

REVIEW
of the official reviewer for dissertation work
Moldabekova Aisulu Turсынbayevna on the theme "Improving quality
of logistics services of dry ports within Eurasian transport corridors
(based on the case study "Khorogos Gateway")"
presented for the degree of Doctor of Philosophy (PhD)
in the specialty "6D090900 – Logistics"

№	Criteria	Eligibility (one of the options must be checked)	Justification of the position of the official reviewer
1.	<p>The topic of the thesis (as of the date of its approval) corresponds to the directions of development of science and/or state programs</p>	<p>1.1 Compliance with priority areas of science development or government programs: 1) The thesis was completed within the framework of a project or target program financed from the state budget (indicate the name and number of the project or program) 2) The thesis was completed within the framework of another state program (indicate the name of the program)</p> <p>3) The dissertation corresponds to the priority direction of the development of science, approved by the Higher Scientific and Technical Commission under the Government of the Republic of Kazakhstan (indicate the direction)</p>	<p>1) The dissertation research was carried out within the framework of Program-targeted financing of the Ministry of Science and Higher Education of the Republic of Kazakhstan "Kazakhstan's path to a knowledge-intensive economy based on the third technological modernization: strategy, models and mechanisms for development" (No. 0118RK01076, 2018-2020) based on Institute of Economics Committee of Science Ministry of Science and Higher Education of the Republic of Kazakhstan.</p> <p>2) Results obtained during the dissertation research would contribute to the implementation of the "State program of infrastructural development "Nurly Zhol" for 2020-2025".</p> <p>3) The dissertation research corresponds to the priority direction "Research in the field of social sciences and humanities" of March 19, 2021, of the National Scientific Council: 1.1. Modernization and sustainable development of the national economy in the face of a changing landscape of global challenges and trends of Industry 4.0.: economic relations and politics, financial system, technical and economic structure, management and organization, business environment</p>

2.	Importance for science	The work makes/does not make a significant contribution to science, and its importance is well disclosed/not disclosed	The results of the dissertation research contribute to the development of the concept of "dry port", the assessment of the quality of logistics services and the problems of digitalization of transport and logistics infrastructure. The scientific relevance of the study is justified by the fact that in the scientific databases Scopus and Web of Science, the number of publications on the analysis of logistics services and digitalization is growing yearly. Also, published articles based on the results of dissertation research have fairly good citation rates by scientists from various countries: 1) Digital Technologies for Improving Logistics Performance of Countries. Transport and Telecommunication, 2021, 22(2), pp. 207–216. – 19 citations; 2) Technological Readiness and Innovation as Drivers for Logistics 4.0. Journal of Asian Finance, Economics and Business, 2021, 8(1), pp. 145–156. – 13 citations; 3) Advanced technologies in improving the management of logistics services: Bibliometric network analysis. Polish Journal of Management Studies, 2020, 21(1), pp. 211–223. – 10 citations. The h index of the candidate is 4.
3.	The principle of independence	Self-reliance level: 1) High ; 2) Medium; 3) Low; 4) No independence	The author did the work independently, as evidenced by the research carried out within the framework of the dissertation and the doctoral student's contribution to each publication where she is the corresponding author. The author has developed her own methodological approach to assessing the quality of logistics services at various levels and carried out several empirical studies based on secondary and primary data.
4.	The principle of inner unity	4.1 Justification of the relevance of the thesis: 1) Justified ; 2) Partially justified; 3) Not justified.	The dissertation topic is relevant and justified in the context of implementing state programs, the digitalization of transport and logistics infrastructure and the geopolitical crisis. The Strategy "Kazakhstan-2050: new political course of the established state" emphasizes that a critical direction is developing transit potential, which is expected to increase transit traffic through Kazakhstan. It was also planned to form transport and logistics hubs in the world's nodal transit points for global infrastructure integration. Aiming to increase the competitiveness of Kazakhstan planned to implement infrastructure projects and improve service and transit routes. Within the frame of the State Program "Digital Kazakhstan", it is planned to introduce an intelligent transport system that will increase the transit potential and improve transport security through

