

# Project Application Form

## Under the Recovery and Resilience Facility

### 1. Project name

Increasing of energy efficiency, modernization of material base and establishment of innovative technologies for people's treatment implemented by basic state and municipal medical centres.

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

As of December 31, 2019, there are 341 hospitals with 53,997 beds, of which 184 are multi-profile hospitals with 38,249 beds. The main structures forming the backbone of the hospital system in the country include 22 medical institutions with 100% of capital state participation and 26 medical institutions with over 50% of capital state participation, 14 state specialized hospitals and 17 municipal medical institutions. These hospital structures are distributed on the territory of the regional cities throughout the country. In implementation of the National Health Strategy 2020 and in particular Policy 2.5. "Optimized hospital care", a number of measures were implemented aimed at optimizing the hospital network and reducing the number of beds in them, while maintaining and increasing their opportunities for intensive treatment of acute diseases, development of high-tech diagnostic and treatment services with increasing supporting role of the outpatient care system, rehabilitation structures, long-term treatment, long-term care, removal of activities from hospital conditions in outpatient settings conditions or in long-term care services. To implement these measures, significant funds have been invested in the renovation of the material and technical base of the medical centers and the purchase of new, high-tech, modern medical equipment. Regional centers for the treatment of oncological, cardiovascular, neurological and other socially significant diseases have been established. Significant resources were invested in the development and modernization of the emergency medical care system in the country, as well as in trainings for the development of the system's human capital. Despite the successes achieved, there are some weaknesses and problems that should be addressed as a matter of priority, namely:

- Low level of energy efficiency of the state medical institutions;
- Obsolete and depreciated electrical installations, plumbing installations, HVAC (Heating, Ventilating, and Air Conditioning) installations, communication installations, etc .;
- Use of expensive energy sources with a high carbon footprint;
- Purchase, installation and operating of innovative equipment for supporting medical institutions with over than 50% of capital state participation;

These weaknesses are difficult to solve due to their complexity, namely - they relate to the medical institution as a whole, and not to individual clinics or departments. Regarding the innovative technologies, in the different medical institutions there is a different level of development of the different specialties. The hospitals adjust their structure according to the types of wards and investments in them. With regard to the specific demographic indicators of the district whose population they serve, the financial condition of different hospitals is also very different, which is often an obstacle to the possibilities for modernization of key clinics and wards. At the same time, carrying out a complete overhaul and renovation, as well as the provision of modern equipment require significant financial resources, which medical institutions and the Ministry of Health cannot provide.

In this regard, the current project aims to modernize and renew the material base of state and municipal medical institutions. The planned investments for equipment are prepared on the basis of the identified needs in the different areas of NUTS 3 for health care, in accordance with the existing equipment and staffing, as well as in view of the potential opportunities for future development and expansion of activities. The provision of state-of-the-art medical equipment for diagnosis and treatment will contribute to the satisfaction of the medical staff with their work, which is a key factor in reducing the processes in which the doctors and nurses leave the country. The Medical Institute of the Ministry of Interior (MI-MoI) is a state-owned medical institution, registered under the law on medical institutions and is part of the national health care system, of the emergency medical care system, as well as of the national health map. As a medical institution, it serves citizens, but also performs additional functions specific to

the activities of the Ministry of Interior.

MI-MoI consists of 4 hospitals, 52 medical services, Central Expert Medical Commission (CEMC) and Regional expert medical commissions (REMC); public health control sector:

- Hospital Central Clinical Base (CCB) is a multidisciplinary hospital for active treatment in the city of Sofia. The central clinical base provides pre-hospital and in-hospital medical care. The CCB also carries out educational and scientific activities - training of postgraduates and PhD students in various medical specialties, as well as of cadets from the Academy of the Ministry of Interior participating in first aid courses.

- Three hospitals for long-term treatment and rehabilitation - in Hissar, in Bankya and in Varna.

- Medical services - 52 units throughout the country that perform functions related to pre-hospital medical care and annual preventive examinations of MoI employees, as well as medical examinations of persons accommodated in specialized homes for temporary accommodation of foreigners at the Migration Directorate.

