

Project Application Form

Under the Recovery and Resilience Facility

1. Project name
<p>Providing sustainable transport connectivity and service on electrified and rehabilitated railway sections for 160 km / h, by purchasing energy-efficient and comfortable rolling stock.</p>
2. Description of the project (objectives, main activities)
<p>BDZ-Passenger Services Ltd. performs a social function through the Contract for the provision of public rail transport (the Contract with the state). Every day 565 trains serve 685 stations throughout the country, thus providing 90% transport service of the population. Despite the difficulties and challenges caused by COVID-19, the company continues to fulfil its obligations under the Contract, as it is a major transportation for many residents.</p> <p>BDZ-Passenger Transport Ltd. has prepared a program for the period of 2020-2024, and a public procurement was conducted for partial renewal of the rolling stock and repair of the existing one, in order to provide a higher quality service by 2030, fully compliant with the investment and development program of the National Railway Infrastructure Company.</p> <p>The Contract for the provision of public rail transport includes transport service in the rehabilitated network lines and in the ones that are still in work for reaching up to 160km/h : Sofia-Varna, Sofia-Burgas and Sofia-Svilengrad.</p> <p>The lengths of the section are as follows:</p> <p>Sofia – Plovdiv – Burgas – 448 km. Sofia – Plovdiv - Svilengrad – 297 km. Sofia - Plovdiv-Karnobat-Varna -545km.</p> <p>Currently, the service in these sections is performed with electric locomotives and various series of passenger cars manufactured in the 70s and 80s of the last century. With less investment the road transport has a much more significant market share in the passenger transport, that's the main reason the offered rail service to be significantly inferior to road transport. In order to ensure the movement of the trains to the indicated destinations, 20 train compositions for 160 km / h are needed daily, which the company does not have.</p> <p>The number of trains by direction is as follows: Sofia – Plovdiv – Burgas –Sofia – up to 20 per day Sofia – Plovdiv – Svilengrad – Sofia – up to 10 trains per day Sofia - Plovdiv-Karnobat-Varna – Sofia – up to 4 per day</p> <p>In this regard, the possibilities for purchasing 20 electric trains for long distances, which are offered on the European market and provide comfortable and ecological transport and sustainable transport connectivity, have been analysed.</p> <p>The information used for the calculation of the estimated value of the current project is taken from the announced public procurement in the previous year, "Supply and warranty maintenance of up to 16 new electric multiple unit/ EMU for "BDZ-Passengers" Ltd." with deadline the first quarter of 2021, during which an</p>

introductory price bids have been received from the following manufacturers: Stadler, Alstom and Siemens. The provided values are described in detail in Appendix 1.

According to the above-cited documents, the estimated value for the supply, warranty maintenance and staff training of 1 newly produced EMU for a long distances providing comfortable and ecological transport and sustainable transport connectivity namely:

Unit type	Manufacturer's value in BGN VAT excluded		
	Stadler	Alstom	Siemens
EMU	16 286 451,00	14 852 500,00	15 671 534,18
<i>Estimated value for production and delivery of EMU for medium and long distances providing comfortable and ecological transport and sustainable transport connectivity:</i>			15 603 495,06 EUR/ 7 977 940,34

In summary, the estimated value of the project "Providing sustainable transport connectivity and service on electrified and rehabilitated railway sections for 160 km / h, by purchasing energy-efficient and comfortable rolling stock", is set at **BGN 312 069 901,20 VAT excluded**.

The following conditions and method of payment are set:

- Up to 25% of the total amount of the contract - advance payment after signing the contract;
- Not less than 75% of the EMU value - payment after acceptance of each one of them;

The following basic parameters are: 4 or 5 section multiple units, with a minimum of 280 seats and with increased comfort for passengers, sections with first and second class, seats and WC suitable for Person with Disabilities, prams and bicycles, video surveillance, WI-FI and catering area.