		<p>information processing. In ensuring the uninterrupted organization of freight traffic in the Eurasian space, one of the tasks is to develop digital transport corridors. Therefore, improving the quality of the logistics service of dry ports is relevant and has prospects for research.</p>
	<p>4.2 The content of the thesis reflects the topic of the thesis: 1) Reflects; 2) Partially reflects; 3) Does not reflect</p>	<p>The dissertation consists of three sections, which reveal the purpose and objectives of the study. The work considers theoretical and methodological approaches to improving the quality of the logistics service of dry ports, analyzes the current state of the quality of the logistics services in the Eurasian space, and develops directions and recommendations for improving the quality of logistics services of dry ports and transport corridors in the context of digitalization.</p>
	<p>4.3. The purpose and objectives correspond to the topic of the thesis: 1) correspond; 2) partially correspond; 3) do not correspond</p>	<p>The purpose and objectives correspond to the topic of the dissertation. Within the framework of theoretical and methodological tasks, the conceptual foundations and foreign experience were studied, and a bibliometric analysis of scientific literature was carried out. The work considers the theoretical, methodological, analytical and practical tasks of improving the quality of the logistics service of dry ports and transport corridors in the context of digitalization. Based on the study of methodological approaches and international service quality standards, a methodological approach and research tools have been developed. Further, based on the developed design of the study, within the framework of analytical tasks, an assessment was made on the impact of technological, innovative development and digital technology on the quality of logistics services. An analysis was made of the transit potential of Kazakhstan and the use of digital technologies in transport and logistics. The doctoral student conducted a case study in the dry port of "Khorgos Gateway". Based on the results of the study in the third chapter, practical recommendations were developed for the development of dry ports and transport corridors in the context of digitalization.</p>
	<p>4.4 All sections and provisions of the thesis are logically interconnected: 1) completely interconnected; 2) the interconnection is partial; 3) there is no interconnection</p>	<p>All sections and provisions of the dissertation are logically and completely interconnected. The work has internal integrity and is presented in scientific language. Each subsection flows from one to the next. There is a clear relationship between the sections and stages of the study.</p>

	<p>4.5 The new solutions (principles, methods) proposed by the author are reasoned and evaluated in comparison with the known solutions: 1) there is a critical analysis; 2) partial analysis; 3) the analysis does not represent one's own opinions, but quotes from other authors</p>	<p>The paper contains a critical analysis of conceptual approaches to the definition of a dry port and existing methodological approaches to assessing the quality of a logistics service. Further, based on the study of research gaps in science, the candidate developed an author's assessment tool for the evaluation quality of the logistics services of dry ports in terms of digitalization.</p>
<p>5. Scientific novelty principle</p>	<p>5.1 Are the scientific results and provisions new? 1) completely new; 2) partially new (25-75% are new); 3) not new (less than 25% are new)</p>	<p>In general, scientific results and provisions are partially new. In general, the impact of ICT technologies on logistics was considered by various authors. Nevertheless, the novelty of this study lies in an integrated approach, where triangulation of quantitative and qualitative analysis is conducted. An assessment of the quality of the logistics service of dry ports in the context of digitalization is carried out.</p>
	<p>5.2 Are the dissertation findings new? 1) completely new; 2) partially new (25-75% are new); 3) not new (less than 25% are new)</p>	<p>In the course of the study, the author's conclusions are new. The originality of the work lies in conducting a study considering the assessment of the transport and logistics infrastructure at various levels: at the macro level, an evaluation of the factors influencing the logistics service, at the meso level - an analysis of the country's transit potential and the status of application of digital technologies, at the micro level - an assessment of the quality of the dry port logistics service.</p>
	<p>5.3 Technical, technological, economic or management decisions are new and reasonable: 1) completely new; 2) partially new (25-75% are new); 3) not new (less than 25% are new)</p>	<p>The solutions proposed by the author to improve the quality of the logistics level in the conditions of Kazakhstan are partially new. Especially the author's proposals made for the provision of value-added services; digital transformation using dry port digital audit, the introduction of digital technologies, development of an integrated information system/platform; development of "soft" infrastructure of transport corridors. The practical recommendations of the doctoral student are confirmed by the acts of implementation of the Union of transport and logistics organizations "Kazlogistics" and LLP "KTZE Khorgos Gateway".</p>