- Central and regional expert medical commissions (CEMC and REMC). Performs specialized medical examination and medical expertise of candidates for employment in the Ministry of Interior, employees of the Ministry of Interior, candidates - cadets for the Academy of the Ministry of Interior and other persons defined by the Law on the Ministry of Interior, as well as employees in the contingents for participation in international missions.

- Public Health Control Sector. Performs preliminary and current health control; issues hygienic opinions; measures physical and chemical factors of the working environment and sources of ionizing radiation; conducts anti-epidemic measures against contact of infectious patients and microbiological tests.

In short, the functions of the MI – MoI with regard to the healthcare system can be divided into several groups, according to the type of persons served:

#### GENERAL:

1. Provides medical care in the pre-hospital and hospital care to citizens in need of and wishing to be consulted, diagnosed and treated in CCB or in hospitals for long-term treatment and rehabilitation.

2. Provides medical care to all persons regardless of their health insurance status, who have independently sought emergency medical care in the emergency reception and consultation office at CCB in Sofia or who have sought emergency medical care on 112 and have been brought by ambulance from the Center for Emergency Medical Aid Sofia;

#### SPECIFIC:

1. Provides medical care in the pre-hospital and hospital care to employees of the Ministry of Interior, their families, as well as to retired civil servants of the Ministry of Interior.

2. Provides medical insurance through mobile teams of the Ministry of Interior.

3. Carries out the medical examinations for identifying the suitability of the candidates to be trained in the Academy of the Ministry of Interior.

4. Provides medical care to persons accommodated in specialized homes for temporary accommodation of foreigners under the Migration Directorate; in homes for temporary accommodation of adults or minors and of temporarily detained / arrested persons.

5. Since 2019, MI-MoI has been performing medical examinations of children under police protection.

The main activities that are planned to be implemented within the project are:

- Carrying out certification of the building stock;

- Implementation of measures for rehabilitation and energy efficiency;

- Renovation and modernization of elevator facilities;

- Setting out systems for disposal of hazardous hospital waste and household waste;

- Renovation and modernization of electrical installations, plumbing and HVAC installations;

- Construction of oxygen production systems for medical purposes;

- Purchase, installation and commissioning of innovative equipment for basic municipal medical centers and basic medical centers with over than 50% of capital state participation.

The implementation of the activities will achieve overall optimization of the costs of state and municipal medical institutions, will provide new highly specialized medical services for the population throughout the country, as well as will support the process of hospital care reform defined in the National Health Strategy 2020 and will improve the level of the achieved results from the implementation of the Concept for restructuring the hospital care system, adopted by Protocol № 49.38 of the Council of Ministers dated 16.12.2009. In addition, the implementation of the

project will strengthen the resilience of the health system, as well as it will increase its accessibility and capacity in the country.

For the implementation of the project, the mentioned activities will be grouped as follows:

**Activity 1 "Construction and installation activities and energy efficiency measures"**

Within activity 1, interventions will be carried out in the infrastructure of the basic state and municipal medical centers by carrying out reconstruction, repair, renovation and improvement of the access for persons with disabilities to the buildings, subject of intervention. For this purpose the activity will be realized as two separate sub-activities:

**Sub-activity 1.1 : "Carrying out certification of the building stock"**

The main goal of the sub-activity is to implement procedures for certification of the building stock for the objects under intervention. For this sub-activity the main responsibility will be held by the Ministry of Health when it concerns hospitals with over than 50% of capital state participation and by the municipalities at which territory the municipal medical institutions are situated. With the implementation of public procurement procedures under the Public Procurement Act, external contractors will be selected to prepare the necessary documents, and the procedures will be organized and conducted by the partners in the project.

As a result of the implementation of sub-activity 1, for all medical centers being objects of intervention, it will be:

- established certain levels of energy consumption;
- determined the specific possibilities for the reduction of the levels of energy consumption;
- prepared recommended measures for increasing the energy efficiency.

