

# Project Application Form

## Under the Recovery and Resilience Facility

<b>1. Project name</b>
Modernization of traction substations and section piles along the core and comprehensive TEN-T network with construction of SCADA remote control and remote signalling system
<b>2. Description of the project (objectives, main activities)</b>
<p>The project foresees full modernization of 20 traction substations, modernization of 21 section piles as well as construction of a combined system of the remote control and remote signalling SCADA. The project scope also includes delivery of 3 rail self-propelled specialized machines for digitalization and visualization of the catenary parameters as well as delivery and placing in service of a mobile diagnostic laboratory that powers its own driving on the permanent way for geometrical, optical and ultrasonic measurements and records for determination of the condition and location of objects and components of the railway infrastructure.</p> <p>The implementation of SCADA system allows automatic control and supervision both from the substation and remotely from the Dispatching Centres, which is a contribution to the digitalization of the railway sector.</p> <p>Digital technologies provide huge potential for optimization of the transport system and open up new opportunities for manufacturing and services. They support the integration of transport with other systems of the economy, such as energy, and significantly increase the efficiency of the sector.</p> <p>Development of the digital technologies and their implementation in all economic and social areas require re-consideration of the approach for utilization of their exclusive potential for improvement of the competitiveness of the Bulgarian economy, increasing of the supply and demand of the efficiency of the public services and successful overcoming of the main social challenges within the period until 2030. The digital transformation is a process characterized by implementation and combination of digital technologies in all areas of the public and economic life.</p> <p>The railway power distribution system, providing electric power for trains, includes 110 kV input high voltage from the National electricity transmission network, a traction substation (TSS), in which the high voltage power is transformed into electric traction power of a type and value suitable to supply the catenary system. The main purpose of the traction substation is to supply the overhead contact line with a nominal system power of 25 kV (max 29 kV), 50 Hz frequency, measured relatively to earth. The supply of the catenary with electricity is provided from the traction substations through supply feeders. The traction current circuit from the catenary and the rolling stock is closed through the track and reverse feeders to the traction substation. The catenary, the tracks, the supply and reverse feeders form the traction network of the electrified section.</p> <p>The catenary is a kind of special power transmission network, which has the task of transmitting electricity from traction substations to the electrified rolling stock and transmitting it through a direct contact with its pantograph. It includes overhead conductors, associated supports and structures, sectional disconnectors, neutral insert, sectional piles, as well as management and signalling of the station disconnectors. The catenary is to be built over the rail tracks and follows them along their entire route.</p> <p>The Applicant - NRIC follows a strategy for modernization of traction substations which includes all TEN-T substations to be equipped with SCADA by 2027. The implementation of this strategy has already started, as a number of them have already been modernized and equipped with SCADA, while others are in the process of modernization. It is planned to modernize four TSSs with funding from the Transport Connectivity Programme 2021-2027, and several others - with national financing.</p> <p>As mentioned above, the traction substations are independent objects, which are a combination of stationary equipment, designed for transformation of 110 kV voltage supplied</p>

from the energy network of the Republic of Bulgaria into a type and value suitable for power supply of the catenary system. The power supply voltage of the catenary system is rated 25 kV single-phase.

The installed capacity of the traction substations is carried out by means of traction transformers, which are often overloaded due to the increased capacity of the new locomotives, which is inconvenient for the traction transformers themselves. The existing traction transformers were put into operation more than 30 years ago and suffer by multiple oil leaks, increased noise and low power. Their foundations have collapsed and put at risk stability of traction transformers, which could provoke final failure of traction substations and inability to ensure power supply to the catenary in the respective sections, and hence to stop the entire movement of trains powered by electric traction.

The facilities of 27.5 kV are obsolete and dangerous for the life and health of employees, and put at risk the proper implementation of the train schedule. The circuit interrupters are low-oil while the disconnectors are operated manually. All equipment located in the 27.5 kV system has expired service cycle, spare parts for this type of equipment are not produced, which causes extremely difficult maintenance.

The equipment located in the open distribution system of 110 kV has expired service cycle, and is of a low reliability and high failure rate. The motor driven devices of 110 kV disconnectors are of extremely low reliability, not-reversible, with unreliable signaling device for monitoring their actual condition. The 110 kV circuit interrupters are low-oil, with extremely difficult maintenance due to the lack of available spare parts already excluded from production. Beams and bearing structures: beams where the 110 kV busbar system is attached are made of reinforced concrete, with weakened integrity due to weather conditions and passed time.

Relay protections are obsolete, extremely difficult to adjust and apply selective operation. The lack of digital protections causes frequent non-selective disconnections of the catenary outputs. These disconnections are due to the fact that the high operating currents of the "new" generation locomotives lack the third harmonic component and are considered by the relay protections as current of a short-circuit. The only solution to this problem is replacement of all relay protections with digital ones.

The existing equipment of TSSs is obsolete, extremely difficult and too expensive for further maintenance and does not allow for deployment of SCADA – a system for remote control and tele-signaling.

**The general objectives** of the present project proposal are:

- to contribute to the achievement of the main specific interoperability requirements of "Energy" subsystem (TSI Energy) - traction substations and related energy components of the railway infrastructure.
- automation of the processes for measurement, treatment and analysis of the results for measurement and generation/preparation of reports; creation of a database for the objects and components of the railway infrastructure; preparation of short-term forecasts for development of the poor technical condition of the objects and elements of the railway infrastructure.
- to contribute to the modernization of the railway facility, to its reform by achievement of interoperability according to the TSI requirements as well as to the certification of existing catenary system under the national interoperability rules for its integration into the European Railway Area in compliance with the specific connecting documents.

**The specific project objectives** include:

- modernization of the existing infrastructure by restoring, repairing and modernizing 20 traction substations, which ensure power supply for sections of the core and comprehensive TEN-T network, in line with the EU standards and the European transport policies
- centralization of the management of the traction energy supply facilities by energy dispatchers and improvement of the efficiency in their operation by the respective energy dispatching sections improvement of the reliability and quality of the voltage

supplied to the catenary system, respectively to the electrified rolling stock from the specified traction substations pursuant to BDS EN 50163 standard

- improvement of the throughput capacity of the respective railway sections and creating conditions for more full execution of the train schedule.
- improvement of the capacity of efficiency and operability of operation of the infrastructure by improvement of the operational parameters and implementation of the most advanced methods for management of the rolling stock and respective railway infrastructure (places for sectioning of the catenary system)
- reduction of the number of accidents caused by the operation of the specified traction substations and respective section piles as well as the time needed for elimination of these faults
- reduction of the environmental impact by the operation of the respective traction substations and related rail infrastructure (the section piles and disconnectors), by replacement of the equipment releasing emissions, flue gases, harmful substances and containing hazardous, toxic and cancerous substances (sulphur hexafluoride SF6, transformer oil, liquid electrolyte in the accumulators and condensate batteries etc.)
- improvement of the operation safety of the specified traction substances and the related rail infrastructure (section piles and disconnectors) for the staff executing emergency and preventive maintenance for third persons, staying close to the traction substations etc.
- support for the development of backward spatial areas mainly in North Bulgaria, situated into the range of the traction substations, which will eliminate the social and economic differences between the region and the other planning regions as well as for the execution of the plans for achievement of economic and social cohesion in the regional development of the country
- improvement of the quality of the railway infrastructure, serviced by all twenty traction substations regarding the safety of movement of people and transportation of goods.
- reduction of CO2 emissions by construction of solar systems for generation of electricity.
- improvement of the reliability and quality of the current supply of the electrified rolling stock
- improvement of the capacity of efficiency and operability of operation of the infrastructure by improvement of the operational parameters of the catenary system and implementation of the most advanced methods for preventive maintenance of the catenary system parameters
- reduction of the number of accidents caused by the poor parameters of the catenary system as well as the time needed for elimination of these faults
- reduction of the environmental impact caused by the operation of the rail self-propelled specialized machines for digitalization and visualization of the catenary system parameters
- execution by the delivery of laboratory of direct measurements, monitoring and video recording on the move of the objects and components of the railway infrastructure that directly affect the train traffic safety
- establishment of database for support of the activity of the Railway Infrastructure Manager in Bulgaria based on collected results of the measurements done by the delivered laboratory.
- options for preparation of reports on the current condition and elaboration of short-term and medium-term forecasts for the objects of the railway infrastructure based on the created database.

The project scope assumes the execution of the following main activities:

Activity 1: Design, construction and delivery of equipment for modernization of twenty traction substations and related 21 section piles with construction of local remote-control systems as follows:

- along 4th railway line Ruse-Dimitrovgrad (core network) the modernization of traction substations Borovo, Dryanovo, Krastets and Yavorets (Dabovo) as well as section piles Polski Trambesh, Tsareva livada, Travna, Raduntsi, Zmeyovo is included.

- along 9th railway line Ruse - Kaspichan (comprehensive network) modernization of traction substations Chervena voda and Hitrino as well as Ruse section pile is included.
  - along 2nd railway line Sofia-Kaspichan (core and comprehensive network) modernization of traction substations Iliantsi, Cherven bryag, Pleven, Levski, Gorna Oryahovitsa, Chestovo, Slavyanovo, Targovishte and Divdyadovo as well as Roman, Telish, Zgalevo, Lesicheri, Strazhitsa, Karadzhata, Kochovo, Zhelad and Kaspichan section piles is included.
  - Along 3rd railway line Stolnik - Zimnitsa modernization of Stolnik, Kazanlak, Tvarditsa and Sliven traction substations as well as modernization of Bunovo, Tazha, Tulovo, Nikolaevo, Oreshak and Zimnitsa section piles is included
- The scope of activity 1 includes assessment of the interoperability and information and publicity activities.

Activity 2: Construction of a system combining SCADA remote control and signalling systems for railway energy objects and upgrade of SCADA system within Plovdiv-Turkish border section.

Activity 3: Supervision of the construction works according to the Spatial Planning Act of all 20 traction substations and related section piles.

Activity 4: Delivery and commissioning of a mobile diagnostic laboratory moving under its own power on rail track for geometrical, optical and ultrasonic measurements and records for determination of the condition and location of objects and elements of the railway infrastructure, such as: Catenary conductor; Catenary system; Tower line; Rails; Fastening systems; Sleepers; Ballast Prism; Subgrade; Bridges; Tunnels; Underpasses and some other facilities; underground crossing of the railway infrastructure. The scope of activity assumes staff training, certification and commissioning of the laboratory.

