of resources. The optimization of material flows in the logistics system allows the realization of maximum profit. To achieve this, the quality of the transport service of material flows in supply, production and distribution has a significant influence. The choice of a rational type of transport and means of transport is decisive for the efficient functioning of the logistics system.

In the aspect of the above, the considered dissertation of Eng. Mariyan Iliev Rahnev topic is a current scientific problem relates to the transport technologies in logistics.

2. Evaluation of the scientific results and the contributions of the dissertation

The dissertation work consists of an introduction, three chapters, conclusion and contributions to the dissertation and references.

The total number of pages of the dissertation is 126, which include 11 tables and 34 figures. There are 136 literary sources used.

I accept the following scientific-applied and applied contributions made by the candidate for the Ph.D. degree:

- an analysis and summary presentation of the scientific and practical framework for the state of the network for combined transport in the Republic of Bulgaria, as a segment for the functioning of the transport logistics system for combined transport, was made;

- a systematic approach was proposed in the management of the combined transport system, as well as models and methods for designing and managing a logistic transport system in order to improve the economic efficiency of this type of transport;

- the integral approach was applied in the optimization of the structure of the logistics supply chains in a transport logistics system, by using mathematical modeling and optimization. The integral paradigm is applicable only with the consideration of the value chain, as the main complex (integral) characteristic of the material flow.

3. Critical notes and Recommendations

The following critical remarks can be presented on the dissertation and the work of the candidate for the Ph.D. degree:

- the relevance of the topic, the subject and the object of research are not well clarified;

- the introduction lacks: working hypothesis, limitations and approbation of the obtained results;

- the dissertation contains too much information of a generally known nature;

- in some places the paragraphs have no connection with each other and do not follow the logical sequence of the presented idea;

- some of the conclusions are descriptive in nature;

- higher precision to the style, grammar and textual design of the dissertation.

4. Conclusions

The developed dissertation meets the requirements for obtaining the educational and scientific degree "Doctor of Philosophy (PhD)", according to the Law on the Development of the Academic Staff of Bulgaria and the Regulations for its implementation.

Mariyan Iliev Rahnev has presented 3 publications on the topic of the dissertation, all of them are independent, which meets the minimum requirements, defined by the Regulations for the implementation of the law on the development of the academic staff of the Republic of Bulgaria.

6. Evaluation of the dissertation

On the basis of the submitted work and the contributions, contained therein I give a positive assessment of a dissertation: "Network-centric approach in modeling and optimization of contemporary transport technologies in logistics" and I recommend to the scientific jury to confer educational and scientific degree "Doctor of Philosophy (PhD)" of Eng. Mariyan Iliev Rahnev in the field of higher education: 5. Technical sciences, professional field: 5.13. General Engineering, PhD program in the scientific specialty: "Engineering logistics".

23.05.2023

Shumen

Chairman of the Scientific Jury,

Col. Asoc. Prof. Eng.  Conyu Conev Ph.D.