**Sub-activity 1.2 : "Development of technical and working projects for construction and installation works"**

As a result of the implementation of sub-activity 1.1 and the prepared materials, it will be started the preparation of technical and working projects for the implementation of the respective construction and installation works in order to achieve the envisaged energy efficiency measures. In addition to the energy efficiency measures, the prepared technical and working projects will include parts for renovation and modernization of elevators, renovation and modernization of electrical installations, plumbing and HVAC installations, construction of oxygen production systems for medical purposes.

Terms of reference for the construction of oxygen production systems for medical purposes will also be prepared. In case of need for additional expert assistance, public procurements will be conducted by the partners in the project, for selection of consultants to prepare the respective technical and working projects.

**Sub-activity 1.3 : "Conducting public procurement for selection of contractors for the implementation of construction and installation activities as well as for construction and author's supervision"**

After completing the implementation of sub-activity 1.1 and sub-activity 1.2, public procurements will be organized and conducted for the selection of contractors for construction and installation works and implementation of the planned measures for rehabilitation and energy efficiency. According to the requirements of the Spatial Development Act, public procurements will be organized and conducted for selection of contractors to ensure construction and author's supervision. The procedures will be organized and conducted by the Ministry of Health under the PPL.

As a result of the implementation of sub-activity 1.3, contracts will be concluded with the selected contractors, and for each object of intervention a contractor of construction and installation works, as well as a contractor of construction and author's supervision will be provided.

**Sub-activity 1.4 : "Implementation of energy efficiency measures and rehabilitation of the building stock of the objects of intervention"**

After the conclusion of the contracts with the selected contractors under sub-activity 1.3, the actual implementation of the activities for renovation and modernization of the building stock and implementation of the necessary energy efficiency measures will start.

The sub-activity will be implemented in parallel in all objects of intervention, as the investor supervision will be carried out by the municipalities, which are the principal of the respective municipal medical centers and by the management of the respective medical centers with over than 50% of capital state participation. The Ministry of Health will monitor and coordinate the whole process of implementation of sub-activity 4, monitoring the accurate and timely implementation of the activities and reporting on the progress to the relevant national and European authorities.

As a result of the implementation of activity 1, the internal structure of the basic medical centers in the country will be renewed and modernized with regard to the critical installations in them - electricity, HVAC, plumbing, as well as the elevator facilities. Also, after the completion of the planned activities, the buildings of the medical centers which are subject to intervention will meet the European requirements for energy efficiency, which will contribute both to the improvement of their economic condition and to the reduction of their energy consumption.

**Sub-activity 1.5. Complete reconstruction of the old building of CCB at the MI-MoI and delivery of equipment.**

The modernization of the building will provide modern facilities, medical care and working conditions for the staff. It is envisaged to create a development plan and to carry out construction and repair activities. The modernization of the base will contribute to the improvement of energy efficiency; it will improve the working and living conditions for the patients; it will create conditions and premises for placement of modern equipment; it will optimize the use of the building area; it will prolong the life of the material base and last but not least, it will leverage the performance of new activities.

**Sub-activity 1.6. Modernization and equipment of the Hospital for long-term treatment and rehabilitation.**

Construction of a medical center at the MI-MoI, which will provide care for people with disabilities, people with chronic diseases, people with special needs and terminally ill patients. It is planned to create a development plan and carry out construction and repair activities.

The presence of such health care unit will provide constant medical monitoring, supportive treatment, health care, coping with and control of pain and psycho-emotional effects of the disease, as well as providing moral support to the patient and his/her relatives. There will be performed diagnostic and therapeutic procedures, continued treatment of various medical conditions, active rehabilitation and daily care for the patient.

The existence of such structure and its positioning within the hospital for aftercare and rehabilitation will allow, if necessary, patients to receive immediate consultation from various specialists, as well as to perform the necessary diagnostic tests on site. It is possible to provide the highest quality medical care to elderly and disabled patients, as the hospital for long-term treatment and rehabilitation has the possibility to provide its medical staff with 24-hour availability and the possibility of emergency transportation to the Ministry of Interior with an ambulance.

