REVIEW FOR PROMOTION TO ASSOCIATE PROFESSOR

Referee: Prof. Dr. Christina Lazarova Nikolova

Scientific field 3.8 Economics, Economics and Management (Economics of

Transport).

Head of Department of Economics of Transport and Energy at the UNWE

About: promotion to the rank of associate professor in the field of 3.8. Economics,

Economics of Transport (waterborne and air transport).

1. Information about the promotion procedure

The promotion procedure has been announced with tenure in the Department of Regional and Sector Economics, Economic Research Institute at the Bulgarian Academy of Sciences, according to the Official Journal №58/30.06.2020. I am appointed as a member of the Promotion Committee according to the Resolution of the Director of the Economic Research Institute at the BAS №365/18.07.2023.

2. Information about the candidates for the promotion

Only one candidate – chief assistant professor Petya Delcheva Koralova – Nozharova, PhD - has submitted documents for the promotion to associate professor. She is a researcher and a member of academic staff of the Department of Regional and Sector Economics, Economic Research Institute at the Bulgarian Academy of Sciences.

Petya Koralova graduated bachelor's degree in Economics of Transport at the University of National and World Economy in 2008 and master's degree in the same subject in 2009. During her studies for this master's degree, she participated in an Erasmus mobility programme and studied for one semester at the BFI University of Applied Sciences in Vienna, Austria. She earned her PhD degree in 2013 by defending a dissertation in the scientific field of Economics and Management (Economics of Transport) with dissertation topic 'Opportunities for increasing the efficiency of river freight transport'.

She has started her career as an expert at the Department of Drivers and Traffic Safety in the Directorate of Road Vehicles and Drivers at the Executive Agency for Road Administration, Ministry of Transport and Communications in 2008. Between 2014 and 2019 she has worked successively as an Assistant Professor and Chief Assistant Professor at the Department of Economics and Accounting in Transport at Todor Kableshkov Higher School of Transport. At the same time she has been an expert in the Department of Scientific and International Activities (2015 - 2018) and Deputy Head of the Department (in the period 01.09.2019 - 31.12.2019).

On 29.10.2020, after winning a competition, she was appointed to the position of Senior Assistant Professor at the Economic Research Institute at the Bulgarian Academy of Sciences.

The candidate has participated as a key expert in the project BG05M9OP001-1.128-0001

on Partnership in a digital environment and has carried out activities to represent the rights and interests of employees to the Confederation of Independent Trade Unions in Bulgaria between 2021 - 2022.

She is a member of the Monitoring Committee of the Operational Programme Transport Connectivity 2021 - 2027 in accordance with Order No. 29-00-12/27.02.2023 of the Ministry of Transport and Communications.

I know Dr. Petya Koralova within the framework of her bachelor's, master's and PhD-studies and trainings at the UNWE and I have my impressions of her work, in which she has appeared as a conscientious student and researcher and a competent specialist in the field of Transport Economics. I also have insight into her work as a lecturer and participant in various international projects at Todor Kableshkov Higher School of Transport, where she was a valuable researcher. She stands in competition with the leaders in the field of Economics and she is a reliable person and an ethical colleague.

3. Fulfilment of the requirements for promotion to associate professor.

Based on the portfolio of materials submitted by the candidate, one could conclude that Dr. Petya Koralova covers all the requirements for the promotion to associate professor, according to the Law on the Academic Staff Development in Republic of Bulgaria (article 24), as well as the additional requirements of the Economic Research Institute at the BAS. Arguments for this are as follows:

- She defended a dissertation thesis on the topic related to the Opportunities for increasing the efficiency of river freight transport diploma for earned PhD degree №87 from 26.04.2013 in a scientific field of Economics and Management (Economics of Transport).
- She has been appointed as a chair assistant professor for 5 years and 5 months now, of which: 3 years and 6 months in the Department of Economics and Accounting in Transport, Faculty of Transport Management at Todor Kableshkov Higher School of Transport, and another 2 years and 11 moths in the Economic Research Institute.
- After being appointed as a chief assistant professor, she has published 2 monographs one habilitation monograph and a book based on her dissertation for the award of
 doctoral degree.
- The candidate covers all the quantitative criteria for promotion to associate professor: with regards to the threshold of 450 point for the appointment as an associate professor at the Economic Research Institute, she has 607,5 points. She has published 20 publications after her promotion to chief assistant professor of which 2 monographs, 2 studies (one in English) one in co-authorship, 6 articles in indexed journals in Bulgaria (incl. 3 as a co-author), and 10 scientific papers (incl. 3 in co-authorships), of which 3 have been presented in English on different scientific and international conferences.
- Three of the submitted publications have been referred and indexed in global databases of scientific information, including one study, one article (in press), and one report,

- refereed, and indexed in the Scopus database.
- Citation file comprise 18 citations in scientific works in the country and abroad, of which: 4 citations in publications in the Scopus database; 6 citations in monographs and collective volumes, and 8 citations in non-refereed peer-reviewed journals.