Activity 5: Delivery of three rail self-propelled specialized machines for digitalization and visualization of the catenary system parameters, placing in service, including obtaining of permit for placing on the market of the vehicle, obtaining of vehicle type authorization and staff training.

In each substation, the following works should be executed: Dismantling of the existing equipment and facilities; Replacement of the existing metal structures; Replacement of the facilities by new ones, thus increasing their reliability and safety; Construction of remote control and video monitoring system; Installation of automatic voltage control. Installation of a compensation system of capacitive and inductive reactive energy in order to improve the power factor  $\cos\phi$ . Installation of a solar system for generation of electric power for the house load.

The investments proposed with the present project proposal are related to the environmental and digital transition thus guaranteeing the sustainable recovery. The investments in environmental and digital technologies, capacities and processes, which assist the transition to clean energy as they improve the energy efficiency in different key economic sectors, will contribute to the job creation and sustainable growth.

The present project proposal is directly related to the implementation of visions of the "Sustainable and Smart Mobility Strategy" (Strategy) of the EC, namely Vision 3 "The transport sector to significantly reduce its emissions and become more sustainable" and Vision 6 "Greening mobility must be the new licence for the transport sector to grow". Also, the planned investments are directly related to the implementation of vision 7 "Digitalisation of the transport sector will become an indispensable driver for the modernisation of the entire system".

All planned investments for modernization of the railway infrastructure are directly related to the achievement of a number of the most important milestones defined in the Strategy, which set themselves the task of reallocating activities towards more sustainable modes of transport, namely:

- By 2030, all organized journeys up to 500 km within the EU are to be "carbon-neutral"
- High speed rail traffic is to double by 2030 and triple by 2050
- Freight rail traffic is to increase by 50% by 2030 and to double by 2050

Two further tasks and policies, which the Strategy follows and which fully comply with the projects for modernization of the railway infrastructure, are defined in part 2 and part 4 of the Document. Part 2 "An Irreversible Shift To Zero-Emission Mobility" provides for decisive action to shift more activity towards more sustainable transport modes (notably increasing the number of passengers travelling by rail and commuting by public transport and active modes, as well as shifting a substantial amount of freight onto rail, inland waterways, and short sea shipping) and in Part 4 "Resilient Mobility – a More Resilient Single European Transport Area: For Inclusive Connectivity" a task that "All necessary steps must be taken to complete the TEN-T on time" is defined. EC intends to propose to strengthen the role of European Coordinators in stimulating progress on transport corridors across the continent in order to achieve their completion by 2030. EU must prioritise the closing of the East-West and North-South divides for modern infrastructure.

The proposed project contributes to the development of TEN-T priorities by constructing an interoperable railway infrastructure on the TEN-T network. The proper functioning of traction substations and the adjacent components of the energy railway infrastructure will ensure trouble-free transport of goods and passengers in a long term. Their modernization will improve the quality of railway services on the TEN-T network by increasing the reliability and quality of the power supply, will ensure better train movement and thus better quality of train services on the lines, will ensure better safety of passengers and goods, will reduce the number of damages and thus prevent power interruptions. In addition, the modernized TSSs and the adjacent components of the railway energy infrastructure will have a direct positive impact on the environment, as the new equipment and facilities will not emit harmful gases, toxic and carcinogenic substances.

In accordance with Article 10 of the TEN-T Guidelines, the successful implementation of this project will promote the efficient and sustainable use of infrastructure by increasing the capacity of the railway infrastructure along the TEN-T network, as well as will lead to improved quality of the railway infrastructure in terms of safety, security, efficiency, climate resilience, environmental performance and accessibility for all consumers. The investments envisaged under this project will also contribute to achieving a coordinated and synchronized approach to infrastructure investments so as to manage its capacity in the best efficient way.

The planned deployment of SCADA affects the implementation of projects for construction and equipment of traction substations, rather than railway traffic management systems and is not related to the equipment with ERTMS (ETCS and GSM-R). The SCADA deployment is not conditioned and bound to the ERTMS equipment, nor even replaces it.

It should be noted that SCADA and ERTMS are two completely different systems.

- ✓ SCADA allows for automatic control and monitoring of the power facilities both from the substation and remotely from the Dispatch Centers.
- ✓ ERTMS system guarantees the safety of the movement and enables the implementation of objective, continuous and independent from the train drivers control over the conditions under which the trains run in stations and in open way.

Deployment of ERTMS along the railways will be carried out under the Transport Connectivity Programme 2021-2027 and, if possible, under CEF-2, in accordance with the deadlines set out in the ERTMS Work Plans and the National Implementation Plan and Strategy, provided that the necessary financial resources are made available for this purpose.

### **3. Beneficiary**

State Enterprise "National Railway Infrastructure Company"

#### **4. Time schedule for project implementation, including activities, stages<sup>1</sup>**

Stage 1 – Design and execution of modernization activities of Borovo traction substation, Polski Trambesh section pile with construction of SCADA remote control and remote signalling system. 2021 – 2023

Stage 2- Design and execution of works for modernization of Dryanovo traction substation, Tsareva livada and Tryavna section piles with construction of SCADA remote control and remote signalling system. 2022 – 2024

Stage 3- Design and execution of works for modernization of Krastets traction substation, Raduntsi section pile with construction of SCADA remote control and remote signalling system. 2023 – 2025

Stage 4- Design and execution of works for modernization of Yavorets (Dabovo) traction substation, Zmeyovo section pile with construction of SCADA remote control and remote signalling system. 2024 – 2026

Stage 5– Design and execution of works for modernization of Chervena voda traction substation and Ruse section pile with construction of remote control and remote signalling SCADA system. 2021 – 2023

Stage 6- Design and execution of works for modernization of Hitrino traction substation with construction of SCADA remote control and remote signalling system 2022 – 2024

Stage 7 – Design and execution of works for modernization of sectionalizers in the railway stations from Sofia Sever to Mezdra, with renovation and restoration of the corrosion protection coating of lattice steel towers in the station sections, Iliantsi traction substation and modernization of SCADA remote control and remote signalling system along II line in Sofia-Telish section. 2021 – 2023

Stage 8- Design and execution of works for modernization of sectionalizers in the railway stations from Roman to Telish, with execution of renovation and restoration of the corrosion protection coating of lattice steel towers in the station sections, Cherven bryag traction substation, Roman and Telish section piles with their integration into SCADA remote control and remote signalling system along II line in Sofia-Telish section. 2022 – 2024

Stage 9- Design and execution of works for modernization of sectionizers in the railway stations from Han Krum to Kaspichan, with execution of renovation and restoration of the corrosion protection coating of the lattice steel towers in the station sections, Divdyadovo traction substation, Kaspichan and Zhalad section piles and modernization of SCADA remote control and remote signalling system of II line in Gorna Oryahovitsa-Kaspichan section. 2022 – 2024

Stage 10- Design and execution of works for modernization of sectionalizers in the railway stations from Resen to Dzhulyunitsa, with execution of renovation and restoration of the corrosion protection coating of the lattice steel towers in the station sections, Gorna Oryahovitsa traction substation with construction of SCADA remote control and signalling system of II line in Gorni Dabnik-Gorna Oryahovitsa section and Chestovo traction substation with its integration into SCADA remote control and remote signalling system of II line in Gorna Oryahovitsa - Kaspichan section. 2023 – 2025

Stage 11- Design and execution of works for modernization of sectionalizers in the railway stations from Dralfa to Targovishte, with execution of renovation and restoration of the corrosion protection coating of the lattice steel towers in the station sections, Targovishte traction substation and Karadzhata and Kochovo section piles with their integration into SCADA remote control and remote signalling system of II line in Gorna Oryahovitsa - Kaspichan section. 2024 – 2026

Stage 12- Design and execution of works for modernization of sectionalizers in the railway stations from Gorni Dabnik to Pavlikeni, with execution of renovation and restoration of the corrosion protection coating of the lattice steel towers in the station sections, Pleven and Levski traction substations as well as Zgalevo and Lesicheri section piles with their integration into SCADA remote control and remote signalling system of II line in Gorni

<sup>1</sup> 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.

Dabnik-Gorna Oryahovitsa section. 2024 – 2026

Stage 13- Design and execution of works for modernization of sectionalizers in the railway stations from Strazhitsa to Popovo, with execution of renovation and restoration of the corrosion protection coating of the lattice steel towers in the station sections, Slavyanovo traction substation and Strazitsa section pile with their integration into the SCADA remote control and remote signalling system under II line in Gorna Oryahovitsa - Kaspichan section. 2024 – 2026

Stage 14- Design and execution of works for modernization of Tvarditsa traction substation, Nikolaevo section pile with construction of SCADA remote control and remote signalling system. 2021 – 2023

Stage 15- Design and execution of works for modernization of Sliven traction substation, Oreshak and Zimnitsa section pile with construction of SCADA remote control and remote signalling system. 2022 – 2024

Stage 16- Design and execution of works for modernization of Stolnik traction substation, Bunovo section pile with construction of SCADA remote control and remote signalling system. 2023 – 2025

Stage 17- Design and execution of works for modernization of Kazanlak traction substation, Tulovo section pile with construction of SCADA remote control and remote signalling system. 2024 – 2026

Stage 18- Design and execution of works for modernization of Karlovo traction substation, Tazha section pile with construction of SCADA remote control and remote signalling system. 2024 – 2026

Stage 19 – Delivery of one self-propelled specialized machine for digitalization and visualization of the parameters of the catenary system, placing in service and staff training. 2021 – 2022

Stage 20 - Delivery of one self-propelled specialized machine for digitalization and visualization of the parameters of the catenary system, placing in service and staff training 2021– 2022.