6.	The validity of the main findings	All main conclusions are/are not based on scientifically significant evidence or well-grounded (for qualitative research and areas of training in the arts and humanities)	Scientific results, conclusions and recommendations of the dissertation are justified and reliable, which is confirmed by compliance with the requirements for scientific research. In the bibliometric analysis of scientific data, materials from the scientific databases Scopus and Web of Science were used. Statistical analysis used data from international organizations such as the United Nations (UN), the World Bank, and the Eurasian Economic Union (EAEU). The descriptive analysis was based on data from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. Empirical evidence was obtained from a case study at the dry port "Khorogos Gateway".
7.	The main provisions for the defense	It is necessary to answer the following questions for each provision separately: 7.1 Is the provision proven? 1) proven; 2) rather proven; 3) rather not proven; 4) not proven 7.2 Is it trivial? 1) yes; 2) no 7.3 Is it new? 1) yes; 2) no 7.4 Application level: 1) narrow; 2) medium; 3) wide 7.5 Is it proven in the article? 1) yes; 2) no	The author identifies six scientific provisions: 1) A dry port in continental transport corridors is a logistics node (terminal, centre, hub) in a land transport corridor and provides a wide range of transport and warehouse services, as well as other value-added services, while ensuring the quality of service and digital transparency of the processes. 7.1 Is the provision proven? 1) proven ; 2) rather proven; 3) rather not proven; 4) not proven 7.2 Is it trivial? 1) yes; 2) no 7.3 Is it new? 1) yes ; 2) no 7.4 Application level: 1) narrow; 2) medium ; 3) wide 7.5 Is it proven in the article? 1) yes ; 2) no

		<p>Moldabekova A., Beifert A., Sabden O. Logistics Service Quality of Dry Ports Within Land-Based Transport Corridors: A Case Study «Khorogos Gateways» // Lecture Notes in Networks and Systems. – 2020. – Vol. 117. – 213–222 p. https://doi.org/10.1007/978-3-030-44610-9_21</p> <p>2) The role of digital technologies in improving the quality of logistics services with the provision of operational data, ensuring transparency of the supply chain, optimizing logistics processes, establishing a flexible connection between products and services, and facilitating instant communication between various stakeholders in the provision of logistics services are substantiated.</p> <p>7.1 Is the provision proven? 1) proven; 2) rather proven; 3) rather not proven; 4) not proven</p> <p>7.2 Is it trivial? 1) yes; 2) no</p> <p>7.3 Is it new? 1) yes; 2) no</p> <p>7.4 Application level: 1) narrow; 2) medium; 3) wide</p> <p>7.5 Is it proven in the article? 1) yes; 2) no</p> <p>Moldabekova, A., Zhidebekkyzy, A., Akhmetkaliyeva, S., Baimukhanbetova, E. Advanced technologies in improving the management of logistics services: Bibliometric network analysis // Polish Journal of Management Studies. –</p>
--	--	--

