

Application form
with a project under the Instrument for Recovery and Sustainability

1. Name of the project.

**RECONSTRUCTION, RESTORATION AND MODERNIZATION OF THE STATE
HYDROMELIORATION FUND IN THE REPUBLIC OF BULGARIA FOR SUSTAINABLE
WATER MANAGEMENT AND ADAPTATION TO CLIMATE CHANGES**

2. Description of the project (objectives, main activities).

Description of the project:

Reconstruction, restoration and modernization of the existing state hydromeliorative fund in the Republic of Bulgaria, managed by "Irrigation Systems" EAD, mainly in two directions:

- sites for capture, storage, distribution and sale of water for drinking and household water supply to the population and irrigation of agricultural crops - categorized in CMD № 181 of 20 July 2009 as strategic sites and activities that are important for national security, namely "irrigation systems".
- facilities to protect against harmful effects of water, including flooding of settlements, roads, railway lines, industrial enterprises, agricultural land and other nationally important sites.

The project does not provide for the construction of new hydromeliorative infrastructure.

The existing hydro-ameliorative system is highly depreciated, with significant losses of water resources due to leaks and filtrations along its length, which puts significant pressure on the main water bodies - dams. This system is also energy inefficient due to the significant electricity consumption of the facilities built in the last century, which drain public and private land. All these circumstances require reforms for efficient and sustainable use of water resources in the country by reducing water losses in irrigation facilities, which in turn will have a positive effect on the environment and adaptation to the effects of climate change.

The project will not have negative consequences for the status of water bodies and the climate, in view of the assessment of the main environmental objectives set out in the EU Taxonomy Regulation and in accordance with the Water Framework Directive (WFD), namely:

- the measure will not adversely affect climate change and climate adaptation, the sustainable use and protection of water resources, the circular economy, including the prevention and recycling of waste, air, water or land pollution and the restoration of biodiversity and ecosystems.
- the project will not have a negative impact on habitats and species, both within and outside Natura 2000, but on the contrary - investments in the restoration of old hydro-ameliorative infrastructure will improve the water balance of soils and reduce over compacting and wind erosion in severe droughts. After the rehabilitation of surface water sources and systems, the pressure on the use of groundwater sources, springs, rivers, etc. will be reduced, which will have a beneficial effect on ecosystems.

To achieve the objectives under Art. 4 of the Water Framework Directive, programs and measures have been developed in the River Basin Management Plans. Each investment intention is subject to an environmental impact assessment (in accordance with the EIA Directive) within the procedure under Art. 93, para. 4 of the Environmental Protection Act, in which the requirements of Directive 2011/92/EU have been transported. According to this procedure, the Basin Directorate performs an assessment for compliance with the objectives and measures under the RBMP and issues an opinion on the grounds of Art. 155, para. 1, item 23 of the Water Act and Art. 4a of the Ordinance on the terms and conditions for carrying out EIA (environmental impact assessment). If necessary (in cases where a significant impact is expected) investment projects are subject to a detailed assessment. After preparation of the projects for repair and restoration works of the sites, proposed for rehabilitation, the same shall be submitted to the competent bodies for environment (Directors of RIEW or the Minister of Environment and Waters) for assessment of the impact on the environment in accordance with art. 93, para. 4 of the Environmental Protection Act, in which the requirements of Directive 2011/92/EU have been transported. An impact assessment on Natura

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2000 sites is also carried out as part of this procedure.

The rehabilitation activities included in the project are in line with environmental considerations, including the provision for a comprehensive environmental impact assessment (EIA) of the proposed investments, namely: maintaining and improving the good ecological status of surface water bodies and maintaining good chemical condition; protection of groundwater bodies as areas for protection of drinking water, according to Art. 119a of the Water Act; improving the condition of water for the protection of habitats and biological species; conservation of wild birds and Natura 2000 habitats.

Given the planned increase in drainage areas, it is considered that the project will not disrupt the natural regulation of flows and floodplains, as wetlands will not be drained and destroyed in the process of carrying out activities. Irrigation fields that are adjacent to existing irrigation facilities to be rehabilitated have been designed in the past to match the terrain and soil composition. The systems are designed to work in balance and where soils and soil-forming rocks cannot absorb part of the excess moisture at certain times of the year, due to the structure or slopes, drainages are provided, the location of which is calculated when creating the original facilities.

This project is in accordance with the regulatory principles - Art. 9 of the Water Framework Directive, introducing the principle of reimbursement of water services in accordance with the "polluter pays" principle, which is currently applied by the company when performing the service "supply of irrigation water", transported in the National Conservation Program, sustainable use and restoration of soil functions of the MoEW.

According to the definition of Article 107 TFEU and the European Commission guidelines on the compatibility of projects under the Recovery and Sustainability Plan with State aid rules, project funding does not contain State aid elements.

The project will be managed by the Ministry of Agriculture, Food and Forestry. The implementation of the included project activities will be carried out by awarding public contracts to external contractors. There is sufficient capacity for realization of short-term investments given the availability of highly qualified specialists in the field of project management, land reclamation, hydro-ameliorative and hydro-technical construction and operation of irrigation and drainage systems and river corrections.