Stage 21 - Delivery and placing in service of a diagnostic mobile laboratory moving under its own power on rail track for geometrical, optical and ultrasonic measurements. 2021 – 2023

Stage 22-„Construction of a system combining SCADA remote control and signalling systems for railway energy objects and upgrade of SCADA system in the Plovdiv-Turkish border section. 2021 - 2026

	2021	2022	2023	2024	2025	2026
<b>Stage 1 - Design and execution of modernization activities of Borovo traction substation, Polski Trambesh section pile with construction of SCADA remote control and remote signalling system. 2021 - 2023</b>						
Preparation of tender documents for construction works						
Tender procedure for construction works						
Signature of construction contract						
Preparation of tender documents for supervision						
Tender procedure for supervision						
Signature of supervision contract						
Technical Design						
Detailed Design						
Compliance Assessment Report						
Building permit						
Construction works						
Act 15						
Act 16						
<b>Stage 2 - Design and execution of works for modernization of Dryanovo traction substation, Tsareva livada and Tryavna section piles with construction of SCADA remote control and remote signalling system. 2022 - 2024</b>						
Preparation of tender documents for construction works						
Tender procedure for construction works						
Signature of construction contract						
Preparation of tender documents for supervision						
Tender procedure for supervision						
Signature of supervision contract						
Technical Design						
Detailed Design						
Compliance Assessment Report						
Building permit						
Construction works						
Act 15						
Act 16						
<b>Stage 3 - Design and execution of works for modernization of Krastets traction substation, Raduntsi section pile with construction of SCADA remote control and remote signalling system. 2023 - 2025</b>						
Preparation of tender documents for construction works						
Tender procedure for construction works						
Signature of construction contract						
Preparation of tender documents for supervision						
Tender procedure for supervision						
Signature of supervision contract						
Technical Design						
Detailed Design						
Compliance Assessment Report						
Building permit						
Construction works						
Act 15						
Act 16						
<b>Stage 4 - Design and execution of works for modernization of Yavorets (Dabovo) traction substation, Zmeyovo section pile with construction of SCADA remote control and remote signalling system. 2024 - 2026</b>						
Preparation of tender documents for construction works						
Tender procedure for construction works						
Signature of construction contract						
Preparation of tender documents for supervision						
Tender procedure for supervision						
Signature of supervision contract						
Technical Design						
Detailed Design						
Compliance Assessment Report						
Building permit						





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<b>4.1. When can the project implementation start at the earliest after its approval?</b>
5 months after its approval
<b>5. Indicative financial resource by activity, including sources of financing (national budget, European funding, private funding, IFIs)</b>
<p>Indicative cost – BGN 273.2 million, VAT excluded.  Financing sources: EU – 100 %, according to the rules of RRF and NRRP</p> <p>Stage 1 – BGN 9 500 000.00  Stage 2 – BGN 10 000 000.00  Stage 3 – BGN 9 500 000.00  Stage 4 – BGN 9 500 000.00  Stage 5 – BGN 9 500 000.00  Stage 6 – BGN 9 000 000.00  Stage 7 – BGN 15 600 000.00  Stage 8 – BGN 13 500 000.00  Stage 9 – BGN 13 500 000.00  Stage 10 – BGN 22 100 000.00  Stage 11 – BGN 13 000 000.00  Stage 12 – BGN 28 500 000.00  Stage 13 – BGN 13 500 000.00  Stage 14 – BGN 9 500 000.00  Stage 15 – BGN 10 00 000.00  Stage 16 – BGN 9 500 000.00  Stage 17 – BGN 9 500 000.00  Stage 18- BGN 9 500 000.00  Stage 19 – BGN 4 500 000.00  Stage 20 – BGN 9 000 000.00  Stage 21 – BGN 10 000 000.00  Stage 22 – BGN 25 000 000,00</p> <p>The above indicative costs are calculated on the basis of our previous experience and collected data from similar contracts for the implementation of analogical types of projects - as stated in Table 3b.</p> <p>In the table below are presented in detail the respective costs under contracts/activities, as well as justification of the indicative costs. In the links indicated similar concluded contracts are presented, as well as the detailed price breakdowns according to the financial offers of the selected Contractors, specifying the unit prices by activities/components.</p>

ivi	Indicative Costs in BGN, VAT excluded	Justification of the Indicative Costs per Contract/Activity	Indicative Costs for the Stage in BGN, VAT excluded
Stage 1 Design and execution of modernization activities of Borovo traction substation, Polski Trambesh section pile with construction of SCADA remote control and remote signalling system. 2021 – 2023			
WORKS Contract	9 150 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and tele-signaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm</a></p> <p>To determine properly the indicative value of the contract, it is necessary to exclude from the financial offer the maintenance and service costs - 500,000.00 BGN, as well as the price for section pile Krivnya - 268,000.00 BGN, VAT excluded. Then add the costs for: delivery of two new traction transformers – 1 500 000.00 BGN, VAT excluded (In Table № 1, line 6 of the Report for market study, approved by NRIC Director General costs of two traction transformers are indicated - 1 364 996.60 BGN, VAT excluded - the cost of 1 500 000.00 BGN, VAT excluded is determined based on a cost conversion by 2021 and the need to eventually increase the installed capacity), and change of the conditions for connection of the TSS to the national electricity transmission network - 900,000.00 BGN, VAT excluded.</p>	9 500 000 BGN
Supervision Contract	185 000,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract № 11223 dated 03.09.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site: "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including their construction and incorporation in the system for remote control and tele-signaling SCADA, as well as maintenance and service for a 10-year period" amounting at 185 000,00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNH2ZOaZ4">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNH2ZOaZ4</a></p>	
Technical Assistance	165 000,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 1 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice).</p> <p>According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	
Stage 2- Design and execution of works for modernization of Dryanovo traction substation, Tsareva livada and Tryavna section piles with construction of SCADA remote control and remote signalling system. 2022 – 2024			

WORKS Contract	9 415 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and tele-signaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7piFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7piFAGm</a></p> <p>To determine properly the indicative value of the contract, it is necessary to exclude from the financial offer the maintenance and service costs - 500,000.00 BGN, VAT excluded.</p> <p>Then add the costs for: delivery of two new traction transformers - 1,500,000.00 BGN, VAT excluded (In Table № 1, line 6 of the Report for market study, approved by NRIC Director General costs of two traction transformers are indicated - 1 364 996.60 BGN, VAT excluded - the cost of 1 500 000.00 BGN, VAT excluded is determined based on a cost conversion by 2021 and the need to eventually increase the installed capacity), and change of the conditions for connection of the TSS to the national electricity transmission network - 900,000.00 BGN, VAT excluded.</p>	10 000 000 BGN
Supervision Contract	185 000,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract № 11223 dated 03.09.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site: "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including their construction and incorporation in the system for remote control and tele-signaling SCADA, as well as maintenance and service for a 10-year period" amounting at 185 000,00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNh2ZOaZ4">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNh2ZOaZ4</a></p>	
Technical Assistance	400 000,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 2 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice).</p> <p>According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	
Stage 3- Design and execution of works for modernization of Krastets traction substation, Raduntsi section pile with construction of SCADA remote control and remote signalling system. 2023 – 2025			



WORKS Contract	8 447 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and tele-signaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwyMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwyMq7pjFAGm</a></p> <p>To determine properly the indicative value of the contract, it is necessary to exclude from the financial offer the maintenance and service costs - 500,000.00 BGN, VAT excluded, as well as the price for section pile Krivnya - 268,000.00 BGN, VAT excluded.</p> <p>Then add the costs for: construction of a new building 500 000 BGN, VAT excluded; modernization of the compensation system for reactive energy 250 000.00 BGN, VAT excluded; provision of independent communication environment 400 000 BGN, VAT excluded; as well as the construction of an additional output field on the side of 25 kV – 500 000 BGN, VAT excluded.</p>	9 500 000 BGN
Supervision Contract	185 000,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract № 11223 dated 03.09.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site: "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including their construction and incorporation in the system for remote control and tele-signaling SCADA, as well as maintenance and service for a 10-year period" amounting at 185 000,00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNH2ZOaZ4">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNH2ZOaZ4</a></p>	
Technical Assistance	868 000,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 3 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice). According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	
Stage 4- Design and execution of works for modernization of Yavorets (Dabovo) traction substation, Zmeyovo section pile with construction of SCADA remote control and remote signalling system. 2024 – 2026			

WORKS Contract	9 247 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and tele-signaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm</a></p> <p>To determine properly the indicative value of the contract, it is necessary to exclude from the financial offer the maintenance and service costs - 500,000.00 BGN, VAT excluded, as well as the price for section pile Krivnya - 268,000.00 BGN, VAT excluded.</p> <p>Then add the costs for: construction of a new building 500 000 BGN, VAT excluded; modernization of the compensation system for reactive energy 200 000.00 BGN, VAT excluded; and change of the conditions for connection of the TSS to the national electricity transmission network – 1 300 000.00 BGN, VAT excluded; as well as the construction of an additional output field on the side of 25 kV – 500 000 BGN, VAT excluded.</p>	9 500 000 BGN
Supervision Contract	185 000,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract № 11223 dated 03.09.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site: "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including their construction and incorporation in the system for remote control and tele-signaling SCADA, as well as maintenance and service for a 10-year period" amounting at 185 000,00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNH2ZOaZ4">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNH2ZOaZ4</a></p>	
Technical Assistance	68 000,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 4 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice).</p> <p>According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	
Stage 5– Design and execution of works for modernization of Chervena voda traction substation and Ruse section pile with construction of remote control and remote signalling SCADA system. 2021 – 2023			

WORKS Contract	9 150 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and tele-signaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm</a></p> <p>To determine properly the indicative value of the contract, it is necessary to exclude from the financial offer the maintenance and service costs - 500,000.00 BGN, as well as the price for section pile Krivnya - 268,000.00 BGN, VAT excluded. Then add the costs for: delivery of two new traction transformers – 1 500 000.00 BGN, VAT excluded (In Table № 1, line 6 of the Report for market study, approved by NRIC Director General costs of two traction transformers are indicated - 1 364 996.60 BGN, VAT excluded - the cost of 1 500 000.00 BGN, VAT excluded is determined based on a cost conversion by 2021 and the need to eventually increase the installed capacity), and change of the conditions for connection of the TSS to the national electricity transmission network - 900,000.00 BGN, VAT excluded.</p>	9 500 000 BGN
Supervision Contract	185 000,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract № 11223 dated 03.09.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site: "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including their construction and incorporation in the system for remote control and tele-signaling SCADA, as well as maintenance and service for a 10-year period" amounting at 185 000,00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNh2ZOaZ4">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNh2ZOaZ4</a></p>	
Technical Assistance	165 000,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 5 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice). According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	
Stage 6- Design and execution of works for modernization of Hitrino traction substation with construction of SCADA remote control and remote signalling system 2022 – 2024			