			<p>2020. – Vol. 21. – № 1. – P. 211–223. https://doi.org/10.17512/rims.2020.21.1.16 Молдабекова А.Т. Индустрия 4.0 жағдайында жеткізу тізбегін басқару: жүйелі әлебиет талдауы // Экономика: стратегия и практика». Алматы. – 2019. - № 2. - С. 167-185.</p> <p>2) A systematic approach to assessing the quality of the logistics service of dry ports in international transport corridors is defined, which implies complexity: at the macro level, an assessment of the factors influencing the logistics service, at the meso level - an analysis of the country's transit potential and application of digital technologies, at the micro level - an assessment of the quality of the logistics service of the dry port. An assessment tool for evaluating the quality of the logistics service of dry ports has been developed, which consists of the following parameters: availability of physical infrastructure, operations and processes quality, management and staff quality, appropriating price for the service quality, comprehensive use of ICT, multimodality, and providing value-added services.</p> <p>7.1 Is the provision proven? 1) proven; 2) rather proven; 3) rather not proven; 4) not proven</p> <p>7.2 Is it trivial? 1) yes; 2) no</p> <p>7.3 Is it new? 1) yes; 2) no</p> <p>7.4 Application level: 1) narrow; 2) medium; 3) wide</p>
--	--	--	---

		<p>7.5 Is it proven in the article? 1) yes; 2) no</p> <p>Сабден О., Имашева Г., Молдабекова А. Методы и практика оценки национальной логистической системы Республики Казахстан // Экономика: стратегия и практика. – 2018. - №1. - С.86-92. Молдабекова А., Вейферт А., Сабден О. Logistics Service Quality of Dry Ports Within Land-Based Transport Corridors: A Case Study «Khorghos Gateways» // Lecture Notes in Networks and Systems. – 2020. – Vol. 117. – 213–222 p. https://doi.org/10.1007/978-3-030-44610-9_21</p> <p>3) Based on the correlation-regression analysis of secondary data, it was revealed that the innovational development, the level of technological readiness of the country and digital technologies have a positive effect on improving the quality of logistics services: trade and transport infrastructure, competence and quality of logistics services, the efficiency of customs clearance processes and cargo tracking.</p> <p>7.1 Is the provision proven? 1) proven; 2) rather proven; 3) rather not proven; 4) not proven</p> <p>7.2 Is it trivial? 1) yes; 2) no</p> <p>7.3 Is it new? 1) yes; 2) no</p> <p>7.4 Application level: 1) narrow; 2) medium; 3) wide</p> <p>7.5 Is it proven in the article?</p>
--	--	--

		<p>1) yes; 2) no</p> <p>Moldabekova, A., Philipp, R., Satybaldin, A. A., Prause, G. Technological Readiness and Innovation as Drivers for Logistics 4.0 // Journal of Asian Finance Economics and Business– 2021. – Vol. 8. – № 1. – P. 145–156. https://doi.org/10.13106/jafeb.2021.vol8.no1.145</p> <p>Moldabekova A., Philipp R., Reimers H. E., Alikozhayev B. Digital Technologies for Improving Logistics Performance of Countries //Transport and Telecommunication Journal – Vol.22 – No.2. – 2021. – P. 207-216. https://DOI:10.2478/ttj-2021-0016</p> <p>4) The analysis of the transit potential and the case study of the dry port "Khorogos Gateway" showed that a high level of logistics services would be achieved due to the digital modernization of the transport and logistics infrastructure. In developing logistics and economic corridors in the Eurasian space, the development of dry ports of international significance and technological, digital modernization of cross-border infrastructure (stations, customs, ports, terminals) would increase the transit potential of countries.</p> <p>7.1 Is the provision proven? 1) proven; 2) rather proven; 3) rather not proven; 4) not proven</p> <p>7.2 Is it trivial? 1) yes; 2) no</p> <p>7.3 Is it new? 1) yes; 2) no</p> <p>7.4 Application level: 1) narrow; 2) medium;</p>
--	--	---