Objectives:

- The main goal of the project is to ensure sustainable water management in the country, mitigate the negative impact on the climate and adapt to the consequences of its change. The project adequately integrates the challenges related to the implementation of the green transition, especially in terms of effective management of natural resources. This objective reflects the Council's Specific Recommendations on Bulgaria's National Reform Program 2019 and 2020, namely: promoting sustainable water management, resource efficiency and the transition to a circular economy, climate change mitigation and adaptation.
- The expectations from the implementation of the project are achievement of the objectives set in the Water Framework Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000: more efficient and sustainable use of water, contribution to expanding the scope of protection of surface and ground waters, better protection of aquatic ecology and unique and valuable habitats; achieving "good condition" of the water; applying a "combined approach" to emission limit values and quality standards by:
 - protection of all types of water (surface and groundwater) and reduction of pollution in water bodies, effective hydration, which will contribute to reducing pollution of groundwater and vegetation with fertilizers and preparations, due to the possibility of their precise dosing, which in turn will help to protect the health of the population and meet the water needs and the needs of industry and settlements. Effective planned and quality management of water resources will reduce these negative effects on soils, creating the necessary moisture in extreme droughts.
 - restoration of ecosystems in and around these water bodies. The water masses saved in this way will allow their accumulation in the dams and the same will be used for hydration of the riverbeds and

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maintenance of the ecological condition/eco-minimum and the biodiversity in them. The flooded riverbeds in the country will support the supply of wells and boreholes for drinking and domestic water supply to the population. The achieved results will lead to benefits for the flora and fauna, as well as for the population and the economy as a whole.

- ensuring the sustainable use of water: To achieve the objectives under Art. 4 of the Water Framework Directive, programs and measures have been developed in the River Basin Management Plans. Each investment intention is subject to an environmental impact assessment (in accordance with the EIA Directive) within the procedure under Art. 93, para. 4 of the Environmental Protection Act, in which the requirements of Directive 2011/92/EU have been transported. According to this procedure, the Basin Directorate performs an assessment for compliance with the objectives and measures under the RBMP and issues an opinion on the grounds of Art. 155, para. 1, item 23 of the Water Act and Art. 4a of the Ordinance on the terms and conditions for carrying out EIA (environmental impact assessment). If necessary (in cases where a significant impact is expected) investment projects are subject to a detailed assessment.
- The renovation of irrigation systems will make it possible to reduce the use of pesticides and fertilizers, which will allow maintaining an appropriate water balance. This objective coincides with the objectives of the “farm-to-table” strategy, which is in line with the priorities of the Green Deal for the Conservation of Ecosystems, which are also adversely affected by climate change, in particular floods or severe droughts.
- Improving the condition of irrigation systems will contribute to more efficient water uptake by industry and households, water supply for energy purposes and recycling of water for reuse in the ecosystem. In some of the drainage/drainage systems, water is taken out of the productions of industrial and agricultural enterprises due to the specific location of the infrastructure. The Ministry of Agriculture and Food plans to include in the Strategic Plan opportunities for providing financing to enterprises for the installation of appropriate equipment for checking the quality and quantity of water, as well as for small treatment facilities, where possible, to achieve adequate water runoff, and their re-use in accordance with the Water Reuse Regulation (OJ 25/06/2020, effective 26/06/2023).
- Rehabilitation of hydrotechnical facilities will favor the migration of fish and will create better conditions for conservation and development of biological diversity. The implementation of the project works will ensure not only an increase in the capacity of the water bodies, but also the passability of the riverbeds, which in turn will create favorable conditions for the migration of fish. The construction of fish passages on the existing dams is necessary to ensure the continuity of the river (RBMP 2016-2021, measure HY_11 "Ensuring the continuity of water flows and the movement of fish and action to it", measure HY_11_1 "Construction of facilities to ensure the continuity of the river (fish passes, bypasses, etc.) ”.

Main activities:

When carrying out the repair activities, subject of the project, the Bulgarian and European legislation will be strictly observed, incl. in the water sector, including the implementation of the applicable measures in the Programs of Measures to the RBMP and FRMP and the opinions on their Environmental Assessments. The recovery through rehabilitation will be carried out on the following **265 hydro-ameliorative facilities**:

1. Restoration of engineering (design and construction) covering a total of **119 sites - irrigation canals and irrigation fields**, including:

- Irrigation channels - 109 pieces;
- Irrigation fields - 10 pieces

Results that will be achieved after the implementation of the planned activities:

- Recovered compromised areas leading to water losses;
- Sustainable use of water;
- Improving water conductivity;

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Expected effects from the rehabilitation:

– **Increasing the irrigated areas without putting pressure on water bodies.** In the past, the hydro-ameliorative sector of Bulgaria reached nearly 1.2 million ha at the end of the 80s of the 20th century, after which it marked a sharp decline to 35,000 - 50,000 ha, depending on the year and precipitation. As of 2000, the state-owned "Irrigation Systems" EAD operates 235 irrigation systems, which are designed to serve more than 740,000 ha of irrigated land through 168 dams and reservoirs, with a total capacity of 3.1 billion cubic meters of water. In the same year, the areas suitable for irrigation amounted to 537,500 ha, and by 2020 they amounted to 22,801 ha. Dams - water bodies have a sufficient water storage volume to serve the irrigation systems designed in the last century, supplying water to over 740,000 ha of irrigated areas. In this sense, the planned increase in the areas to which irrigation water will be supplied - from 22,801 ha (in 2020) to 101,354.6 ha (after rehabilitation) will not lead to pressure on water bodies, as they are designed to supply water to an area of 740,000 ha. In practice, the restoration work will lead to the resumption of irrigation on 13% of the normal design capacity of irrigation systems. In addition, where the main and secondary networks are restored, losses will be significantly reduced. With the current losses from filtration through the destroyed canals, a much higher load of the water source is required in order to deliver the actually required quantities of water according to irrigation norms. It is important to note that only existing dams (annual and perennial levelers) that are designed and intended for irrigation will be used as water sources.

The reconstruction of the irrigation canals will reduce water losses and thus provide a larger volume of water for irrigation, without increasing the amount of water that will be taken from water bodies. The implementation of the investment projects is in accordance of measures from the River Basin Management Plan - measure "Reduction of water abstraction by reducing water losses in the public water supply" and measure "Reconstruction of the water supply network, including lining of irrigation canals for public irrigation", aimed at improving water efficiency.