Works Contract	8 488 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and tele-signaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded.</p> <p><a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm</a></p> <p>To determine properly the indicative value of the contract, it is necessary to exclude from the financial offer the maintenance and service costs - 500,000.00 BGN, VAT excluded, as well as the price for section pile Krivnya - 268,000.00 BGN, VAT excluded and Samuil – 264 000 BGN, VAT excluded.</p> <p>Then add the costs for change of the conditions for connection of the TSS to the national electricity transmission network – 1 500 000.00 BGN, VAT excluded.</p>	9 000 000 BGN
Supervision Contract	185 000,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract № 11223 dated 03.09.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site: "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including their construction and incorporation in the system for remote control and tele-signaling SCADA, as well as maintenance and service for a 10-year period" amounting at 185 000,00 BGN, VAT excluded.</p> <p><a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNh2ZOaZ4">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNh2ZOaZ4</a></p>	
Technical Assistance	327 000,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 6 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice).</p> <p>According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	

**Stage 7 – Design and execution of works for modernization of sectionalizers in the railway stations from Sofia Sever to Mezdra, with renovation and restoration of the corrosion protection coating of lattice steel towers in the station sections, Iliyantsi traction substation and modernization of SCADA remote control and remote signalling system along II line in Sofia-Telish section. 2021 – 2023**

WORKS Contract	15 000 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and telesignaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm</a></p> <p>Contract № 11308 dated 23.12.2020 for "Modernization of traction substation Vratsa, adjacent section piles Moravitsa and Krivodol, replacement of station disconnectors at Moravitsa halt, at the stations of Ruska Byala, Vratsa, Beli Izvor and Krivodol, construction of a system for remote control and telesignaling SCADA with incorporation of the traction substation, section piles and station disconnectors, commissioning with issued permit for use, as well as maintenance and service during a10-year period” amounting at 13 442 120.00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCLk53LD0V2m1gods2wPFHw">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCLk53LD0V2m1gods2wPFHw</a></p> <p>The Iliyantsi TSS has 6 outputs to the catenary in more than Razgrad TSS, and the station disconnectors in the section are twice as many as in the Krivodol - Moravitsa section.</p>	15 600 000 BGN
Supervision Contract	400 000,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract №11260 dated 28.10.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site "Modernization of traction substation Vratsa, adjacent section piles Moravitsa and Krivodol, replacement of station disconnectors at Moravitsa halt, at the stations of Ruska Byala, Vratsa, Beli Izvor and Krivodol, construction of a system for remote control and telesignaling SCADA with incorporation of the traction substation, section piles and station disconnectors, commissioning with issued permit for use, as well as maintenance and service during a10-year period”, amounting at 391 959.00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAKn7XAQY852eT4AmZTxvMr">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAKn7XAQY852eT4AmZTxvMr</a></p>	
Technical Assistance	200 000,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 7 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice). According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	
Stage 8- Design and execution of works for modernization of sectionalizers in the railway stations from Roman to Telish, with execution of renovation and restoration of the corrosion protection coating of lattice steel towers in the station sections, Cherven bryag traction substation, Roman and Telish section piles with their integration into SCADA remote control and remote signalling system along II line in Sofia-Telish section. 2022 – 2024			

WORKS Contract	13 000 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and telesignaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm</a> Contract № 11308 dated 23.12.2020 for "Modernization of traction substation Vratsa, adjacent section piles Moravitsa and Krivodol, replacement of station disconnectors at Moravitsa halt, at the stations of Ruska Byala, Vratsa, Beli Izvor and Krivodol, construction of a system for remote control and telesignaling SCADA with incorporation of the traction substation, section piles and station disconnectors, commissioning with issued permit for use, as well as maintenance and service during a10-year period” amounting at 13 442 120.00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCLk53LD0V2m1gods2wPFHw">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCLk53LD0V2m1gods2wPFHw</a> The TSS at Cherven Bryag has 3 outputs to the catenary in more than the TSS at Razgrad, and the station disconnectors in the section are twice more than in the section Krivodol - Moravitsa.</p>	13 500 000 BGN
Supervision Contract	391 595,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract №11260 dated 28.10.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site "Modernization of traction substation Vratsa, adjacent section piles Moravitsa and Krivodol, replacement of station disconnectors at Moravitsa halt, at the stations of Ruska Byala, Vratsa, Beli Izvor and Krivodol, construction of a system for remote control and telesignaling SCADA with incorporation of the traction substation, section piles and station disconnectors, commissioning with issued permit for use, as well as maintenance and service during a10-year period”, amounting at 391 959.00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAKn7XAQY852eT4AmZTxvMr">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAKn7XAQY852eT4AmZTxvMr</a></p>	
Technical Assistance	108 405,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 8 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice).</p> <p>According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	
Stage 9- Design and execution of works for modernization of sectionizers in the railway stations from Han Krum to Kaspichan, with execution of renovation and restoration of the corrosion protection coating of the lattice steel towers in the station sections, Divdyadovo traction substation, Kaspichan and Zhalad section piles and modernization of SCADA remote control and remote signalling system of II line in Gorna Oryahovitsa-Kaspichan section. 2022 – 2024			

WORKS Contract	13 000 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and telesignaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm</a></p> <p>Contract № 11308 dated 23.12.2020 for "Modernization of traction substation Vratsa, adjacent section piles Moravitsa and Krivodol, replacement of station disconnectors at Moravitsa halt, at the stations of Ruska Byala, Vratsa, Beli Izvor and Krivodol, construction of a system for remote control and telesignaling SCADA with incorporation of the traction substation, section piles and station disconnectors, commissioning with issued permit for use, as well as maintenance and service during a10-year period” amounting at 13 442 120.00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCLK53LD0V2m1gods2wPFHw">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCLK53LD0V2m1gods2wPFHw</a></p> <p>The Divdyadovo TSS has 2 outputs to the catenary in more than the Razgrad TSS, and the station disconnectors in the section are twice as many as in the Krivodol-Moravitsa section.</p>	13 500 000 BGN
Supervision Contract	391 959,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract №11260 dated 28.10.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site "Modernization of traction substation Vratsa, adjacent section piles Moravitsa and Krivodol, replacement of station disconnectors at Moravitsa halt, at the stations of Ruska Byala, Vratsa, Beli Izvor and Krivodol, construction of a system for remote control and telesignaling SCADA with incorporation of the traction substation, section piles and station disconnectors, commissioning with issued permit for use, as well as maintenance and service during a10-year period”, amounting at 391 959.00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAKn7XAQY852eT4AmZTxvMr">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAKn7XAQY852eT4AmZTxvMr</a></p>	
Technical Assistance	108 041,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 9 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice).</p> <p>According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	
Stage 10- Design and execution of works for modernization of sectionalizers in the railway stations from Resen to Dzhulyunitsa, with execution of renovation and restoration of the corrosion protection coating of the lattice steel towers in the station sections, Gorna Oryahovitsa traction substation with construction of SCADA remote control and signalling system of II line in Gorni Dabnik-Gorna Oryahovitsa section and Chestovo traction substation with its integration into SCADA remote control and remote signalling system of II line in Gorna Oryahovitsa - Kaspichan section. 2023 – 2025			



WORKS Contract	21 200 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and tele-signaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxVi%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxVi%2fv1z3MwvMq7pjFAGm</a></p> <p>Contract № 11308 dated 23.12.2020 for "Modernization of traction substation Vratsa, adjacent section piles Moravitsa and Krivodol, replacement of station disconnectors at Moravitsa halt, at the stations of Ruska Byala, Vratsa, Beli Izvor and Krivodol, construction of a system for remote control and tele-signaling SCADA with incorporation of the traction substation, section piles and station disconnectors, commissioning with issued permit for use, as well as maintenance and service during a 10-year period" amounting at 13 442 120.00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCLk53LD0V2m1gods2wPFHw">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCLk53LD0V2m1gods2wPFHw</a></p> <p>The TSS Gorna Oryahovitsa has 5 outputs to the catenary in more than the substation Razgrad, TSS Chestovo has two outputs to the catenary in more than TSS Razgrad. For the two TSSs is envisaged delivery and installation of new traction transformers, which will increase the cost by 3 200 000 BGN, VAT excluded. The station disconnectors in the section are twice as many as along the section Krivodol-Moravitsa.</p> <p>For Gorna Oryahovitsa TSS is envisaged a change of the conditions for connection of the TSS to the national electricity transmission network, which will increase the costs with 1 500 000.00 BGN, VAT excluded.</p>	22 100 000 BGN
Supervision Contract	750 000,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract № 11260 dated 28.10.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site "Modernization of traction substation Vratsa, adjacent section piles Moravitsa and Krivodol, replacement of station disconnectors at Moravitsa halt, at the stations of Ruska Byala, Vratsa, Beli Izvor and Krivodol, construction of a system for remote control and tele-signaling SCADA with incorporation of the traction substation, section piles and station disconnectors, commissioning with issued permit for use, as well as maintenance and service during a 10-year period", amounting at 391 959.00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAKn7XAQY852eT4AmZTxvMr">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAKn7XAQY852eT4AmZTxvMr</a></p> <p>The indicative amount of the Supervision contract is doubled, considering the activities included in the Works contract and the bigger scope of work, namely construction of two TSSs at Chestovo and Gorna Oryahovitsa.</p>	
Technical Assistance	150 000,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 10 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice).</p> <p>According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	



**Stage 11- Design and execution of works for modernization of sectionalizers in the railway stations from Dralfa to Targovishte, with execution of renovation and restoration of the corrosion protection coating of the lattice steel towers in the station sections, Targovishte traction substation and Karadzhatia and Kochovo section piles with their integration into SCADA remote control and remote signalling system of II line in Gorna Oryahovitsa - Kaspichan section.**  
**2024 – 2026**