4. Characteristics and assessment of the scientific publications

The candidate submitted in her portfolio for review 20 publications, including 2 single monographs; 2 studies (1 in co-authorship); 6 articles in Bulgarian indexed and peer reviewed journals (incl. 3 in co-authorships); 10 papers, published in conference books, and presented in English and Bulgarian on international conferences (incl. 3 in co-authorships).

Based on a thorough review of the publications submitted, we could sum up the following main fields of candidate's research interests:

- 1) Research in the field of the competitiveness and efficiency of waterborne and air transport. Two of the submitted monographs one, called 'Inland Water Transport in Bulgaria and the Multimodal Transport Network Integration and Prospects for Development', published on the basis of the PhD-dissertation research of Petya Koralova and respectively, second called 'Effective Forms of Competition Protection and Regulation of the Business Environment of Maritime Transport in Bulgaria' are focused on this field and are dedicated to the analysis and evaluation of business development, economic factors, and competition in waterborne transport (maritime and inland waterways). Furthermore, Dr. Petya Koralova published 7 more publications on this topic, of which 1 study, published in a scientific journal, refereed and indexed in world-known databases of scientific information (under number 3.1 in the list of publications and abstracts of scientific publications); 2 articles in journals indexed in different international databases of scientific information (under numbers 6.1 and 6.3, respectively, in the list of publications and abstracts of scientific publications); and 4 reports (No. 8.3, 8.5, 8.6, 8.8).
- 2) Research in the field of economic policy and sustainable development of transport. The candidate has_submitted interesting publications systematized in 1 monograph (No. 1.1 in the list of publications and abstracts of scientific publications), as well as 4 articles in journals indexed in different international databases of scientific information (No. 6.2, 6.4, 6.5 and 6.6) and 5 papers (No. 8.2, 8.3, 8.4, 8.5 and 8.8) presented at national and international scientific forums. The research on this topic focuses on identifying problems and solutions to achieve the objectives of European and national transport policies, sustainable transport development, and increased competitiveness in the transport sector.
- 3) Research in the field of human resources management in transport. The main results of the candidate's research efforts in this field are presented in 1 article published in a scientific journal, refereed, and indexed in world-known databases of scientific information (№ 5.1); 1 study published in a journal indexed in different international databases of scientific information (№ 4.1) and 2 papers in conference proceedings (№

- 8.6 and 8.7). All they put an accent on the ground for adopting appropriate approaches for efficient human resources management in the transport sector.
- 4) Research in the field of the state, development and functioning of the Bulgarian economy and transport sector in the context of digitalization and corporate social responsibility. The field is covered by 1 study (No. 4.1) and 1 article (No. 6.1) published in journals indexed in different international databases of scientific information; 1 article (No. 5.1) and 1 paper in proceedings (No. 7.1), published in scientific journals refereed and indexed in world-renowned databases of scientific information; and 1 paper from a national scientific forum (No. 8.1). They are all focused on analyzing the Bulgarian economy and transportation industry, as well as researching the crucial factors and connections involved in their growth under the influence of digitalization and corporate social responsibility.

The monographs submitted by the candidate as main research results represent well rounded studies on up-to-date and original topics.

The monograph 'Effective Forms of Competition Protection and Regulation of the Business Environment of Maritime Transport in Bulgaria' is presented as a habilitation thesis and was developed based on a research project successfully defended and accepted by the Scientific Council of the Institute of Economic Research at the Bulgarian Academy of Sciences with protocol № 16 of 14.12.2022. It is 179 pages long, structured in an introduction, three chapters and a conclusion, and presents a study of topical issues related to the competitiveness of maritime transport in Bulgaria. After conducting a thorough analysis of financial, economic and logistical trends regarding maritime transport in the EU Member States situated in the Black Sea, Baltic Sea, and Adriatic Sea regions, recommendations have been made for protecting competition and implementing effective measures. The author assesses the business environment of maritime transport from 2016 to 2021 to identify and evaluate opportunities for enhancing competitiveness. The author carefully analyzed international practices and identified key recommendations. She concluded that it is important to revise the strategic framework for maritime transport in Bulgaria, as well as evaluate the readiness of our maritime transport to achieve climate neutrality by 2050. The author also suggested the national government to participate more actively in initiatives like the Three Seas and Blue Economy and to use advanced technologies such as blockchain, AI, augmented reality, and digital twin and digitize transshipment and transport processes.