Reconstruction of irrigation canals will not affect surface water, as the amount to be taken will not increase.

– Rehabilitation of irrigation canals will have a positive impact on the balance of ecosystems, given global climate change, causing prolonged droughts and moments of torrential rains and floods that lead to massive soil erosion. Effective, planned and quality management of water resources will reduce these negative effects on soils, providing the necessary moisture in extreme droughts.

Effective drainage will contribute to reducing groundwater and vegetation pollution with fertilizers and preparations because of the possibility of their precise dosing, which in turn will help to protect the health of the population and meet the water needs and needs of industry and settlements. Such processes will be able to be planned so that the negative effects on the environment decrease significantly.

2. Restoration of a total of 35 sites - pumping stations (PS), pipelines, equalizers as follows:

- pumping stations - 29 pieces;
- pressure pipelines - 4 pieces;
- equalizers - 2 pieces.

The results to be achieved by carrying out the planned events:

– Replacement of energy-intensive and depreciated pumps and pump units of the PS with new, energy-efficient pumps;

– Replacement of eroded pipes with new technologically advanced pipes;

– Replacement of the cladding of the equalizers, to stop water losses and its uncontrollable leakage through compromised areas.

The effects to be achieved are as follows:

- Reduction of the losses that the system generates when transporting water quantities for small areas;
- Increasing the efficiency of the facilities, leading to water savings;
- Reliable water supply of the irrigated areas related to the restored hydro-ameliorative infrastructure;
- Reduction of electricity consumption of PS;
- Restoration of the suitable built irrigated areas in the country;
- Continuous monitoring of the flowing water quantities and control over the implementation of the schedule of the control body the MoEW.

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3. Restoration of a **total of 8 water catchments**:

The results to be achieved by carrying out the events:

- Restored shutter doors to stop water leakage;
- Restored collapsed concrete facings, elements and foundations;
- Restored electrical equipment;
- Improving the conductivity of the facilities to increase the volume of captured water quantities.

The effects to be achieved are as follows:

- Optimal functioning of the overall hydro-ameliorative systems;
- Prevention of emergency situations arising on the facilities;
- Reducing the risk of disasters;
- Limiting the risk of flooding of the adjacent areas;
- Reduction of water losses due to ruptures

4. Restoration of a total of **3 sites – dams**:

- “Bozhuritsa” Dam - Gramada Municipality, Vidin Region - repair and restoration;
- “Sopot Dam” (PSP) - repair and restoration;
- “Garvanovo” Dam - repair and restoration.

The results to be achieved by carrying out the planned events:

- Restoration of dam overflows;
- Restoration of the crown of the dams.

The effects to be achieved are as follows:

- The restoration of the dam overflows will allow filling in accordance with the maximum useful volume of the dam. This will enable long-term water supply for irrigation of suitable irrigated areas in irrigation systems, predictability in applications and increase of the areas occupied with irrigated crops.
- Rehabilitation of the dam crown will prevent water from entering the body of the dam wall and subsequent violations.

5. Engineering restoration (design and construction) activities covering a total of **100 drainage sites** as follows:

- Drainage pumping stations /DPS/ - 55 pieces;
- Drainage systems, drainage channels and safety dikes - 45 pieces.

The results to be achieved by carrying out the planned events:

- Replacement of energy-intensive and depreciated pumps and pumping units of DPSs with new, energy-efficient ones/restoration of DPS buildings/construction of a new power supply of DPSs;
- Strengthening/rehabilitation of safety dikes;
- Improving the conductivity of drainage channels to increase the volume of captured water quantities.

The effects to be achieved are as follows:

- Restoration of compromised areas to protect the population from the harmful effects of water;
- Reducing the risk of disasters and floods;
- Protection and conservation of biodiversity endangered in case of disasters;
- Improved energy efficiency of DPSs;
- Efficiency in ensuring the conductivity of the facilities and drainage of the adjacent areas.

3. **Beneficiary:** “Irrigation Systems” EAD

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4. Timeline for project implementation, including activities, stages.¹

The overall deadline for implementation of the project is from 2021 to 2025 years.

The period of conducting the open procedures under the Public Procurement Act for awarding public procurement contracts with subject: Engineering (design and construction) and construction supervision is in the period from July 2021 to June 2022.

The period of implementation of engineering (design and construction) of all 265 sites subject to investment is from July 2022 to December 2025, including by stages and activities as follows:

1. Step №1, including:

1.1. Design (will be carried out simultaneously for all 265 sites, the deadline for implementation is 6 months from the start of the project and the conclusion of a contract between "NS" EAD and the funding body for the award of the project);

1.2. Preparation of an assessment of the compliance of the investment projects with the essential requirements to the constructions (265 sites) (2 months after the completion of the design, total for all sites), including:

- a) Assessment of the compliance of the investment projects with the essential requirements to the constructions in the sense of art. 142, para. 6, item 2 of the Spatial Planning Act (SPA) in compliance with the requirements of Art. 142, para. 5 of the Spatial Development Act;
- b) Assessment of the conformity of the “Constructive” part of the investment projects within the meaning of Art. 142, para. 10 of the Spatial Development Act.

1.3 Coordination of investment projects with control bodies (265 sites) (1 month after the activity under item 2.2).

2023 / 2024

2. Stage №2 - implementation of construction and repair works on 100 sites, including:

2.1.Starting the actual implementation of the repair and restoration works for 100 sites simultaneously (16 months from the signing of the Protocol for opening a construction site and determining the construction line and level (act form 2 or 2a), including the period of the irrigation season from April to October, for the sites for which it is applicable).