WORKS Contract	12 500 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and tele-signaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm</a></p> <p>Contract № 11308 dated 23.12.2020 for "Modernization of traction substation Vratsa, adjacent section piles Moravitsa and Krivodol, replacement of station disconnectors at Moravitsa halt, at the stations of Ruska Byala, Vratsa, Beli Izvor and Krivodol, construction of a system for remote control and tele-signaling SCADA with incorporation of the traction substation, section piles and station disconnectors, commissioning with issued permit for use, as well as maintenance and service during a 10-year period" amounting at 13 442 120.00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCLk53LD0V2m1gods2wPFHw">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCLk53LD0V2m1gods2wPFHw</a></p> <p>The TSS in Targovishte has 2 outputs to the catenary in more than the TSS in Razgrad, and the station disconnectors along the section are twice more than those along the section Krivodol-Moravitsa. The Targovishte TSS has already installed a system for reactive energy compensation, which will be maintained after the modernization, so the amount of 500 000 BGN, VAT excluded is to be deducted from the total cost.</p>	<b>13 000 000 BGN</b>
Supervision Contract	391 959,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract № 11260 dated 28.10.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site "Modernization of traction substation Vratsa, adjacent section piles Moravitsa and Krivodol, replacement of station disconnectors at Moravitsa halt, at the stations of Ruska Byala, Vratsa, Beli Izvor and Krivodol, construction of a system for remote control and tele-signaling SCADA with incorporation of the traction substation, section piles and station disconnectors, commissioning with issued permit for use, as well as maintenance and service during a 10-year period", amounting at 391 959.00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAKn7XAQY852eT4AmZTxvMr">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAKn7XAQY852eT4AmZTxvMr</a></p>	
Technical Assistance	108 041,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 11 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice). According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	

**Stage 12- Design and execution of works for modernization of sectionalizers in the railway stations from Gorni Dabnik to Pavlikeni, with execution of renovation and restoration of the corrosion protection coating of the lattice steel towers in the station sections, Pleven and Levski traction substations as well as Zgalevo and Lesicheri section piles with their integration into SCADA remote control and remote signalling system of II line in Gorni Dabnik-Gorna Oryahovitsa section.**

**2024 – 2026**

WORKS Contract	27 500 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and telesignaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxVi%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxVi%2fv1z3MwvMq7pjFAGm</a></p> <p>Contract № 11308 dated 23.12.2020 for "Modernization of traction substation Vratsa, adjacent section piles Moravitsa and Krivodol, replacement of station disconnectors at Moravitsa halt, at the stations of Ruska Byala, Vratsa, Beli Izvor and Krivodol, construction of a system for remote control and telesignaling SCADA with incorporation of the traction substation, section piles and station disconnectors, commissioning with issued permit for use, as well as maintenance and service during a10-year period" amounting at 13 442 120.00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCLk53LD0V2m1gods2wPFHw">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCLk53LD0V2m1gods2wPFHw</a></p> <p>TSSs in Pleven and Levski have 3 outputs to the catenary in more than the TSS in Razgrad, and the station disconnectors along the section are twice more than those along the section Krivodol Moravitsa. The TSSs are located on the plots of regional 110KV substations, and the project envisages their relocation and change in the conditions for connection to the National energy network.</p>	<b>28 500 000 BGN</b>
Supervision Contract	800 000,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract №11260 dated 28.10.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site "Modernization of traction substation Vratsa, adjacent section piles Moravitsa and Krivodol, replacement of station disconnectors at Moravitsa halt, at the stations of Ruska Byala, Vratsa, Beli Izvor and Krivodol, construction of a system for remote control and telesignaling SCADA with incorporation of the traction substation, section piles and station disconnectors, commissioning with issued permit for use, as well as maintenance and service during a10-year period", amounting at 391 959.00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAKn7XAQY852eT4AmZTxvMr">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAKn7XAQY852eT4AmZTxvMr</a></p> <p>The indicative amount of the Supervision contract is doubled, considering the activities included in the Works contract and the bigger scope of work, namely construction of two TSSs at Pleven and Levski.</p>	
Technical Assistance	200 000,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 12 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice).</p>	

		According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.	
<b>Stage 13- Design and execution of works for modernization of sectionalizers in the railway stations from Strazhitsa to Popovo, with execution of renovation and restoration of the corrosion protection coating of the lattice steel towers in the station sections, Slavyanovo traction substation and Strazitsa section pile with their integration into the SCADA remote control and remote signalling system under II line in Gorna Oryahovitsa - Kaspichan section.</b> <b>2024 – 2026</b>			
WORKS Contract	12 990 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and tele-signaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm</a></p> <p>Contract № 11308 dated 23.12.2020 for "Modernization of traction substation Vratsa, adjacent section piles Moravitsa and Krivodol, replacement of station disconnectors at Moravitsa halt, at the stations of Ruska Byala, Vratsa, Beli Izvor and Krivodol, construction of a system for remote control and tele-signaling SCADA with incorporation of the traction substation, section piles and station disconnectors, commissioning with issued permit for use, as well as maintenance and service during a10-year period" amounting at 13 442 120.00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCLk53LD0V2m1gods2wPFHw">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCLk53LD0V2m1gods2wPFHw</a></p> <p>The TSS in Slavyanovo has 2 outputs to the catenary in more than that in Razgrad, and the station disconnectors along the section are twice as many as those along the Krivodol Moravitsa section. The TSS in Targovishte has a system for reactive energy compensation, which is to be maintained after the modernization, so the amount of 500 000 BGN, VAT excluded is to be deducted from the total cost. The modernization also envisages overhaul of the traction transformers, which in turn will increase the cost with 480 000 BGN, VAT excluded.</p>	<b>13 500 000 BGN</b>
Supervision Contract	391 959,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract №11260 dated 28.10.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site "Modernization of traction substation Vratsa, adjacent section piles Moravitsa and Krivodol, replacement of station disconnectors at Moravitsa halt, at the stations of Ruska Byala, Vratsa, Beli Izvor and Krivodol, construction of a system for remote control and tele-signaling SCADA with incorporation of the traction substation, section piles and station disconnectors, commissioning with issued permit for use, as well as maintenance and service during a10-year period", amounting at 391 959.00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAKn7XAQY852eT4AmZTxvMr">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAKn7XAQY852eT4AmZTxvMr</a></p>	
Technical Assistance	118 041,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 13 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice).</p>	

		According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.	
Stage 14– Design and execution of works for modernization of Tvarditsa traction substation, Nikolaevo section pile with construction of SCADA remote control and remote signalling system. 2021 - 2023			
WORKS Contract	8 802 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and tele-signaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm</a></p> <p>To determine properly the indicative value of the contract, it is necessary to exclude from the financial offer the maintenance and service costs - 500,000.00 BGN, VAT excluded, as well as the price for section pile Krivnya - 268,000.00 BGN, VAT excluded. Then add the costs for change of the conditions for connection of the TSS to the national electricity transmission network – 1 200 000.00 BGN, VAT excluded as well as the cost for modernization of the reactive energy compensation system with capacitive and inductive features - BGN 250 000, VAT excluded.</p> <p>For TSS Tvarditsa is envisaged to construct two additional outputs to the catenary amounting at 600 000.00 BGN, VAT excluded.</p>	9 500 000 BGN
Supervision Contract	185 000,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract № 11223 dated 03.09.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site: "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including their construction and incorporation in the system for remote control and tele-signaling SCADA, as well as maintenance and service for a 10-year period" amounting at 185 000,00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNH2ZOaZ4">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNH2ZOaZ4</a></p>	
Technical Assistance	513 000,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 14 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice).</p> <p>According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	
Stage 15- Design and execution of works for modernization of Sliven traction substation, Oreshak and Zimnitsa section piles with construction of SCADA remote control and remote signalling system. 2022 – 2024			
WORKS Contract	9 652 000,00 BGN	The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely:	10 000 000 BGN

		<p>Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and tele-signaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded.  <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm</a></p> <p>To determine properly the indicative value of the contract, it is necessary to exclude from the financial offer the maintenance and service costs - 500,000.00 BGN, VAT excluded, as well as the price for section pile Krivnya - 268,000.00 BGN, VAT excluded. Then add the costs for change of the conditions for connection of the TSS to the national electricity transmission network – 600 000.00 BGN, VAT excluded.</p> <p>For TSS Sliven is envisaged to construct three additional outputs to the catenary amounting at 900 000.00 BGN, VAT excluded, as well as new traction power transformers – 1 400 000.00 BGN, VAT excluded.</p>	
Supervision Contract	185 000,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract № 11223 dated 03.09.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site: "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including their construction and incorporation in the system for remote control and tele-signaling SCADA, as well as maintenance and service for a 10-year period" amounting at 185 000,00 BGN, VAT excluded.  <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNh2ZOaZ4">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNh2ZOaZ4</a></p>	
Technical Assistance	163 000,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 15 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice). According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	
<b>Stage 16- Design and execution of works for modernization of Stolnik traction substation, Bunovo section pile with construction of SCADA remote control and remote signalling system. 2023 – 2025</b>			
WORKS Contract	9 252 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and tele-signaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded.  <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm</a></p> <p>To determine properly the indicative value of the contract, it is necessary to exclude from the financial offer the maintenance and service costs - 500,000.00 BGN, VAT excluded, as well as the price for section pile Krivnya - 268,000.00 BGN, VAT excluded.</p> <p>Then add the costs for change of the conditions for connection of the TSS to the national electricity transmission network – 1 600 000.00 BGN, VAT excluded. It is also necessary to construct in the regional traction substation</p>	<b>9 500 000 BGN</b>

		a second 110 kV traction power line and a field. The Stolnik traction substation is envisaged to be constructed with three additional outputs to the catenary - BGN 900 000.00, VAT excluded.	
Supervision Contract	185 000,00 BGN	The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract № 11223 dated 03.09.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site: "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including their construction and incorporation in the system for remote control and tele-signaling SCADA, as well as maintenance and service for a 10-year period" amounting at 185 000,00 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNH2ZOaZ4">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNH2ZOaZ4</a>	
Technical Assistance	63 000,00 BGN	The proposed activity is intended to assist implementation of the Stage 16 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system. The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice). According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.	
<b>Stage 17- Design and execution of works for modernization of Kazanlak traction substation, Tulovo section pile with construction of SCADA remote control and remote signalling system. 2024 – 2026</b>			
WORKS Contract	9 102 000,00 BGN	The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and tele-signaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded. <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm</a> To determine properly the indicative value of the contract, it is necessary to exclude from the financial offer the maintenance and service costs - 500,000.00 BGN, as well as the price for section pile Krivnya - 268,000.00 BGN, VAT excluded and the price of the reactive energy compensation system – 550 000 BGN, VAT excluded. Then add the costs for change of the conditions for connection of the TSS to the national electricity transmission network – 2 000 000 BGN, VAT excluded - the TSS is to be located on a plot property of ESO. The Kazanlak TSS is envisaged to be constructed with three additional outputs to the catenary - BGN 900 000.00, VAT excluded.	<b>9 500 000 BGN</b>