The construction of the structure at the MI MoI will provide palliative care for many patients for whom the health system does not allow long hospital stays, but their condition requires long-term specialized medical care.

**Sub-activity 1.7. Construction of an operating block.**

The project envisages a complete reconstruction and expansion of the operating room, in connection with the highly increasing number of patients in need of operative activities in the various operative specialties of the Ministry of Interior.

In the process, the modern norms in the construction of specialized hospital premises will be observed, which is necessary for the modernization of the operational activity and the introduction of innovative, high-tech and minimally invasive procedures, requiring special conditions and digitalization. At the moment, the operating room of the Ministry of Interior needs a complete reconstruction and expansion in order to meet the existing European architectural requirements and standards and the related use of high-tech equipment.

It is necessary to build an operating room with seven operating rooms and adjoining premises in accordance with the relevant operational standards. The implementation of repair and renovation activities will include energy efficiency measures in accordance with the provisions of the Energy Efficiency Act. This will, in turn, allow to achieve the goals set in the policy "Green and Sustainable Bulgaria", which is a part of the National Development Program "Bulgaria 2030", as well as one of the main goals of the EU for the period 2021 - 2027 - "Greener, carbon-free Europe" and to respond to the Council's recommendations on Bulgaria's National Reform Program for 2020 and containing a Council opinion on Bulgaria's Convergence Program for 2020 (COM (2020) 502 from 20 May 2020).

**Activity 2 "Provision of innovative medical equipment"**

With the implementation of activity 2, the medical centers that are subject to intervention, will significantly increase the volume, type and quality of the provided medical care to the population in the country. This will indirectly increase the motivation of medical professionals and will be a prerequisite for attracting young doctors and health professionals. For the realization of the activity it is necessary to perform the following sub-activities:

**Sub-activity 2.1. "Preparation of technical specifications and requirements for the acquisition of innovative medical**

### **devices and medical equipment"**

Determining the list of innovative equipment for each individual medical institution is an extremely responsible, important and key activity for achieving the expected results of the project. The proposed lists of innovative medical equipment are tailored to the individual needs of each hospital, taking into account the functions it performs (regional, district or interdistrict), the availability of medical specialists and inaugurated structures, as well as demographic indicators of the served area. In compliance with all these criteria, a detailed list of the necessary medical equipment has been prepared.

The next step to be done with the implementation of sub-activity 2.1., is aimed at the preparation of appropriate technical specifications for each technical device, as well as for the systems for disposal of hazardous hospital waste and household waste, which will ensure, on one hand its maximum modernity and ability to provide the necessary medical activities and procedures, and on the other hand – the sufficient competition between producers without favoring one or restricting other interested participating stakeholders.

In this regard, during the implementation of sub-activity 2.1., the Ministry of Health will organize working groups, including leading medical specialists, representatives of medical institutions and experts from the Ministry of Health, who will prepare technical specifications for all medical devices and medical equipment, as well as the complete documentation for public procurement. The prepared materials will be approved by the Minister of Health.

### **Sub-activity 2.2. "Conducting public procurement for selection of contractors for the supply of innovative medical devices and medical equipment"**

As a result of the implementation of sub-activity 2.1. public procurements will be announced under the Public Procurement Act for selection of suppliers of innovative medical equipment. The organization and conduct of public procurement will be implemented by the Ministry of Health. As a result of the implementation of sub-activity 1.3, contracts will be concluded with the selected suppliers.

### **Sub-activity 2.3. "Supply of innovative medical devices and medical equipment"**

After the conclusion of the contracts with the selected contractors as a result of the implementation of activity 2.2., the actual implementation of the activity will start, namely - delivery of medical devices and equipment in each medical institution. The contractors will be obliged to perform assembly, installation, trial tests and commissioning of each device, as well as of the systems for disposal of hazardous hospital waste and household waste.