2.2.Exercise of construction supervision during the construction of 100 sites (as of the date of start of construction - 18 months), according to Art.166 of the Spatial Development Act. The scope of the activities for carrying out construction supervision during the construction is according to art.168 of the Spatial Development Act, including coordination of the construction process until the commissioning of the site.

2.3.Exercise of author's supervision during the execution of the construction of all 100 sites (from the date of start of construction - 18 months);

2.4.Putting 100 sites into operation under the Spatial Development Act - 2 months after the completion of construction.

After implementation of stage №2, the start of stage №3 begins

2024 / 2025

3. Stage №3- execution of construction and repair works of 165 sites including:

3.1. Starting the actual implementation of the repair and restoration works for 165 sites simultaneously (14 months from the signing of the Protocol for opening a construction site and determining the construction line and level (act form 2 or 2a), including the period of the irrigation season from April to October, for the sites for which it is applicable).

3.2. Exercise of construction supervision during the construction of 165 sites (as of the date of start

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of construction - 16 months), according to Art. 166 of the Spatial Planning Act (SPA). The scope of the activities for carrying out construction supervision during the construction is according to art. 168 of the Spatial Development Act, including coordination of the construction process until the commissioning of the site.

- 3.3. **Exercising author's supervision** during the execution of the construction of all 165 sites (as of the date of starting the construction - 18 months);
- 3.4. **Commissioning of 165 sites into operation** under the Spatial Development Act - 2 months after the completion of construction.

Subject	Start date	End date (up to m/years)	Duration (months)
"PUBLIC PROCUREMENT"			
2021/2022			
Preparation, conduct and award of a public procurement contract with the object "Performing engineering"	01.07.2021	30.06.2022	12
Preparation, conduct and award of a public procurement contract with the object "Construction supervision"	01.07.2021	30.06.2022	12
ACTIVITY "ENGINEERING"			
STAGE 1 2022 / 2023			
Design of 265 sites	01.07.2022	01.01.2023	6
Preparation of an assessment of the conformity of investment projects with the essential requirements for construction works	01.01.2023	01.03.2023	2
Coordination of investment projects with control bodies	01.03.2023	31.03.2023	1
STAGE 2 2023 /2024			
Implementation of construction works at 100 sites	01.04.2023	31.07.2024	16
Construction supervision	01.04.2023	30.09.2024	18
Author's supervision	01.04.2023	30.09.2024	18
Commissioning into operation of 100 sites	01.08.2024	30.09.2024	2
STAGE 3 2024 /2025			
Implementation of the construction works on 165 sites	01.09.2024	31.10.2025	14
Construction supervision	01.09. 2024	31.12.2025	16
Author's supervision	01.09.2024	31.12.2025	16
Commissioning into operation 165 sites	01.11.2025	31.12.2025	2

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

Immediately after approval for financing the project and concluding a contract with the financing body for

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assigning its implementation.

2021/2022 - Carrying out the procedures under the Public Procurement Act for awarding public procurement contracts for engineering and construction supervision;

2022/2023 - Start of the actual implementation of the engineering of the sites described in section 2 of this application form.

5. Indicative financial resource by activities, including sources of funding (GB, European funding, private funding, IFIs).

The total estimated financial resource for carrying out the rehabilitation amounts to BGN 847 854 185.32, excl. VAT

The estimated budget is determined on the basis of expert opinions from designers with full design capacity and / or historical data from public procurement with a subject identical or similar to the subject of this project.

The total estimated value broken down by step is as follows:

Activities	Number of sites	Indicative value (BGN)	Deadline of execution	Explanation / Description of the indicative value (cost granulation)
TOTAL VALUE FOR THE ENTIRE PROJECT, INCLUDING VALUE PER STAGES AND ACTIVITIES:	265	847 854 185,32	31.12.2025	The total value of the project is formed as a sum of the indicative values of all planned activities
STAGE 1 - 2022-2023 r.		38 340 909,53		
Including:				
<i>1. Design</i>	265	37 428 392,40	01.01.2023	From the Methodology for Determining the Amount of Remuneration for Provision of Design Services by Engineers in Spatial Planning and Investment Design, the Chamber of Engineers in Investment Design (KIIP) has taken an average percentage of 5% of the value of construction to determine the design value. . The percentages are given on page 77 of the Methodology.
<i>2. Preparation of an assessment of the compliance of the investment projects with the requirements to the constructions</i>	265	364 981,07	31.03.2023	The conformity assessment of the project is obligatory for all constructions from first to third category and is an obligatory precondition for issuing a Construction Permit (according to art. 142, para 1, 2, 4 and 5 of the Spatial Development Act). The value is 0.1% of the construction and installation work on the site, but not less than BGN 500 and not more than BGN 3,000 without VAT according to Article 28, paragraph 2 of Tariff № 14 for fees that are collected in the system of the Ministry. of regional development and public works and by the regional governors
<i>3. Approval of investment projects by control bodies</i>	265	364 981,07	31.03.2023	The value is 0.1% of the construction and installation work on the site, but not less than BGN 500 and not more than BGN 3,000 without VAT determined on the basis of Article 28, paragraph 4 of Tariff № 14 for the fees collected in the system of the Ministry of Regional Development and Public Works and by the regional governors (amended and supplemented, SG No. 79 of 8 October 2019).
<i>4. Fees for issuing a building permit, according to the Spatial Development Act</i>	265	182 555,00	31.03.2023	Issuance of a building permit according to Spatial Development Act on the basis of Article 29. of Tariff № 14 for fees, which are collected in the system of the Ministry of Regional Development and Public Works and by the regional governors (amended and supplemented, SG No. 79 of October 8, 2019) For issuing a construction permit under Art. 148, para. 3 of the law, a fee in the amount of 0.05 per cent of the construction value of the site shall be collected, but not less than BGN 250 and not more than BGN 1500.