Supervision Contract	185 000,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract № 11223 dated 03.09.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site: "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including their construction and incorporation in the system for remote control and tele-signaling SCADA, as well as maintenance and service for a 10-year period" amounting at 185 000,00 BGN, VAT excluded.</p> <p><a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNH2ZOaZ4">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNH2ZOaZ4</a></p>	
Technical Assistance	213 000,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 17 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice). According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	
<b>Stage 18- Design and execution of works for modernization of Karlovo traction substation, Tazha section pile with construction of SCADA remote control and remote signalling system. 2024 – 2026</b>			
WORKS Contract	9 152 000,00 BGN	<p>The indicative value is calculated on the basis of concluded similar contracts for analogical activities, namely: Contract № 6732 dated 12.03.2020 for "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including construction and incorporation in the system for remote control and tele-signaling SCADA, as well as the maintenance and service for a 10-year period" amounting at 7 513 246.66 BGN, VAT excluded.</p> <p><a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwAxViS%2fv1z3MwvMq7pjFAGm</a></p> <p>To determine properly the indicative value of the contract, it is necessary to exclude from the financial offer the maintenance and service costs - 500,000.00 BGN, as well as the price for section pile Krivnya - 268,000.00 BGN, VAT excluded.</p> <p>Then add the costs for change of the conditions for connection of the TSS to the national electricity transmission network – 1 500 000 BGN, VAT excluded - the TSS is to be located on a plot property of ESO.</p> <p>The Karlovo TSS is envisaged to be constructed with three additional outputs to the catenary - BGN 900 000.00, VAT excluded.</p>	<b>9 500 000 BGN</b>
Supervision Contract	185 000,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract № 11223 dated 03.09.2020 for compliance assessment with the essential requirements for construction works according to the Spatial Planning Act, supervision during construction and management of the contract for design-and-build for the site: "Modernization of traction substation Razgrad and section piles Krivnya and Samuil including their construction and incorporation in the system for remote control and tele-signaling SCADA, as well as maintenance and service for a 10-year period" amounting at 185 000,00 BGN, VAT excluded.</p> <p><a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNH2ZOaZ4">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwDwL9Cnccg7VumVNH2ZOaZ4</a></p>	

Technical Assistance	163 000,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 18 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice). According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	
<b>Stage 19 – Delivery of one self-propelled specialized machine for digitalization and visualization of the parameters of the catenary system, placing in service and staff training. 2021 – 2022</b>			
SUPPLY Contract	4 430 682,00 BGN	<p>The indicative value is calculated on the basis of already concluded similar contracts, carried out tender procedures and published Procurement Notices on the Internet for analogical supplies, namely: Contract № 6224 dated 11.09.2018 for Delivery and commissioning of 2 railway traction engines “heavy type” with loading platform and crane device for a track gauge of 1435 mm and the related working equipment, consumables, special tools, technical, maintenance and repair files;  <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwBV1VgKOyPlqO9tinT%2b3ZI7">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwBV1VgKOyPlqO9tinT%2b3ZI7</a>  Contract № 5130 dated 08.09.2015 for Delivery and installation of individually designed measuring equipment and software for measuring the parameters of the catenary, after reconstruction on a rail self-propelled specialized machine;  <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwBxs4Yhla2T8Q%3d%3d">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwBxs4Yhla2T8Q%3d%3d</a>;  Carried out tender procedure ref.: 2019-OII-036 for Delivery and commissioning of 2 railway traction engines “light type” with loading platform and crane device for a track gauge of 1435 mm and the related working devices, consumables, special tools, technical files and documents for maintenance and repair,  <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwA12rIWOjxYMrKjZ9BRuY8p">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwA12rIWOjxYMrKjZ9BRuY8p</a>,  as well as the information published on the Internet for delivery of specialized machines for catenary, which is available on <a href="https://www.railwaygazette.com/infrastructure/tesmec-preferred-bidder-to-supply-maintenance-vehicles-to-rfi/43345.article">https://www.railwaygazette.com/infrastructure/tesmec-preferred-bidder-to-supply-maintenance-vehicles-to-rfi/43345.article</a>.  To determine the indicative value of delivery, method of the arithmetic mean value for one unit of rail self-propelled specialized machine equipped with a crane device and a mobile work platform was used, after which was added the value of the measuring equipment that is to be installed on track.</p>	4 500 000 BGN
Technical Assistance	69 318,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 19 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit</p>	



		activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice). According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.	
<b>Stage 20 - Delivery of one self-propelled specialized machine for digitalization and visualization of the parameters of the catenary system, placing in service and staff training 2021– 2022</b>			
SUPPLY Contract	8 861 364,00 BGN	<p>The indicative value is calculated on the basis of already concluded similar contracts, carried out tender procedures and published Procurement Notices on the Internet for analogical supplies, namely: Contract № 6224 dated 11.09.2018 for Delivery and commissioning of 2 railway traction engines “heavy type” with loading platform and crane device for a track gauge of 1435 mm and the related working equipment, consumables, special tools, technical, maintenance and repair files;  <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwBV1VgKOyPlqQ9tinT%2b3ZI7">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwBV1VgKOyPlqQ9tinT%2b3ZI7</a>  Contract № 5130 dated 08.09.2015 for Delivery and installation of individually designed measuring equipment and software for measuring the parameters of the catenary, after reconstruction on a rail self-propelled specialized machine  <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwBxs4YhIa2T8Q%3d%3d;">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwBxs4YhIa2T8Q%3d%3d</a>;  Carried out tender procedure ref.: 2019-OII-036 for Delivery and commissioning of 2 railway traction engines “light type” with loading platform and crane device for a track gauge of 1435 mm and the related working devices, consumables, special tools, technical files and documents for maintenance and repair,  <a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwA12rIWOjxYMrKjZ9BRuY8p">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwA12rIWOjxYMrKjZ9BRuY8p</a>,  as well as the information published on the Internet for delivery of specialized machines for catenary, which is available on <a href="https://www.railwaygazette.com/infrastructure/tesmec-preferred-bidder-to-supply-maintenance-vehicles-to-rfi/43345.article">https://www.railwaygazette.com/infrastructure/tesmec-preferred-bidder-to-supply-maintenance-vehicles-to-rfi/43345.article</a>.  To determine the indicative value of delivery, method of the arithmetic mean value for one unit of rail self-propelled specialized machine equipped with a crane device and a mobile work platform was used, after which was added the value of the measuring equipment that is to be installed on track.</p>	<b>9 000 000 BGN</b>

Technical Assistance	138 636,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 20 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice). According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	
<b>Stage 21 - Delivery and placing in service of a diagnostic mobile laboratory moving under its own power on rail track for geometrical, optical and ultrasonic measurements. 2021 – 2023</b>			
SUPPLY Contract	9 855 000 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely:</p> <p>1. Contract № 4669 dated 17.06.2014. for "Supply of a rail self-propelled specialized machine with continuous action for simultaneous positioning of two sleepers, leveling and straightening of railway switches and railway tracks with gauge of 1435 mm", "Plasser &amp; Theurer" system, model "DUOMATIC 09-32 CSM" amounting at 5 823 767.60 BGN, VAT excluded.</p> <p>2. Contract № 4670 dated 17.06.2014. for "Delivery of rail self-propelled specialized machine with continuous action for simultaneous positioning of two sleepers, leveling and straightening of railway switches and railway tracks with gauge of 1435 mm, system "Plasser &amp; Theurer", model "UNIMAT 09-32/4S", amounting at 11 531 718.80 BGN, VAT excluded.</p> <p>To determine the indicative value of the supply contract, the method of arithmetic mean value of the two contracts was used, taking into account the inflation rate for the period 07.2014 to 12.2020.</p>	
Technical Assistance	145 000 BGN	<p>The proposed activity is intended to assist implementation of the Stage 21 objectives and refers to the provision of support to its management by NRIC under the following directions:</p> <p>1. Putting the diagnostic mobile laboratory into operation, including: Compliance assessment of the laboratory parameters with the national technical codes and the national safety rules for the railway infrastructure in the Republic of Bulgaria; Issuance of a permit for approved vehicle type of the laboratory; Issuance of a permit for commissioning of the laboratory.</p> <p>2. Management and coordination of the implementation of the objectives of the respective stage, including: Management of the project during the implementation of the stage; Risk assessment in case of any changes, quality control; Monitoring of the communication system.</p> <p>The respective costs are adopted with an indicative amount of 145 000 BGN, VAT excluded and according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for</p>	<b>10 000 000 BGN</b>

		<p>administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice).</p> <p>According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	
<b>Stage 22- „Construction of a system combining SCADA remote control and signaling systems for railway energy objects and upgrade of SCADA system in the Plovdiv-Turkish border section. 2021 - 2026</b>			
SUPPLY/SERVICE Contract	24 071 692,00 BGN	<p>The indicative value is calculated on the basis of similar contracts for analogical activities, namely: Contract №11102 dated 27.05.2020 for "Modernization and upgrading of SCADA remote control and tele-signaling system along the section Dupnitsa - Kulata, part of the 5th major railway line" - 3 190 002.00 BGN, VAT excluded.</p> <p><a href="https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCOTt9%2fn6yEA%2bTKmEPadpGi">https://zop.rail-infra.bg:3737/DocumentList.aspx?SXHmTXofHwCOTt9%2fn6yEA%2bTKmEPadpGi</a>,</p> <p>From the financial offer the cost for construction of a dispatch center for this section and the deployment of a SCADA system for one traction substation may be determined - 389 630.00 BGN, VAT excluded. The cost of a SCADA system per one section pile is 15 034.00 BGN, VAT excluded, the cost for SCADA system for station disconnectors placed in one station is 57 680.00 BGN, VAT excluded. It should be noted that from the cost of station disconnectors should subtract the cost of a control panel 30 000.00 BGN, VAT excluded.</p> <p>The contract includes construction of:</p> <ul style="list-style-type: none"> <li>- Three dispatch centers located in Plovdiv, Sofia and Gorna Oryahovitsa, each of them with five dispatch lines.</li> <li>- Unifying server for control and monitoring of the dispatch control centers, the dispatch lines and the managed items.</li> <li>- Deployment of a telecontrol system for 54 traction substations, 51 section piles and station disconnectors in the electrified railway stations in Bulgaria.</li> </ul>	<b>25 000 000 BGN</b>
Technical Assistance	928 308,00 BGN	<p>The proposed activity is intended to assist implementation of the Stage 22 objectives and refers to the provision of support to its management by NRIC. The main tasks are: time management of the stage; risk and change, quality; control of the expenses, control over implementation of the individual contracts in the scope of the stage and the execution of payments; control over the communication system.</p> <p>The expenses are calculated according to the following items: Coordination of the technical and administrative activities, monitoring of the technical and financial progress and control of the expenses incurred, preparation of reports, financial statements, etc.; Organizing technical meetings, communication activities, reporting and audit activities; Provision of remuneration for the team of experts responsible for the management of the stage; Transport costs related to the management, verification and audit during the implementation of the stage. Transport costs (business trips, accommodation, fuel); Costs for delivery of office equipment, software and consumables; Expenses for administrative fees and permits; External services costs - These are costs for specialized consulting services to be provided by external experts, who may need to assist the Team in the management and implementation of the stage and for which services there is insufficient internal competence and expertise (specialized reports and opinions, engineering and laboratory research, legal aid, financial advice).</p> <p>According to the current practice, these costs are estimated within the limit of 10 % of the costs of the project/stage.</p>	