The project aimed at training women drivers, an integration policy that has already been introduced in the major European railways.

When providing basic comfort for travel by rail in accordance with the requirements of Regulation (EC) 1371/2007, the main criteria is the purchase price, as well as the cost of maintenance of the train and the cost of transport per passenger.

The newly produced electric multiple units are expected to be delivered within 30 months from the date of signing the contract, based on the market conditions in the sector.

The investment project is part of the General plan for improving the conditions of the passenger transport and strategic development of the state railways, including renovation of the existing fleet and purchase of new rolling stock, thus the company will meet the challenges of modern competitive conditions.

The project will contribute to the implementation of Bulgaria's commitments for the development of railway infrastructure, reaching European standards for sustainable development of the Trans-European Transport Network.

Main goals

- Improving the competitiveness of rail transport compared to other modes of transport, especially through the transfer of passengers from road to rail, which would lead to lower greenhouse gas emissions, ie. to reduce the overall negative impact of transport on the environment.

- Upgrading and visualization of the projects for renovation and rehabilitation of the railway infrastructure,

implemented or in the process of implementation by NRIC.

3. Beneficiary

Holding BDZ EAD through its subsidiary BDZ-Passengers Ltd.

4. Time schedule for project Implementation, including activities, stages¹

Project duration: 36 months with the following time schedule:

	Months																																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
Pre-project analysis	X																																				
Preparation of tender documentation	X																																				
Beginning of a public procurement			X																																		
Work of the commission				X	X	X																															
Signing a contract with the selected contractor							X																														
Delivery of the first lot multiple units																								X	X	X											
Final delivery																																				X	X
Placing in service																								X	X	X									X	X	

4.1. When can the project implementation start at the earliest after its approval?

immediately

5. Indicative financial resource by activity, including sources of financing (national budget, European funding, private funding, IFIs)

Based the cited above market study, the indicative value of the project amounts to **BGN 312 069 901,20 VAT excluded**.

- 217 600 000 European funding
- 94 469 901,20 private funding through the EUROFIMA financial institution of the European Railways.

¹ The time schedule shall be relevant for determining interim targets within the framework of the Recovery and Resilience Plan and is directly related to the disbursement of grant instalments from the Recovery and Resilience Fund.

5.1. Indicative allocation of the financial resource, depending on the type of expense
<ul style="list-style-type: none"> - Infrastructure construction / rehabilitation (CAW) -.....% - Physical capital (purchase of machines and equipment with maintenance included) -100% - Human capital (skills development, retraining..)-....% - Labor (wage costs, consulting services....)-...% - Technology (costs for acquisition of intangible fixed assets - patents, software
6. Indicators
6.1. Result indicator/s
<p>Reduction by up to 30% of the used volume of traction electricity per train kilometer for servicing trains in composition- electric locomotive +5 wagons at a distance of 448 km (Sofia-Plovdiv-Burgas)</p> <ul style="list-style-type: none"> - Initial value – 17,05 kW/km [2021] - Intermediate value - 14,20 kW/km [24th month/ 2023] - Final value –11,90 kW/km [36th month/ 2024]
<p>Improving transport connectivity by reduction of travel time at a distance of 448 km (Sofia-Plovdiv-Burgas)</p> <ul style="list-style-type: none"> - Initial value – 6:00 hours [2021] - Intermediate value - 5:00 hours [24th month/ 2023] - Final value – 4:30 hours [36th month/ 2024]
<p>6.2 Effect indicator/s</p> <p>Increase in passenger transport by rail</p> <ul style="list-style-type: none"> - Initial value - 18 million [2020] - Intermediate value - 22 million [2024] - Final value - 25 million [2027]
7. Does the project require the opening of a procedure pursuant to the Public Procurement Act (PPA)?
Yes
7.1. If a procedure under the Public Procurement Act is required, what part of the activities and financial resources will be subject of the public procurement?
100%
7.2. If a procedure under the Public Procurement Act is required, what is the indicative schedule for its implementation?
<ul style="list-style-type: none"> - Preparing of tender documents: up to 1 month - Starting a public procurement: up to 3 months - Signing a contract: up to 6 months - Delivery after the signed contract: up to 30 months
8. Demarcation and complementarity
8.1. If similar projects have been implemented (regardless of their source of funding), describe

how this project builds on/complements what has been achieved with previous projects.