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STAGE 2 - 2023-2024 r.				
Construction and repair works, including:		344 105 539,06		
<i>1. Construction and repair works</i>	100	334 158 162,98	31.07.2024	Actual execution of the repair and restoration works on the approved projects
<i>2. Construction supervision</i>	100	6 364 917,39	30.09.2024	The lowest price offers of the selected contractors under an open public procurement procedure with subject: "Selection of contractors for construction supervision during repair works of hydro-ameliorative facilities owned by" Irrigation Systems "EAD, under sub-measure 4.3" Investments for development, modernization or adaptation of agricultural and forestry infrastructure "from measure 4" Investments in tangible assets "under the RDP 2014-2020, with 26 separate items" converted into a percentage ratio to the value of construction of 2%.
<i>3. Author's supervision</i>	100	3 182 458,70	30.09.2024	According to № BG06RDNP001-4.010 "Project proposals from" Irrigation Systems "EAD for rehabilitation of existing irrigation facilities for irrigation" under sub-measure 4.3 "Support for investment in infrastructure related to the development, modernization or adaptation of agriculture and forestry" of measure 4 " Investments in tangible assets "of the Rural Development Program for the period 2014-2020 in section 14.1“ Eligible costs ”costs for author's supervision is 1% of the construction and installation works.
<i>4. Placing ithe sites in service</i>	100	400 000,00	30.09.2024	Preparation and completion of the necessary documentation for the commissioning of the finished construction. The value is according to art. 31b, para 2 of Tariff № 14 for fees, which are collected in the system of the Ministry of Regional Development and Public Works and by the regional governors hydro-ameliorative facilities - irrigation and drainage canals, etc. - BGN 200 per km, but not more than BGN 4000.
STAGE 3 - 2024-2025 r.				
Construction and repair works, including:		465 407 736,73		
<i>1. Construction and repair works</i>	165	451 838 077,37	31.10.2025	Actual execution of the repair and restoration works on the approved projects
<i>2. Construction supervision</i>	165	8 606 439,57	31.12.2025	The lowest price offers of the selected contractors under an open public procurement procedure with subject: "Selection of contractors for construction supervision during repair works of hydro-ameliorative facilities owned by" Irrigation Systems "EAD, under sub-measure 4.3" Investments for development, modernization or adaptation of agricultural and forestry infrastructure "from measure 4" Investments in tangible assets "under the RDP 2014-2020, with 26 separate items" converted into a percentage ratio to the value of construction of 2%.
<i>3. Author's supervision</i>	165	4 303 219,78	31.12.2025	According to № BG06RDNP001-4.010 "Project proposals from" Irrigation Systems "EAD for rehabilitation of existing irrigation facilities for irrigation" under sub-measure 4.3 "Support for investment in infrastructure related to the development, modernization or adaptation of agriculture and forestry" of measure 4 " Investments in tangible assets ”of the Rural Development Program for the period 2014-2020 in section 14.1“ Eligible costs ”costs for author's supervision is 1% of the construction and installation works.
<i>4. Placing ithe sites in service</i>	165	660 000,00	31.12.2025	Preparation and completion of the necessary documentation for the commissioning of the finished construction. The value is according to art. 31b, para 2 of Tariff № 14 for fees, which are collected in the system of the Ministry of Regional Development and Public Works and by the regional governors hydro-ameliorative facilities - irrigation and drainage canals, etc. - BGN 200 per kilometer, but not more than BGN 4000.

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5.1. Distribute the financial resource indicatively, according to the type of expenditure:

1. STAGE №1:

- Design - 5%
- Preparation of an assessment of the compliance of the investment projects with the essential requirements to the constructions - 0.1% of the construction and installation works on the site, but not less than BGN 500 and not more than BGN 3,000.
- Coordination of investment projects with control bodies - 0.05% of construction and installation works, but not less than BGN 250 and not more than BGN 1500.
- Issuance of a building permit according to Spatial Development Act - 0.05% of construction and installation work, but not less than BGN 250 and not more than BGN 1500.

2. STAGE №2:

- Construction/rehabilitation of infrastructure (Construction and Installation work) – 90%
- Construction supervision – 2 % from the sum of construction and installation work
- Author's supervision – 1% from the sum of construction and installation work
- Taxes – 0.15%

3. STAGE №3:

- Construction/rehabilitation of infrastructure (Construction and Installation work) – 90%
- Construction supervision – 2 % from the sum of construction and installation work
- Author's supervision – 1% from the sum of construction and installation work
- Taxes – 0.15%

6. Indicators

6.1. Result indicator(s)

Level of negotiation of the financial resource:

- Initial value – 0 (30.06.2021)
- Intermediate value - 0 (31.12.2021)
- Intermediate value – BGN 382 446 448,60 (38 340 909,53 BGN for design and BGN 344 105 539,06 for construction and installation works) (30.06.2022)
- Intermediate value - BGN 265 407 733,72 for carrying out construction and installation works (31.12.2022)
- Intermediate value - BGN 200 000 000 for carrying out construction and installation works (30.06.2023)
- Final value - BGN 847 854 185,32 total for engineering (design and construction) (31.12.2023)

STAGE №1: 265 investment projects and compliance assessments of investment projects have been prepared and agreed with the control bodies

1.1. Design of all sites (265 pieces)

- Initial value – 0 (01.07.2022)
- Intermediate value – 140 sites (31. 10.2022)
- Final value – 265 sites (01.01.2023)

1.2. Preparation of an assessment of the compliance of investment projects with the essential requirements to the construction works (265 sites):

- Initial value – 0 (01.01.2023)
- Intermediate value – 140 sites (01.02.2023)
- Final value – 265 sites (01.03.2023)

1.3. Coordination of investment projects with control bodies (265 sites);

- Initial value – 0 (01.03.2023)
- Intermediate value – 140 sites (15.03. 2023)

¹ The timetable will be relevant for setting interim targets under the Recovery and Sustainability Plan and is directly relevant to the release of tranches of financial support under the Recovery and Sustainability Fund.