<b>5.1. Indicative allocation of the financial resource, depending on the type of expense</b>
<ul style="list-style-type: none"> <li>- Construction/refurbishment of the infrastructure (Civil and installation works) - 30%</li> <li>- Physical capital (purchase of machines and equipment) - 60%</li> <li>- Human capital (improvement of skills, retraining...) - 1%</li> <li>- Labor (wage costs, consultancy services ...) - 5%</li> <li>- Technology (costs for acquisition of short-term intangible assets – patents, software...) - 4%</li> </ul>
<b>6. Indicators</b>
<b>6.1. Result indicator/s</b>
Number of launched tender procedures
<ul style="list-style-type: none"> <li>- Initial Value – 0 [2020]</li> <li>- Interim Value – 5 [1<sup>st</sup> semester of 2021]</li> <li>- Interim Value – 7 [2<sup>nd</sup> Semester of 2021]</li> <li>- Interim Value – 2 [1<sup>st</sup> Semester of 2022]</li> <li>- Interim Value – 8 [2<sup>nd</sup> Semester of 2022]</li> <li>- Interim Value – 4 [1<sup>st</sup> Semester of 2023]</li> <li>- Interim Value – 2 [2<sup>nd</sup> Semester of 2023]</li> <li>- Interim Value – 6 [1<sup>st</sup> Semester of 2024]</li> <li>- Interim Value – 6 [2<sup>nd</sup> Semester of 2024]</li> <li>- Target Value – 40 [2026]</li> </ul>
Number of contracts concluded with selected contractors after successfully finalized tender procedures
<ul style="list-style-type: none"> <li>- Initial Value – 0 [1<sup>st</sup> Semester of 2021]</li> <li>- Interim Value – 7 [2<sup>nd</sup> Semester of 2021]</li> <li>- Interim Value – 5 [1<sup>st</sup> Semester of 2022]</li> <li>- Interim Value – 10 [2<sup>nd</sup> Semester of 2022]</li> <li>- Interim Value – 6 [2<sup>nd</sup> Semester of 2023]</li> <li>- Interim Value – 11 [2<sup>nd</sup> Semester of 2024]</li> <li>- Interim Value – 1 [1<sup>st</sup> Semester of 2025]</li> <li>- Target Value - 40 [2026]</li> </ul>
Number of prepared Technical Designs
<ul style="list-style-type: none"> <li>- Initial Value – 0 [1<sup>st</sup> Semester of 2021]</li> <li>- Interim Value – 2 [2<sup>nd</sup> Semester of 2021]</li> <li>- Interim Value – 3 [1<sup>st</sup> Semester of 2022]</li> <li>- Interim Value – 1 [2<sup>nd</sup> Semester of 2022]</li> <li>- Interim Value – 3 [1<sup>st</sup> Semester of 2023]</li> <li>- Interim Value – 3 [2<sup>nd</sup> Semester of 2023]</li> <li>- Interim Value – 1 [1<sup>st</sup> Semester of 2024]</li> <li>- Interim Value – 3 [2<sup>nd</sup> Semester of 2024]</li> <li>- Interim Value – 3 [1<sup>st</sup> Semester of 2025]</li> <li>- Target Value- 19 [2026]</li> </ul>
Number of issued Construction Permits
<ul style="list-style-type: none"> <li>- Initial Value – 0 [2021]</li> <li>- Interim Value – 1 [1<sup>st</sup> Semester of 2022]</li> <li>- Interim Value – 3 [2<sup>nd</sup> Semester of 2022]</li> <li>- Interim Value – 5 [1<sup>st</sup> Semester of 2023]</li> </ul>

<ul style="list-style-type: none"> <li>- Interim Value – 3 [1<sup>st</sup> Semester of 2024]</li> <li>- Interim Value – 5 [ 1<sup>st</sup> Semester of 2025]</li> <li>- Interim Value – 1 [ 2<sup>nd</sup> Semester of 2025]</li> <li>- Target Value- 18 [2026]</li> </ul>
Number of modernized traction substations
<ul style="list-style-type: none"> <li>- Initial Value – 0 [2022]</li> <li>- Interim Value – 1 [1<sup>st</sup> Semester of 2023]</li> <li>- Interim Value – 3 [2<sup>nd</sup> Semester of 2023]</li> <li>- Interim Value – 1 [1<sup>st</sup> Semester of 2024]</li> <li>- Interim Value – 4 [2<sup>nd</sup> Semester of 2024]</li> <li>- Interim Value – 2 [1<sup>st</sup> Semester of 2025]</li> <li>- Interim Value – 2 [2<sup>nd</sup> Semester of 2025]</li> <li>- Interim Value – 7 [1<sup>st</sup> Semester of 2026]</li> <li>- Target value- 20 [ 2026]</li> </ul>
Delivered and placed in service diagnostic laboratory
<ul style="list-style-type: none"> <li>- Initial value - 0 [ 2021]</li> <li>- Interim value - N/A</li> <li>- Target value - 1 [ 2<sup>nd</sup> Semester of 2023 ]</li> </ul>
Delivered specialized rail self-propelled machines
<ul style="list-style-type: none"> <li>- Initial value – 0 [ 2020]</li> <li>- Interim value - 3 [2<sup>nd</sup> Semester of 2022]</li> <li>- Target value - 3 [2023]</li> </ul>
<b>6.2. Effect indicator/s</b>
Reduction of the staff number in all twenty traction substations because of the centralized remote control by SCADA
<ul style="list-style-type: none"> <li>- Initial value - 80 [2020]</li> <li>- Interim value – 50 [2023]</li> <li>- Target value - 0 [2026]</li> </ul>
Km mechanised non-destructive control of the rail track per year – 10 000 km
<ul style="list-style-type: none"> <li>- Initial value – 0 km [2021]</li> <li>- Interim value – 0 km [ 2023]</li> <li>- Target Value – 10,000 km [2024]</li> </ul>
<b>7. Does the project require the opening of a procedure pursuant to the Public Procurement Act (PPA)?</b>
Yes
<b>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?</b>
About 99 %
<b>7.2. If a procedure under the Public Procurement Act is required, what is the indicative schedule for its implementation?</b>

About 7 months for carrying out the tender procedure and selection of contractors

Tender procedure schedule by stages:

Stage 1 – July 2021 – December 2021

Stage 2 – March 2022 – August 2022

Stage 3 – February 2023 – July 2023

Stage 4 – March 2024 – July 2024

Stage 5 – June 2021 – November 2021

Stage 6 – March 2022 – July 2022

Stage 7 – August 2021 – January 2022

Stage 8 – April 2022 – September 2022

Stage 9 – March 2022 – September 2022

Stage 10 – April 2023 – September 2023

Stage 11 – April 2024 – September 2024

Stage 12 – April 2024 – September 2024

Stage 13 – June 2024 – November 2024

Stage 14 – January 2021 – June 2021

Stage 15 – March 2022 – September 2022

Stage 16 – February 2023 – July 2023

Stage 17 – January 2024 – June 2024

Stage 18 – January 2024 – June 2024

Stage 19 – February 2021 – July 2021

Stage 20 – February 2021 – July 2021

Stage 21 – February 2021 – September 2021

Stage 22 – February 2021 – July 2021

## **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 project is related to the following projects:

- Modernization of Vratsa and Pernik traction substations located along Orient-East Mediterranean corridor, the scope of which includes modernization of Vratsa traction substation, Moravitsa and Krivodol section piles, replacement of disconnectors in Ruska Byala, Vratsa, Beli Izvor and Krivodol stations as well as construction of SCADA remote control and remote signalling system. The project is approved for financing under CEF, Call 2019.
- Modernization of Varna and Razgrad traction substations, construction of Ruse traction substation and placing in service of SCADA the scope of which includes the modernization of Razgrad traction substation, Krivnya and Samuil section piles with construction of SCADA remote control and remote signalling system. It is offered the project to be included in and financed under Operational Programme "Transport and Transport Infrastructure" 2014-2020.
- Modernization and reconstruction of Mezdra traction substation and construction of SCADA remote control and remote signalling system for Mezdra and Bov traction substations, 2014;
- Modernization and reconstruction of Bov traction substation, 2014;
- Optic cable network in Mezdra - Gorna Oryahovitsa - Varna section from 2 core railway line, 2014 - 2020;
- Optic cable network and digital telecommunication equipment Sofia - Mezdra - Cherven bryag from 2 core railway line 2019;
- Modernization of Pirdop traction substation with construction of SCADA remote control and remote signalling system. The system is located in Sofia Dispatching Centre and has the capacity to cover the energy facilities from Sofia to Karlovo.
- Modernization of Klisura section pile and its control is integrated into the SCADA remote control and remote signalling system implemented with the previous project.

Besides, the project is directly dependent on all projects executed by NRIC and financed by

EU during the previous programming period 2007-2013, in the present 2014-2020, and it also contributes to the forthcoming programming period 2021-2027.

For control and maintenance of the parameters of the railway sections, modernized/refurbished with ESIF financing the following is required:

- similar type of rail self-propelled specialized machines for execution of direct measurements, monitoring and maintenance of the catenary system in order to guaranty the train traffic safety;
- similar type of laboratory for execution of direct measurements, supervision and video recording on the move of the objects and components of the railway infrastructure that directly affect the train traffic safety. By the means of the track measurement laboratory the condition of the rail track is analysed and specified by measurement of particular qualitative characteristics. After the measurement a complex assessment and analysis of the results will be prepared, based on which the short-term and long-term maintenance of the rail track and catenary system will be carried out.