The implemented Investment projects for renovation of the rolling stock with complete renovation of own wagons and delivery of highly productive and energy efficient electric locomotives and EMUs in 2020-2024 period include:

1. Purchase of 15 newly manufactured electric locomotives: the contract has been concluded and delivering have been started in the period 12.2020-04.2021.

<https://www.bdz.bg/bg/a/dostavka-i-garancionna-poddrujka-na-10-broia-novoproizvedeni-magistralni-elektricheski-lokomotivi-za>

2. Project for the recycling and complete renovation of passenger cars. 15 units will be completed by the end of March 2021.

<https://www.bdz.bg/bg/a/retsiklirane-na-7-sedem-broya-ptnicheski-vagoni-sobstvenost-na-bdzh-ptnicheski-prevozi-eood-delima-na-7-sedem-obosobeni-pozitsii>

<https://www.bdz.bg/bg/a/retsiklirane-na-8-osem-broya-ptnicheski-vagoni-sobstvenost-na-bdzh-ptnicheski-prevozi-eood-delima-na-osem-obosobeni-pozitsii>

The financing for both projects are covered from national budget 2020/2021, through the Contract for the provision of public rail transport.

3. The project in the process of implementation is "Supply and warranty maintenance of up to 16 new electric multiple unit/ EMU for "BDZ-Passengers" Ltd." and the public procurement have announced the in the previous year, with deadline the first quarter of 2021.

The financing for the project are covered from national budget, through the Contract for the provision of public rail transport.

The projects represent the first two stages of the overall repair and investment program of the Company, secured with national funding through the Contract with the state, in order to provide a competitive transport service with the required quality and reliability over the next 15 years.

The third stage of the program is the project described in this application form, mainly secured with European funding and co-financed by the company through a loan from EUROFIMA, of which BDZ is a shareholder.

As a summary, the activities described in the project and the estimated costs **are not funded** by other projects of the European Union and / or the national budget / other donor programs, and **are not planned for future funding**.

8.2. If similar projects are envisaged to be implemented under the Partnership Agreement programs, the centrally managed facilities of EU or the Just Transition Fund, outline the demarcation with this project.

The project will complement and visualize the projects for rehabilitation and new construction of the railway infrastructure, reaching the European standards for stable development of the Trans-European transport network.

9. Does the project directly contribute to the implementation of any of the Council's Specific Recommendations addressed to Bulgaria in the framework of the European Semester in the period 2017-2020? Please describe how.

In a recommendation of the European Council regarding the National Reform Program of Bulgaria for 2020, which contains an opinion of the Council on the Convergence Program of Bulgaria for 2020 is stated that the

coverage and quality of the transport infrastructure and also the service in Bulgaria remain below the average EU level, and the trans-European transport network is not completed yet. A recommendation was made to focus investments in the green and digital transition, in particular in the areas of clean and efficient production and use of energy and resources, environmental infrastructure and sustainable transport, contributing to the gradual decarbonisation of the economy.

The ascertainment, conclusions and recommendations of the previous 2019 Council report are similar.

In order to implement the above recommendations, it is necessary to support projects in the railway sector, which increase its competitiveness and make it a preferred way of traveling. This is the essence of the proposed project. Its implementation will contribute to reflecting the recommendations of the European Council to Bulgaria, aimed at transport.