The contractors will organize trainings for medical centers' workers how to operate with the new equipment. During the implementation of the activity, admission commissions will be established, including on the one hand representatives of the Ministry of Health and the specific medical centers where the assets are delivered, and on the other hand - representatives of the contractors. At each stage of the implementation of the contracts (delivery; assembly, installation and trial tests; commissioning; training), acceptance and transfer protocols will be signed, thus providing the necessary audit trail to monitor the implementation of the obligations of the parties of contracts.

With the completion of the sub-activity 2.3., the medical centers that are object to intervention, will have the necessary capacity to provide new, contemporary and highly specialized health services to the people served by them.

Within the scope of the activity, the following sub-activities will be implemented for the needs of MI MoI:

- *Purchase and deployment of equipment for extracorporeal lithotripsy.*

The need to have a modern, innovative and efficient lithotripsy system stems from the need to improve the quality of medical services so that it can meet modern trends. This will minimize the limitations available to the current equipment.

Urolithiasis is among the leading most common urological conditions in our country, requiring hospitalization. This fact is determined by the geographical location of the country and the natural resources (high mineralization of water in certain regions). This defines it as an endemic area and is the cause of one of the highest morbidity in Europe. In addition, there is a tendency to increase the number of cases.

Bulgaria falls into the so-called stone belt, covering Bulgaria, Turkey and Romania, with a higher incidence of kidney stone disease compared to northern European countries. (<https://www.aerzteblatt.de/int/archive/article/167652>; DOI: 10.3238/arztebl.2015.0083).

It has been empirically identified that the frequency of the stone kidney disease is higher among men. Given the contingent of the MI MoI, urolithiasis is the second most common chronic disease (after hypertonia), which is found out at the annual preventive examinations of employees.

The treatment of urolithiasis with a modern extracorporeal lithotripter is an effective and non-invasive procedure that can be performed quickly, easily and safely in outpatient care. Extracorporeal lithotripsy is a modern and very effective method using shock waves, fragmenting stones in the kidneys and ureters. It is the first step in the treatment of urolithiasis. It is non-invasive and in many cases is an alternative to surgical interventions. Using the available equipment, its effectiveness is reduced to 70% of cases, which requires re-hospitalization. The introduction in the daily urological practice of modern equipment, combining multiple energy sources for lithotripsy, can guarantee success of up to 100% without the need for repeated hospitalization of patients. This will ensure results similar to those cited in the European literature.

The advantages of using a modern lithotripter include:

- reducing the number of invasive medical procedures that limit the working capacity of patients for a significant period of time
- elimination of the feeling of discomfort and pain
- reduce the risk of complications when performing complex invasive operations
- fast performance without requirements for specific preparation and anesthesia of the patient
- reduce the number of staff needed to achieve a similar result
- can be performed in an outpatient setting
- shortens the hospital stay, which reduces the costs of the medical center
- reduces the restrictions available for the current equipment - obesity of the patient, size and specific composition of the kidney stones

The introduction of this modern equipment will increase the quality of the medical service, will reduce the time of incapacity for work and will increase the patient's satisfaction with the received medical care.

- *Purchase of equipment for robotic surgery.*

The aim is to improve the medical care for the MI-MoI contingent by introducing into practice equipment for robotic surgery, allowing minimally invasive surgical treatment, called robot-assisted laparoscopic surgery.

Its advantage is less trauma compared to conventional surgery, which significantly reduces hospital stays and postoperative pain and discomfort, and provides shortened recovery time.

The robotic system allows:

- remote work of the surgeon
- transmission by optical signal of three-dimensional video images with high resolution and magnification of the image with 10-20 times, which makes the boundaries of the operating field better visible
- greater range of motion, allowing better precision in surgery, as instruments bend and rotate with more flexibility than the human wrist
- providing a high-resolution image even in difficult-to-reach operational fields
- performing complex, long-term and large-scale surgical interventions with minimal trauma
- limiting blood loss due to the smaller area of the incisions, which allows less blood transfusion
- reducing the risk of nosocomial infection
- smaller operative scars
- shorter period of hospitalization
- lower risk of intra-abdominal adhesions.