The execution of the present project proposal will supplement and upgrade the executed infrastructure projects of NRIC thus providing up to 100% management of the energy objects as well as it will ensure timely diagnostics and repair, facilitating the maintenance of the newly constructed/modernised infrastructures.

The project is based on the comprehensive approach and strategy of NRIC for execution of the activities for modernization/reconstruction of the traction substations as site objects separately from the modernization/refurbishment of the railway lines as linear projects/objects. This approach for separation of some particular activities is justified by the type of the required infrastructure/engineering works, which has to be executed and as a measure for reduction of the risk regarding the avoidance of potential delays of execution. Similar projects could also be listed, such as reconstruction, repair and modernization of Burgas, Karnobat and Yambol traction substations financed under the OPTTI during the current programming period 2014-2020 and Varna, Razgrad and Ruse traction substations, to be financed within 2020-2023 period.

The activities described in this project proposal and the estimated costs are not funded under any other EU project and/or national budget/other financing instrument and are not envisaged 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.**

Under the Partnership Agreement and the Connecting Europe Facility - 2, financing of different railway projects is expected, which as a whole will contribute to the development of the railway infrastructure along the Trans-European transport network - core and comprehensive as well as along OEM corridor. The present project is partially located along OEM corridor, the core and comprehensive TEN-T network in Bulgaria and it is related to the projects of PA and CEF-2, and it is expected to contribute to the common improvement of the railway sector, but meanwhile its execution will be clearly distinguished and split from the financing under the above programs. The project contributes to digitalization and facilitation of the following operation and maintenance of the newly constructed railway infrastructure.

The scope of the present project is fully in compliance with all other projects planned for implementation under the Partnership Agreement and Connecting Europe Facility-2 aiming to avoid overlapping of costs for one and the same activities under different facilities and duplication of projects.

Under the Transport Connectivity Programme 2021 – 2027, modernization and placing in service of SCADA and 4 traction substations is planned: Vidin, Boychinovtsi, Brusartsi and Dimovo and that is why they are not included in the present proposal.

The project proposal is agreed with the present programmes of the Union and supplements them, while avoiding duplicated financing of the same costs. All this contributes to efficient

and agreed allocation of the budget funds of the Union and to the observance of the principle for good financial management.

In view of the above, our consideration is that during the preparation of the project proposal the recommendations for promotion of synergies are observed thus contributing to the effective coordination between the investments planned under the Recovery and Resilience Facilities and the other EU programmes and facilities.

The project ensures mutual complementarity, beneficial interaction, consequence and consistency between the different facilities and programmes.

The financial support for the offered project proposal under the Facility will be complementary to the support provided under some other funds and programmes of the Union.

While the planned investments under the Transport Connectivity Programme are located to a large extent in Southern Bulgaria and contribute to the full completion of the "West-East" direction, including the cross border connections with the neighboring countries, those proposed in Pillar III "Connected Bulgaria" of the Recovery and Resilience National Plan (RRNP) cover mainly projects located almost entirely in Northern Bulgaria, which could be considered as complementary and at the same time balancing and demarcating in geographical terms, approach of the sectoral investment policy.

In the selection process of RRNP projects, the already proposed investments, included under the scope of Transport Connectivity Programme, in terms of their geographical location and technical features, were carefully considered, so that the envisaged investments under RRNP provide logical upgrading, complementarity and continuation of the overall process for modernization of the railway infrastructure in the country, which must contribute to the multiplication of the added value as a result from the implementation of all railway projects for modernization in the sector during the programming period 2021-2027.

The activities described in this project proposal and the estimated costs are not envisaged for future funding under any other EU project and/or national budget/other financing instrument.

**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 the recommendation of the European Council on the 2020 National Reform Programme of Bulgaria and delivering a Council opinion on the 2020 Convergence Programme of Bulgaria it is stipulated that **the coverage and quality of transport infrastructure in Bulgaria remains below the EU average** and the Trans-European Transport Network is still incomplete. The multimodal platforms network, some railway and road sections as well as the European Rail Traffic Management Systems and the intelligent transport systems remain underdeveloped. A recommendation is addressed to **focus investment on the green and digital transition**, in particular on clear and efficient production and use of energy and resources, **environmental infrastructure and sustainable transport, contributing to a progressive decarbonisation of the economy.**

The statements, conclusions and recommendations in the previous Council report from 2019 are similar.

In implementing the above recommendations to address the established deficiencies, it is needed to support the projects of the railway sector, which contribute to the achievement of the objectives of the green transition by reduction of the negative environmental impact. This is the nature of the proposed project. Its execution will contribute to the fulfilment of the recommendations of the European Union to Bulgaria regarding transport, as well as to the environmental and digital transition in the railway transport.

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

The project will contribute to the modernization of the railway sector and to its reformation by achieving interoperability according to the requirements of the TSI Energy.



The project will contribute to the modernization of the railway facility and to its reforming by achievement of interoperability according to the TSI requirements as well as for the authorization of existing catenary system under the national interoperability rules required for its integration into the European Railway Area in compliance with the specific connecting documents.

Supportive impact of the railway digitalization process.

The digital transformation along with the European Green Deal is a key priority at European level too. The European Commission reports annually the progress of the EU member states, but unfortunately, Bulgaria significantly lags behind compared to the average European levels of digital connectivity, use of the digital online skills, digitalization of the enterprises and digital public services. Meanwhile, the COVID-19 crisis proves the necessity for acceleration of the digital transformation practically in all economic and social sectors and justifies that the huge efforts for utilization of the potential of the digital technologies are not only needed, but mandatory. Their application will increase the economy competitiveness and sustainability. The investments in the digital technologies are also investments in the achievement of ambitious objectives of the European Green Deal such as establishment of clean and circular economy, smart mobility, energy integration, precision agriculture etc. The pandemic proves the more increasing importance of the digitalization for all aspects of the economy, society and general government.

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

In the last annual EC report on Bulgaria for 2020 regarding the transport it is considered that our country has limited progress within the context of sustainability, because, in particular, for the railway infrastructure some serious efforts are needed to avoid segmentation by modernized and non-modernized sections. It is stipulated that the railway transport has limited contribution to the common transport revenues, which calls into question its sustainability. The financing of the development of railway transport and in particular of the above project will contribute to improvement of the sustainability. The project implementation will strengthen the growth potential of the more backward regions, e.g. North Bulgaria, where the most objects, included in the project scope, are located.

The infrastructure quality will be improved in view of its safety, reliability, efficiency, sustainability and climatic conditions as well as of the quality of services and continuity of the traffic flows. The implementation and development of the telematics applications as well as the promotion of development of innovative technologies will have direct impact on the sustainable economic development.

In addition, during the implementation process some new jobs will be created.

The foreseen activities neither will have considerable negative impact on the environmental components and factors nor will damage the habitats of the species in the protected areas of the European Network Nature 2000. No release of greenhouse gas emissions into the atmosphere air is expected, but on the contrary the project implementation aims at reduction of the environmental impact caused by the operation of the respective traction substations and related infrastructure (the section piles and disconnectors), by replacement of the equipment releasing harmful gases and containing harmful substances and hazardous, toxic and cancerous substances (sulphur hexafluoride SF<sub>6</sub>, transformer oil, liquid electrolyte in the accumulators and condensate batteries etc.)

All this will have direct impact on and contribution to both green transition of Europe and the railway digitalization.

The digital transformation is a process needed for the technological development of Bulgaria aiming at establishment of conditions for innovations and business growth, improvement of

the labour efficiency, competitive digital economy and high standard of the public. The digital technologies ensure huge potential for optimization of the transport system and open some new opportunities for production and services. They support the transport integration with some other economic systems such as energy system and improve considerably the efficiency of the sector. The modernization of the traction substations and implementation of SCADA system contribute to the transport digitalization.

**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 National Development Programme of Bulgaria 2030 and its execution is in compliance with Priority P7 – „Transport connectivity“, 7.1 „Railway transport“ and Impact field 7.1a – „Management of the Railway Sector“ and 7.1b – „Railway Infrastructure“. It is stated there that **the railway transport will remain a priority field of the transport policy** and the sector will be developed and managed in a manner allowing it to be efficiently competitive on the transport market, providing qualitative passenger and freight transport for the clients as well as to invest reasonably and to maintain in good condition the needed assets and to be financially independent with acceptable level of the state support. **The efforts for construction of the Trans-European Rail Network on the territory of the country will continue.** The implementation of the European Rail Traffic Management System (ERTMS) will continue, which will contribute to additional improvement of the traffic safety and sector efficiency. **The efforts for improvement of the quality of the railway lines in the country will continue.** The execution of the offered project will contribute to the achievement of the above objectives and priorities of NDP BG2030.

**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.**

Section Dimension “Energy Efficiency” of NIECP 2030 stipulates that the planned policies, measures and programmes for achievement of the indicative national objectives for energy efficiency for 2030 as well as of the other objectives for promotion of the energy efficiency in the Transport sector require the efforts to be focused on the development of electric mobility, developing and promoting the use of public electric transport and **accelerating the integration of modern technologies into the innovative railway sector.**

In addition, the main objectives of the policy for reduction of the greenhouse gas emissions in the Transport sector are related to reduction of the road freights over 300 km **and shift to more environmentally friendly transport means, e.g. railway transport,** in compliance with the Third National Action Plan on Climate Change 2013-2020 (extended until 2030).

The main measures applied by Bulgaria for improvement of the energy efficiency in the sector include increasing of the share of the public electric transport by **improvement of the railway infrastructure.**

Considering the above priorities and the measures of the NIECP it could be concluded that the proposed project will contribute to their implementation in the field of energy efficiency of the railway transport.

The modernization of the traction substations and section piles will be executed with facilities not containing greenhouse gases (commutation facilities with SF6 are broadly used) and the present project stipulates the number of such facilities to be reduced to the minimum.

We hereby declare that none of the activities mentioned in the project proposal significantly affects the six environmental and climate objectives (DNSH criteria) set out in Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 establishing

a framework to facilitate sustainable investment and to amend Regulation (EU) 2019/2088 ("EU Taxonomy Regulation"):

- 1) climate change mitigation
- 2) climate change adaptation
- 3) sustainable use and protection of water and marine resources
- 4) transition to a circular economy
- 5) pollution prevention and control
- 6) protection and restoration of biodiversity and ecosystems