		<p>3) wide</p> <p>7.5 Is it proven in the article?</p> <p>1) yes;</p> <p>2) no</p> <p>Молдабекова А.Т. Перспективы развития региональных логистических центров в Республике Казахстан / Материалы МНПК. Экономическая наука Казахстана: поиски и решения Под ред. Сатыбалдина А.А. – Алматы: Институт экономики КН МОН РК, 2018. – Т.2. – С. 215-223. 2018.</p> <p>Молдабекова А.Т. Приоритеты развития экспорта транспортно-логистических услуг в Республике Казахстан в условиях технологической модернизации / Материалы МНПК. Наука, экономика и социальная модернизация общества: реальность и перспективы. Под ред. Сатыбалдина А.А. – Алматы: Институт экономики КН МОН РК, - 2019. – С. 679-690.</p> <p>Молдабекова А.Т. Развитие транзитного потенциала Казахстана. - Колл. монография: «Стратегия экономической безопасности и социальной стабильности Казахстана: коллективная монография/ Под ред. Академика НАН РК А.А. Сатыбалдина. – Алматы. Институт экономики КН МОН РК, 2019. – С. 162-168.</p> <p>Молдабекова А.Т., Филлипс Р., Ахметова З.Б., Асанова Т.А. Роль цифровых технологий в развитии логистики в Казахстане в формировании Индустрии 4.0. Economics: the strategy and practice. – 2021. – №16(2). – С. 164-177. https://doi.org/10.511176/1997-9967-2021-2-164-177</p> <p>Moldabekova A., Veifert A., Sabden O. Logistics Service Quality of Dry Ports Within Land-Based Transport Corridors: A Case Study «Khotogos Gateways» // Lecture Notes in Networks and Systems. – 2020. – Vol. 117. – 213–222 p. https://doi.org/10.1007/978-3-030-44610-9_21</p> <p>5) Developed recommendations on improving the quality of logistics services of dry ports and Eurasian transport corridors based on (1) ensuring the quality of logistics services with the introduction of the ISO international service quality standard and the provision of value-added services; (2)</p>
--	--	--

		<p>digital transformation based on the digital audit of the dry port, the introduction of digital technologies, the development of an integrated information system/platform; (3) integration into regional, international transport networks based on the development of a "soft" infrastructure of transport corridors, involvement in the regional and global chain, development as a logistics hub.</p> <p>7.1 Is the provision proven? 1) proven; 2) rather proven; 3) rather not proven; 4) not proven</p> <p>7.2 Is it trivial? 1) yes; 2) no</p> <p>7.3 Is it new? 1) yes; 2) no</p> <p>7.4 Application level: 1) narrow; 2) medium; 3) wide</p> <p>7.5 Is it proven in the article? 1) yes, partially 2) no</p> <p>Philipp R., Gerlitz L., Moldabekova A. Small and Medium-Sized Seaports on the Digital Track: Tracing Digitalisation Across the South Baltic Region by Innovative Auditing Procedures // Reliability and Statistics in Transportation and Communication. Lecture Notes in Networks and Systems. - Springer, Cham, 2020. - Volume 117. – P. 351-362. https://doi.org/10.1007/978-3-030-44610-9_35</p> <p>Молдабекова А.Т. Приоритеты развития экспорта транспортно-логистических услуг в Республике Казахстан в условиях</p>
--	--	---