Robotic surgery is more gentle on tissues and is preferred in oncological diseases in the field of ecology and gynecology. The system of robotic surgery is the most famous modern system, through which minimally invasive, precise, safe and timely action is applied. It is widespread in the practice of many European hospitals and is an inseparable part of the surgical procedures in the future. The MI MoI needs to have a system for robotic surgery in order to meet the highest European standards in surgical treatment.

- *Purchase of complete hemodialysis equipment.*

The main goal is to create conditions for chronic hemodialysis of patients with renal failure on the territory of the MI-MoI.

The main task is to purchase hemodialysis machines and provide complete equipment for the relevant activity.

Hemodialysis is a medical procedure to cleanse the blood of waste nitrogen-containing substances in the blood and unnecessary water and salts.

It is used in the presence of renal failure, as well as in emergencies of drug overdose and poisoning. It is lifesaving in acute renal failure, as well as in cases where conservative treatment does not work.

The lack of possibility to perform a dialysis procedure requires transportation of patients to other medical institutions, which needs time, equipment, involvement of an accompanying medical team, creates conditions for complications for the patient's health and requires additional costs.

The lack of dialysis does not allow patients with chronic renal failure to receive large-scale surgical treatment in the hospital due to the short time between dialysis procedures.

In cases of life-threatening conditions, transport time significantly reduces the likelihood of survival.

Given the complicated epidemiological situation, the transportation of Sars-Cov2-positive patients is risky due to their health status. It implies danger for the accompanying medical staff; it creates difficulties of a logistical nature. Hence, it creates great difficulties in providing adequate medical care in the environment of the growing pandemic.

The dialysis machine and the performance of a hemodialysis procedure in the MI-MoI are necessary due to the close interaction

of the procedure with the modern nephrology department, the high-tech urology, as well as the vascular surgery. In its presence, the entire cycle of therapy is closed, and the hospital becomes a modern clinical center for comprehensive treatment of patients with renal impairment.

The following are available at the MI-MoI: Department of Nephrology and Hemodialysis Treatment of third level of competence, Department of Anesthesiology and Intensive Care of third level of competence, General Vascular and Abdominal Surgery of third level of competence, Clinic of Urology of third level of competence and a third-level orthopedic clinic. The presence of a structure for chroniodialysis provides an opportunity to increase the quality of health care not only for the contingent of the Ministry of Interior, but also for the other patients.

- *Purchase of a digital mammography system.*

In connection with the construction of a center for early diagnosis and screening of benign and malignant diseases of the mammary gland, it is necessary to purchase a digital mammography system.

Breast cancer, according to the National Cancer Registry, ranks first in the incidence of malignancies in women - 26.8%, and is among the leading causes of death. This necessitates the widespread use of screening methods in order to reduce the number of deaths and severe and large-scale operations on advanced cancers, which cause inoperability to many patients.

Screening is used for early diagnosis of cancer before the first symptoms appear. The gold standard in breast cancer screening is mammography. It is a specific imaging method in which a relatively low dose of X-rays, visualizing the structures that constitute the mammary gland. The method is specific, highly effective and requires only trained staff. It significantly reduces deaths due to early diagnosis and timely treatment.

Modern diagnostics of breast diseases includes digital mammography, which has a higher resolution, allowing the visualization of extremely small pathological findings. It allows precise 3D biopsy and accurate localization of lesions and micro calcifications. The image is guaranteed to be more accurate with minimal ionizing radiation. Modern devices maximally spare patient health. False negative results - cases in which cancer exists, but the test does not detect it, are significantly less than those related to the old mammographs.

Given the large contingent of women in the system of the Ministry of Interior, it is extremely necessary to provide equipment for modern diagnostics of breast diseases.

- *Purchase of magnetic resonance equipment.*

The main goal is to purchase modern magnetic resonance equipment with a magnetic field strength of 1.5T, which allows accurate diagnostic imaging, obtaining high-resolution images and expanding the diagnostic capabilities of the clinic imaging diagnostics.

The construction of a center for early diagnostics and screening of breast diseases is an integral part of the project of the MI-MoI.