- End value – 265 sites (31.03.2023)

STAGE №2: A total of 100 sites have been reconstructed

- 2.1.** Start of the actual implementation of the repair and restoration works for 100 sites
 - Initial value – 0 (01.04.2023)
 - Intermediate value – 50 sites (31. 12.2023)
 - End value – 100 sites (31.07.2024)
- 2.2.** Exercise of construction supervision during the construction of all 100 sites
 - Initial value – 0 (01.04.2023)
 - Intermediate value – 50 sites (31. 12.2023)
 - Final value – 100 sites (30.09.2024)
- 2.3.** Exercise of author's supervision during the implementation of the construction of 100 sites
 - Initial value – 0 (01.04.2023)
 - Intermediate value – 50 sites (31. 12.2023)
 - Final value – 100 sites (30.09.2024)
- 2.4.** Commissioning of 100 sites into operation under the SDA
 - Initial value – 0 (01.08.2024)
 - Final value – 100 sites (30.09.2024)

STAGE №3: A total of 165 sites have been reconstructed

- 3.1. Start of the actual implementation of the repair and restoration works for 165 sites**
 - Initial value – 0 (01. 09.2024)
 - Intermediate value – 65 sites (28.02.2025)
 - End value – 165 sites (31. 10.2025)
- 3.2. Exercise of construction supervision during the construction of 165 sites**
 - Initial value – 0 (01.09.2024)
 - Intermediate value – 65 sites (28.02.2025)
 - End value – 165 sites (31. 12.2025)
- 3.3. Exercise of author's supervision during the implementation of the construction of 165 sites**
 - Initial value – 0 (01.09.2024)
 - Intermediate value – 65 sites (28.02.2025)
 - End value – 165 sites (31. 12.2025)
- 3.4. Commissioning of all 165 sites into operation under the SDA**
 - Initial value – 0 (01.11.2025)
 - End value – 165 sites (31. 12.2025)

6.2. Effect indicator(s)

STAGE №1: 265 investment projects and conformity assessments of the investment projects have been prepared and agreed with the control bodies:

- 1.1.** Design of all sites (265 pieces)
 - Starting value – 0 (01.07. 2022)
 - End value – 265 (01.01. 2023)
- 1.2.** Preparation of an assessment of the conformity of investment projects with the essential requirements for construction works (265 sites):
 - Starting value – 0 (01.01. 2023)
 - End value – 265 (01.03. 2023)
- 1.3.** Coordination of investment projects with control bodies(265 sites);
 - Starting value – 0 (01. 03. 2023)
 - End value – 265 (31.03. 2023)

¹ The timetable will be relevant for setting interim targets under the Recovery and Sustainability Plan and is directly relevant to the release of tranches of financial support under the Recovery and Sustainability Fund.

STAGE №2: A total of 100 objects have been reconstructed.

2.1. Start the actual execution of repair and restoration works for all 100 sites.

➤ Starting value – 0 (01.04. 2023)

➤ End value – 100 (31.07. 2024)

2.2. Exercise of construction supervision during the construction of all 100 sites

➤ Starting value – 0 (01.04. 2023)

➤ End value – 100 (30.09. 2024)

2.3. Exercise of author's supervision during the execution of the construction of all 100 sites

➤ Starting value – 0 (01.04. 2023)

➤ End value – 100 (30.09. 2024)

2.4. Putting all 100 sites into operation under the SDA

➤ Starting value – 0 (01.08. 2024)

➤ End value – 100 (30. 09. 2024)

STAGE №3: A total of 165 sites have been reconstructed

3.1. Start of the actual implementation of the repair and restoration works for 165 sites.

➤ Starting value – 0 (01.09. 2024)

➤ End value – 165 (31.10. 2025)

3.2. Exercise of construction supervision during the construction of 165 sites

➤ Starting value – 0 (01.09. 2024)

➤ Final value – 165 (31.12. 2025)

3.3. Exercise of author's supervision during the implementation of the construction of 165 sites

➤ Starting value – 0 (01.09. 2024)

➤ Final value – 165 (31.12. 2025)

3.4. Commissioning of 165 sites under the SDA

➤ Starting value – 0 (01. 11. 2025)

➤ Final value – 165 (31.12. 2025)

AFTER THE IMPLEMENTATION OF THE ACTIVITIES, THE FOLLOWING QUANTITATIVE EFFECTS WILL BE ACHIEVED:

Data on the achieved effects will be available on the website of "Irrigation Systems" EAD:
<https://nps.bg/>

- Expected increase of irrigated/drained areas after rehabilitation (possible potential):

- Irrigated areas: in 2020 the serviced (actually irrigated) areas amount to 228,010.12 ha. and it is expected that after the rehabilitation of the hydro-ameliorative sites, subject of the investment, to create an opportunity for irrigation of another 795,445, 88 ha. or the irrigated areas to reach a total of 1,013,546 ha.

- Starting value – 228 010,12 ha. (30.06. 2020)

- Final value – 1 013 546 ha. (28.02. 2026 years old)

- Drained areas: in 2020 the actual drainage areas amount to 236 644 ha. and after carrying out the rehabilitation of hydromeliorative sites (HWP) subject to the investment, will increase by 67 129 ha. or the drainage areas will increase to a total of 303 773 decas.

- Starting value – 236 644 ha. (30.06. 2020)

- Final value – 303 773 ha. (28.02. 2026)

- Minimized technological losses and losses from filtration and leaks - reduction of water losses by up to 75%, which is in accordance with Art. 46 of Regulation (EU) № 1305/2013 of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulation (EC) (Council Regulation (EC) No 1698/2005.