		<p>технологической модернизации / Материалы МНПК. Наука, экономика и социальная модернизация общества: реальность и перспективы. Под ред. Сатъбаддина А.А. – Алматы: Институт экономики КН МОН РК, - 2019. – С. 679-690.</p>
<p>8. The principle of reliability of sources and information provided</p>	<p>8.1 Choice of methodology - is justified or the methodology is described in sufficient detail 1) yes; 2) no</p> <p>8.2 The results of the thesis were obtained using modern methods of scientific research and methods of processing and interpreting data using computer technologies: 1) yes; 2) no</p>	<p>In the dissertation work, the choice of methodology is substantiated. The applied research methods are clearly described in the dissertation in subsection 1.3. The methodological basis of the dissertation is based on the explanatory sequential research design. It includes general scientific methods (analysis and synthesis, induction, deduction), empirical methods (quantitative and qualitative methods) and statistical methods of data analysis.</p> <p>In the study of the quality of the logistics services of dry ports, the following methods were used: bibliometric network analysis, content analysis, correlation-regression analysis, the SERVQUAL method, and the importance of analysis. Empirical data were collected through expert interviews and surveys. VOS viewer and SPSS 25 programs were used to analyze and visualize qualitative and quantitative data.</p>
	<p>8.3 Theoretical conclusions, models, identified relationships and patterns have been proven and confirmed by experimental research (for areas of training in pedagogical sciences, the results have been proven on the basis of a pedagogical experiment): 1) yes; 2) no</p>	<p>The developed assessment of the quality of the logistics service of the dry port was tested in the dry port of "Khorogos Gateway". Also, with the Union of transport and logistics organizations "Kazlogistics", a study was conducted to assess the level of digitalization and quality of service management, the results of which allow to assess the problems and opportunities for the digital transformation of transport and logistics infrastructure facilities in Kazakhstan.</p>
	<p>8.4 Important statements are confirmed / partially confirmed / not confirmed by references to current and reliable scientific literature</p>	<p>Important statements are supported by references to the current reliable scientific literature. The list of literature contains 140 sources, which are referenced in the dissertation. The primary scientific literature is represented by the last five years (2017-2022).</p>

		8.5 Used literature sources are sufficient/not sufficient for a literature review	As part of the literature study, a bibliometric analysis was carried out and published as an article in a rating journal: Moldabekova, A., Zhidebekkyzy, A., Akhmetkaliyeva, S., Baimukhanbetova, E. Advanced technologies in improving the management of logistics services: Bibliometric network analysis // Polish Journal of Management Studies. – 2020. – Vol. 21. – № 1. – P. 211–223. https://doi.org/10.17512/pjms.2020.21.1.16 In this paper, the candidate conducted a network analysis of published works on the keywords ICT and logistics service on scientific databases Scopus and Web of Science.
9	Practical value principle	9.1 The thesis has theoretical value: 1) yes; 2) no 9.2 The thesis is of practical importance and there is a high probability of applying the results obtained in practice: 1) yes; 2) no 9.3 Are the practice suggestions new? 1) completely new; 2) partially new (25-75% are new) ; 3) not new (less than 25% are new)	The results of the dissertation contribute to the development of theoretical and conceptual foundations for the study of dry ports, the quality of logistics services, and the digitalization of transport and logistics infrastructure (ports and transport corridors). Also, theoretical developments of the dissertation research can be used in the preparation of educational and methodological programs in the specialties "Logistics" and "Management" and applied in the development of the educational program in the discipline "Logistics infrastructure of international transport corridors (LIMTK4309)". The practical significance of the research is that the conclusions and recommendations of the thesis can be used in the digital transformation and improvement of the quality of the logistics service of the transport and logistics infrastructure of the Republic of Kazakhstan (in the dissertation Appendix A), in the development of the dry port "Khorogos Gateway" (in the dissertation Appendix B). Practical recommendations for the development of a dry port based on improving the quality of service and digitalization are partially new. However, the developed recommendations for conducting a digital audit and introducing an integrated platform for stakeholders are of interest.
10.	The quality of writing and design	Academic writing quality: 1) high ; 2) average; 3) below average; 4) low.	The dissertation work is written in a relatively good academic style, and the text is presented in an understandable language. The content and design of the work meet the requirements for a PhD thesis. There are typos and technical errors in formatting, which generally do not detract from the quality of the dissertation work.

The content of the dissertation fully complies with the requirements for PhD work. The thesis of Moldabekova Aisulu Nursynbaevna "Improving quality of logistics services of dry ports within Eurasian transport corridors (based on the case study "Khorgos Gateway")" is recommended for public defense, the applicant deserves the award of a PhD degree in the specialty "6D090900 - Logistics".

Official Reviewer:

Candidate of Technical Sciences,

Associate Professor, Dean of the Faculty

of Engineering and Information Technology,

Kazakh-German University

(place of work, academic title)



Zhandos Kegenbekov Kadytkhanovich