The monograph called 'Inland Waterway Transport in Bulgaria and the Multimodal Transport Network - Integration and Development Prospects' is published on the basis of the PhD-dissertation research. The document spans over 108 pages and follows a traditional structure consisting of an introduction, three chapters, and a conclusion. It delves into the current challenges concerning sustainable inland waterway transportation, emphasizing its role in achieving low carbon and circular economy goals, and highlights the benefits of integrating various modes of transport. The monograph is an in-depth study of the possibilities for integrating national river transport into the multimodal transport network using quantitative and

qualitative research methods, including a survey. Based on the study's results, there are specific recommendations for using and implementing measures to improve the available infrastructure facilities. These measures include adopting the synchromodality initiative, ensuring 24/7 operations for congestion facilities, and implementing technical renovations.

The candidate's portfolio contains publications that fall within the scientific field of the promotion process, specifically the Economics of Transport. These publications meet or even surpass the necessary quantitative and qualitative standards for appointment and promotion to the position of associate professor in the Economic Research Institute of BAS.

5. Assessment of the scientific and applied results and contributions

The candidate's theoretical, methodological, and applied contributions are clearly stated in the report and aligned with those in the submitted publications for promotion. In our opinion, we can summarize these contributions as follows:

- 1) <u>Scientific and theoretical results and contributions</u> related to: (1) Effective forms of competition for water transport and market position improvement have been identified through clarification of competitiveness specifics; (2) A model is summarized to evaluate the correlation between a passenger air operators' financial performance and the degree of digitalization of their core business.; (3) A test model has been created to evaluate the feasibility of incorporating Bulgaria's inland waterway transport into Europe's multimodal transport network; (4) a theoretical matrix is developed for applying corporate social responsibility indicators to different transport modes (water, air, inland).
- Methodological results and contributions related to: (1) A methodology has been created to assess and analyze the competitiveness of Bulgarian seaports. The analysis is based on comparisons with EU member states using operational characteristics, efficiency, and productivity indicators of seaports; (2) A system of indicators has been defined and a concept developed to link the process of digitalization of human resources management in transport infrastructure entities (with a focus on waterborne and air transport) and the effects of the COVID-19 pandemic are evaluated; (3) A toolkit for assessing opportunities and constraints for the transport sector in line with the priorities of the European Green Deal and the National Recovery and Resilience Plan is proposed.
- 3) Applied results and contributions including: (1) The effective and appropriate forms of competition in water transport have been systematized; (2) The economic, environmental, and social aspects of corporate social responsibility have been clarified and tailored to each mode of transport; (3) A system has been developed to assess river port financial and operational status and to identify obstacles to integrating inland waterways transport into the multimodal network; (4) Concrete measures have been proposed to accelerate digitization processes in the transport sector (air transport).

6. Critical notes and recommendations

Regarding the further academic development of Dr. Petya Koralova, I could recommend concentrating her attention and deepening her research work in the field of the economic impact of modern innovative approaches for sustainable waterborne and air transport development by reviewing and analyzing a broader range of existing Bulgarian and foreign publications on the topic. In her work, she has focused on the effects of digitalization, circular economy, and corporate social responsibility. However, there is a room to expand this research to explore how other strategies can improve the quality of transportation services and promote sustainable development in the country's economy.

To promote the accomplishments of Bulgarian economic and transport science on a global scale, I suggest publishing and sharing the research findings in various international scientific forums and peer-reviewed and indexed scientific journals abroad.

7. Conclusions

After reviewing the portfolio of materials submitted by Dr. Petya Koralova, which includes publications and documents representing her scientific, teaching, and social activities, I believe that she exhibits qualities that place her in competition with the foremost leaders in her field. Furthermore, based on the requirements outlined in Article 24 of the Law on Academic Staff Development in the Republic of Bulgaria (LASDRB), as well as the regulations for its implementation and the procedures for acquiring scientific degrees and holding academic positions at the Economic Research Institute of BAS, I believe that Dr. Koralova meets all the necessary criteria for promotion to the position of associate professor.

The candidate's publications definitely demonstrate scientific excellence, and they present the necessary theoretical, methodological, and applied contributions to the field of Economics (Economics of Transport – waterborne and air transport). The portfolio of materials presented, demonstrate an impact, and promise of very high levels of the candidate's research and scholarship.

As of the review preparation, there have been no reports of copyright infringement and no overlap with scientific works from other authors.

Based on all the above stated arguments, with full confidence, I vote positive on the promotion of Dr. Petya Delcheva Koralova - Nozharova to associate professor.

15.09.2023	Signature:
Sofia	