¹ The timetable will be relevant for setting interim targets under the Recovery and Sustainability Plan and is directly relevant to the release of tranches of financial support under the Recovery and Sustainability Fund.

- Technological losses are calculated according to the following formula: Efficiency Rate (old) - Efficiency Rate (new), as the efficiency is the ratio of the water used by the plants in the root zone to the water supplied by the water source. The ratio of the volume of water reaching the area intended for irrigation of the system to the volume of water received from the water source represents the efficiency of the system.
- Starting value - 0 (30.06. 2022)
- Final value – 75% (28.02. 2026)

Data on the achieved effect will be available on the website of “Irrigation Systems” EAD: <https://nps.bg/>

- Increasing the effectiveness of the efficiency ratio (ratio of water supplied and used) of the system by an average of 40%, by planning the water supply (efficiency calculated as the amount of actually discharged water masses from the water body and activated / actually delivered water masses to the end user);
- Starting value - 0 (30.06. 2022)
- Final value - 40% (28.02. 2026)

Data on the achieved effect will be available on the website of “Irrigation Systems” EAD: <https://nps.bg/>

- After the rehabilitation of pumping stations, depending on the location and displacement or height of pumping water, the average cost savings per acre of irrigation will be at least 20% (the formula used to calculate is: old cost per acre of irrigation minus new consumption per acre per number of irrigations) depending on the acres irrigated areas, the effect will be multiplied by the expected increase of the irrigated areas
- Starting value - 0 (30.06. 2022)
- Final value - 20% (28.02. 2026)

Data on the achieved effect will be available on the website of “Irrigation Systems” EAD: <https://nps.bg/>

The following cumulative economic, industrial, agricultural and household effects will be achieved through the rehabilitation of the hydro-ameliorative sites managed by “Irrigation Systems” EAD:

- More efficient water management in canals, dams, rivers and groundwater, but also in flood zones - key elements for ecosystems, drinking water supply to the population, wastewater management, agriculture and the economy as a whole.
- Protection from the harmful effects of water and limitation of the risks from floods of settlements, agricultural lands, industry and other sites of national importance;
- Constant monitoring of the flowing water quantities and control over the implementation of the schedule of the MoEW;
- By reducing water losses, water will be saved, which allows it to accumulate in dams and use it to irrigate riverbeds and maintain the ecological status/eco-minimum and biodiversity in them. The flooded riverbeds in the country will support the supply of wells and boreholes for drinking and domestic water supply to the population.
- The rehabilitation of the state hydro-ameliorative fund will create conditions for attracting private investments in the approximate amount of BGN 874 million (calculated as a product of the projected increase in irrigated areas - 795,445.88 ha. and approximately BGN 1,100.00/ha.) capital investments depending on the planting scheme, respectively of the pipe network) for construction of in-house water saving systems..

7. Does the implementation of the project require a PPA procedure?

Yes

Type of public procurement procedure:

¹ The timetable will be relevant for setting interim targets under the Recovery and Sustainability Plan and is directly relevant to the release of tranches of financial support under the Recovery and Sustainability Fund.

<p>Open procedure for awarding a public procurement under Art. 18, para. 1, item 1 of the Public Procurement Act (PPA).</p> <p>1. The object of the procurement is construction (design and execution of construction) within the meaning of Art. 3, para. 1, item 1b of the Public Procurement Act with 14 separate positions representing the 14 branches of “IS” EAD, including the hydro-ameliorative facilities on the territory of the respective branch.</p> <p>2. The object of the procurement is the provision of services within the meaning of Art. 3, para. 1, item 3 of the Public Procurement Act for carrying out construction supervision. The public procurement will include 14 separate positions representing the 14 branches of “Irrigation Systems” EAD, covering the hydro-ameliorative facilities on the territory of the respective branch.</p>
<p>7.1. If a PPA procedure is required, how much of the activities and the financial resource will be the subject of the public procurement?</p>
<ul style="list-style-type: none"> – Engineering costs (design and construction) - 90%; – Costs for preparation of assessment of the compliance of the investment projects with the essential requirements to the constructions/sites and exercise of construction supervision - 10%.
<p>7.2. If a PPA procedure is required, what is the indicative timetable for its implementation?</p>
<p>It is envisaged to conduct an open procedure for awarding a public procurement under Art. 18, para. 1, item 1 of the Public Procurement Act.</p> <p>The procedures will be carried out within the statutory deadlines under the Public Procurement Act, and the public procurement contracts will be concluded no later than June 2022, with the participants selected as contractors. The indicative deadlines for the execution of both orders are as follows:</p> <ul style="list-style-type: none"> • Preparation of a technical specification for the purposes of the two public procurements (2 months); • Conducting market research or consultations under Article 21, paragraph 2 of the Public Procurement Act to determine the market-oriented estimated value of the two public procurements (1 month); • Preparation of documentation for participation in the public procurement procedures (1 month); • Period of the work of the commission for examination, evaluation and ranking of the potential participants in the public procurements (4 months); • Deadline for appealing the decisions for selection of contractors for public procurement (14 days); • In case of appeal of the procedures before the CPC/SAC (2 months); • Deadline for concluding contracts with selected contractors (1 month).
<p>8. Demarcation and additionally.</p>
<p>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.</p>
<p>A sub-measure has been launched to support the restoration of the hydro-ameliorative infrastructure outside the agricultural holdings under the RDP 2014-2020. As of August 2020, 26 project proposals of “Irrigation Systems” EAD, beneficiary under sub-measure 4.3, are in the process of evaluation by the MA of the Rural Development Program 2014-2020 (RDP 2014-2020). With Code BG06RDNP001-4.010 under the procedure for acceptance of project proposals under sub-measure 4.3 "Investments for development, modernization or adaptation of agricultural and forestry infrastructure" of measure 4. "Investments in tangible assets" under RDP 2014-2020 of "Irrigation systems " EAD have been submitted through UMIS 2020 projects for restoration of existing hydro-ameliorative irrigation facilities, distributed among 26 separate positions.</p> <p>The objects for restoration proposed in the present application form are different and do not duplicate the objects submitted under sub-measure 4.3.</p>
<p>8.2. If similar projects are envisaged under the Partnership Agreement programs, the centrally managed instruments of the EU or the Fair Transition Fund, outline the demarcation with this project.</p>

¹ The timetable will be relevant for setting interim targets under the Recovery and Sustainability Plan and is directly relevant to the release of tranches of financial support under the Recovery and Sustainability Fund.