The contingent of the Ministry of Interior, due to the specifics of the work and the resulting high injuries and heavy physical exertion, suffers from acute and chronic injuries of the musculoskeletal system. Given this fact, the provision of Nuclear Magnetic Resonance (NMR) is essential as an addition to the equipment available in the clinic for imaging diagnostics.

Magnetic resonance imaging is used as a gold standard for examination of the central nervous system, head and neck, chest, spine, abdominal organs, bone and joint system, diagnostics of the mammary gland, diagnostics of the prostate. For all soft tissue structures, magnetic resonance imaging has significantly superior quality compared to the computed tomography.

NMR does not use X-rays, which makes it harmless to patients. It uses a non-iodine-based contrast agent and is much less likely to provoke allergic reactions. It is able to create a three-dimensional image in different planes. It can be used for pregnant women and children. Modern devices are powerful and open type, not like the old tunnel type. This facilitates work with overweight patients, claustrophobic patients, as well as children's cooperation.

MI-MoI is a training base for students, postgraduates and PhDs, which requires equipment with modern equipment with full capacity for diagnostic imaging.

Given the above facts, it is extremely necessary to supply the institute with modern magnetic resonance equipment.

- *Purchase of computer tomography equipment.*

The main goal is to provide modern computed tomography equipment for accurate diagnostic imaging.

MI-MoI is a multidisciplinary hospital in which patients with diseases of all organs and systems are served and treated.

The diagnostic algorithm of these diseases uses complex methods, as computed tomography diagnosis finds a place in neurology, surgery, urology, as well as in many therapeutic specialties - gastroenterology, pulmonology and cardiology. This diagnostic examination is used in the routine diagnostics of the diseases, monitoring the results of the conducted treatment, as well as for performing diagnostic and therapeutic procedures under Computed Tomography (CT) control.

Computed tomography is essential in emergencies, when the examination can be performed quickly and bring enough imaging

information.

The more modern the device, the shorter the research time. Extensive areas of the body are scanned within seconds, and the patient's radiation exposure is greatly reduced. Respiratory and other disturbances are eliminated and image quality is improved, which also improves the diagnostic ability.

The technical progress integrated in the modern equipment allows the computed tomography to perform highly specialized examinations - virtual colonography, brain perfusion, examination of the heart by CT coronary angiography, which, performed in the traditional way, require a longer stay of patients in the hospital, a larger number of specialists and in addition, they cause a health risk. These tests are used for both screening programs and medical emergencies.

Modern computed tomography is the preferred diagnostic method due to:

- greater informativeness;
- shortening the time for the correct diagnosis;
- less beam load;
- higher diagnostic value;
- facilitates adequate and timely treatment.

### Activity 3: "Project management and implementation"

The implementation of the project will be a serious challenge for the Ministry of Health, despite the significant experience gained and the administrative capacity created during the first and second programming periods of the membership of the Republic of Bulgaria in the EU. Due to its large volume, a team of experts will be established in the Ministry of Health, possessing the necessary knowledge and skills in the field of construction, medical equipment, finance and law, public procurement, etc. The team of the Ministry of Health will be supported by similar, albeit smaller in number and expertise teams, established by the partners in the project. The necessary communication channels between them will be provided and established, periodic working meetings will be organized. Periodic reports will be prepared and reviewed concerning the individual objects of intervention to monitor the progress in the implementation of the project. The management team of the Ministry of Health, together with its partners will provide and implement the necessary information and communication measures. As a result of all this, a financial and technical portfolio of the project will be created and maintained. The implementation of the activity will ensure quality, accurate and secure management, guaranteeing the appropriate and lawful spending of European funds.

### 3. Beneficiary

Ministry of Health, collaborates (partners) - municipalities, on the territory of which there are basic municipal medical centres and the basic medical centres with over than 50% of state capital participation, Medical Institute-Ministry of Interior.

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

Total time for the project implementation – 36 months.

Activity:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Activity 1 "Construction and installation activities and energy efficiency measures"																																				

<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.