10. Does the project contribute to the implementation of a reform in a given sector? Please describe how.

- The project will contribute to improve the safety and modernization of the railway sector, to its reform by achieving interoperability in accordance with the requirements of the TSI.
- The implementation of such projects will support the full implementation of Regulation (EC) No 1371/2007 regarding the rights and obligations of rail passengers.
- Improving the provided service will make rail transport more preferable to other modes and will contribute to an increase in rail passenger transport at the expense of road transport. This would reduce the overall negative impact of transport on the environment through its decarbonisation.
- **The project contributes to European policy on transport accessibility and gender equality.**
- The project will also make an indirect contribution to the overall concept of road safety reforms, with the reduction of traffic on the national road network.

11. Does the project contribute to the development of any aspect of sustainable economic development? Please describe how.

The latest annual report of the European Commission for Bulgaria for 2020 regarding the transport, states that our country has limited progress in the context of sustainability, because especially for the railway infrastructure serious efforts are needed to avoid segmentation of modernized and non-modernized sections. It is stated that rail transport has a limited contribution to the total transport revenues, which questioning its sustainability.

The financing for the development of the railway transport and in particular of the specific project will contribute to the increase of the sustainability and will support the visualization of the investment projects of NRIC. The implementation of the project will contribute to the reduction of the total travel time on the long routes with the possibility to prepare and provide a timetable with additional trains to improve the transport connection between the small regions and at the same time will have a positive cross-border effect for the transport links between Bulgaria and Turkey.

The quality of services and the continuity of transport flows will be improved by renovating the railway infrastructure in terms of its safety, security, efficiency, resilience to climatic conditions, which have a direct impact on sustainable economic development.

The provided activities will not have a significant negative impact on the components and factors of the environment, nor will they cause damage to the habitats in the protected areas of the European Natura 2000 network. They are not expected any gas emissions in the atmosphere, as the activities are not related to the generation of such gases.

All this will have a direct impact and contribution to Europe's green transition.

12. Does the project contribute to the implementation of the objectives of the National Development Program BULGARIA 2030? Please describe how.

The project is directly related to the objectives of the NDP Bulgaria 2030 and its implementation is in accordance with Priority P7 - "Transport connectivity", 7.1 "Railway transport" and Area of impact 7.1a - "Railway sector management" and 7.1b - "Railway infrastructure" 7.1c - "Rolling stock". It states that rail transport will remain a priority area in transport policy, as the sector will be developed and managed in a way that allows it to compete effectively in the transport market, providing quality passenger transport for customers, investing wisely and maintaining necessary assets in good condition and to support itself financially with an acceptable level of support from the state. Efforts to improve the quality of the offered transport service in the country will continue. The implementation of the proposed project will contribute to the achievement of the above objectives and priorities of the NDP BG 2030.

13. Does the project contribute to the implementation of the objectives and priorities set out in the National Integrated Energy and Climate Plan? If yes, please describe how.

In the Energy Efficiency section of the Integrated Energy and Climate Plan of the Republic of Bulgaria 2021-2030 it is stated that the planned policies, measures and programs for achieving the indicative national energy efficiency targets for 2030, as well as the other targets for promoting energy efficiency in the transport sector require the efforts to be focused at deploying electric mobility, developing and stimulating the use of public electric transport, as well as accelerating the integration of modern technologies in the innovative railway sector.

In addition, the main objectives of the policy for reducing gas emissions in the transport sector are to reduce freight, which are transported by motor vehicles over a distance of more than 300 km by shifting to more environmentally friendly transports, such as rail, in accordance with the Third National Action Plan on Climate Change 2013-2020 (extended until 2030)

The main measures by which Bulgaria seeks to improve energy efficiency in the sector include increasing the share of public electric transport by renewal of the rolling stock.

Taking into account the above-mentioned priorities and measures in Integrated Energy and Climate Plan of the Republic of Bulgaria 2021-2030, it can be concluded that the proposed project will contribute to their implementation in the field of energy efficiency of railway transport.