The project complements the above 26 project proposals submitted by “Irrigation Systems” EAD for rehabilitation of the existing irrigation facilities, which are limited in the budget under sub-measure 4.3 "Investments for development, modernization or adaptation of agricultural and forestry infrastructure" of measure 4. "Investments in tangible assets" under the RDP 2014-2020 in the amount of BGN 88,831,016.09 and partially, to a minimum, satisfies the need for restoration and modernization of the existing hydro-ameliorative infrastructure of the Republic of Bulgaria. The projects submitted through EUMIS 2020, subject to evaluation and financing as of August 2020, amount to a total of BGN 114,762,927.74. The projects under RDP Measures for the programming period 2014-2020 are financed by the EAFRD as an instrument for support of the EU.

The project envisages restoration and reconstruction of irrigation facilities for irrigation outside agricultural holdings. Activities will be carried out to restore the existing main line infrastructure and its facilities, which are publicly owned and operated by the state. The Strategic Plan for Agricultural and Rural Development in the period 2021-2027 (SP) envisages the development of an intervention to support irrigation investments in agricultural holdings.

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

The implementation of the project will directly contribute to the Council recommendations for 2019 and 2020 on the National Reform Program of Bulgaria and the Convergence Program, concerning the need for investments to mitigate climate change, adapt to climate change, and implement measures to overcome high energy intensity and inefficient use of energy and resources, including for sustainable water management. Agricultural activities make a significant contribution to climate change and biodiversity through greenhouse gas emissions, nutrient surpluses in soil, water and air, tillage leading to erosion, etc.

On the other hand, the increasingly extreme effects of adverse climatic events are adversely affecting agricultural production and productivity, which requires production practices to adapt to these changing conditions.

Specific link to the recommendations:

Recommendations for 2019:

- item 14 – concerning the need for investment to promote sustainable water management, resource efficiency, climate change mitigation and adaptation;
- Recommendation 3 – to guide investment policy in areas such as research, innovation, water, etc.

Recommendations for 2020:

- item 25 – in relation to the finding that Bulgaria has the most resource-intensive use of resources and highest greenhouse gas emissions in the EU;
- Recommendation 3 – accenting on focusing investments in the green and digital transition and in particular on the clean and efficient production and use of energy and resources.

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

Investments in restoration and modernization of the existing hydro-ameliorative infrastructure can be used as an effective means to limit or prevent on the one hand the stress impact of droughts, water shortages and water deficit and on the other - for overcoming the harmful impact of water on territories in other extreme climatic events - floods, destruction of the banks of river beds, over-wetting of soils, etc. Hydromelioration has the urgent need for the implementation of an adequate policy that will lead to effective water management in the Republic of Bulgaria. Reconstruction of the hydro-ameliorative fund is essential both for the country's economy and for the adaptation of the hydro-systems to the adverse impact of the climatic factors during the different climatic years.

11. Does the project contribute to the development of any aspects of sustainable economic development?

¹ The timetable will be relevant for setting interim targets under the Recovery and Sustainability Plan and is directly relevant to the release of tranches of financial support under the Recovery and Sustainability Fund.

Please describe how.

The implementation of a project of this nature directly affects and will have a positive impact on environmental problems in general and in the water sector in particular, which are deepening in recent decades due to severely disturbed natural balances and the cumulative negative effect on human health. The protection of water resources is fundamental to achieving sustainable development and growth in economic, social and environmental terms. The water sector is directly related to the health of the population, industry and water supply of the settlements. Effective water management affects different economic areas that are interconnected: industrial, agricultural and domestic.

The proposed investments in the field of hydro-amelioration can be defined as environmentally sustainable, given their potential contribution to three of the six environmental objectives of the EU set out in Art. 9 of Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 establishing a framework to facilitate sustainable investment (the Taxonomy Regulation). These are the objectives: "Climate change mitigation", "Adaptation to climate change" and "Sustainable use and conservation of water and marine resources".

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

The envisaged reform in the hydromeliorations sector will mainly contribute to the realization of Objective I. Accelerated economic development of the National Development Program Bulgaria 2030 and in particular will make a significant contribution to the priorities included in the Second Axis of Development "Green and Sustainable Bulgaria "- Priority 4. Circular and low-carbon economy and Priority 6. Sustainable agriculture.

This contribution will be linked to a significant reduction in water losses, an increase in irrigated areas, improved water use efficiency, protection of territories from harmful water impacts, prevention of disaster risk, adaptation to climate change, and mitigation of the effects of climate change in order to protect ecosystems.

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

The modernization of the hydro-ameliorative infrastructure will lead to the improvement of the energy efficiency of the facilities, will reduce the consumption and water losses, will improve the control and management of the water resources. The improved technical condition of the system will minimize the risk of floods, swamps and other harmful effects on the territories.

¹ The timetable will be relevant for setting interim targets under the Recovery and Sustainability Plan and is directly relevant to the release of tranches of financial support under the Recovery and Sustainability Fund.