[illegible]



<b>Renovation and modernization of MI-MoI in Sofia and Bankya</b>
<p><b>Realized construction and installation works in buildings and blocks of the MI-MoI in Sofia and Bankya:</b></p> <ul style="list-style-type: none"> <li>- Initial value - 0 up to the second half of 2021.</li> <li>- Intermediate value - 1 up to the second half of 2024.</li> <li>- Final value - 3 up to the second half of 2024.</li> </ul> <p><b>Percentage of delivered medical equipment from the total volume of medical equipment provided for purchase under the project:</b></p> <ul style="list-style-type: none"> <li>- Initial value - 0% as of the second half of 2021.</li> <li>- Intermediate value - 30% as of the second half of 2023.</li> <li>- Intermediate value - 60% as of the second half of 2024.</li> <li>- Final value - 100% as of the second half of 2024.</li> </ul>
<b>6.2. Effect indicator/s</b>
<b>Population covered by the improved services in supporting state and municipal medical establishments</b>
<ul style="list-style-type: none"> <li>- Initial value - 0 [2021]</li> <li>- Final value - 6 795 802 [2024]</li> </ul>
<b>Achieved average percentage reduction of energy costs in the medical centers that are objects of intervention, after the completion of the project</b>
<ul style="list-style-type: none"> <li>- Initial value - 0 [2021]</li> <li>- Final value - (-12%) [2024]</li> </ul>
<b>7. Does the project require the opening of a procedure pursuant to the Public Procurement Act (PPA)?</b>
Yes, it does.
<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>
99 %
<b>7.2. If a procedure under the Public Procurement Act is required, what is the indicative schedule for its implementation?</b>
<p>With regard to the state and municipal medical centres, the implementation of the following procedures under the Public Procurement Act is envisaged:</p> <ol style="list-style-type: none"> <li>1. Preparation and conducting of the public procurements for assigning the execution of construction and installation works, construction and author's control in pursuance to the PPA - 10 months;</li> <li>2. Preparation and conducting of the public procurements for assigning the execution of delivery of medical devices and equipment in pursuance to the PPA - 12 months.</li> </ol> <p>It is envisaged to conduct 5 public procurements for the activities planned for the MI-MoI on selection of a contractor by conducting an open procedure under the Public Procurement Act:</p> <ol style="list-style-type: none"> <li>1. Design, repair / modernization of author's supervision, coordination procedures, etc. for buildings and blocks of the Ministry of Interior in Sofia. Construction of an operating block.</li> <li>2. Design, repair / modernization of author's supervision, coordination procedures, etc. for the Hospital for long-term treatment</li> </ol>

and rehabilitation in Bankya.

3. Assessment of the conformity of the investment projects and independent supervision for buildings and blocks of the MI-MoI in Sofia and in the Hospital for long-term treatment and rehabilitation in Bankya;

4. Delivery of medical devices and equipment for the needs of the MI-MoI.

Each procedure will last 11 months as follows:

- preparation of documentation - 3 months;
- deadline for submission of bids - 1 month;
- conducting public procurement - 3 months.

Investment of gratuitous grants does not constitute state aid within the meaning of Art. 107, para. 1 of the Treaty on the Functioning of the European Union (TFEU).

The procedures for selection of contractors will be carried out under the PPA and the RULES FOR IMPLEMENTATION OF THE PUBLIC PROCUREMENT ACT (RIPPA) in an open, transparent, sufficiently public, non-discriminatory and unconditional manner within the meaning of items 89-96 of the Commission Notice on the concept of state aid referred to in Art. 107, para 1 of the TFEU. In this sense, at the level of contractors, the support should neither be considered as state aid.

When providing its specific medical services, it does not threaten or threatens to distort competition in the provision of medical services or care to the contingent of the MI-MoI. The investment in the medical centres would not lead to an improvement of the competitive positions of the recipient, in comparison with other enterprises with which it could compete, in terms of art. 107, para. 1 of the TFEU. Due to the specific nature and place of the medical institution in the structure of the health system, there is no way to give it a stronger position than it would have had without being provided with the assistance.

Secondly, with the support of the MI-MoI, it could not be argued that there is a distortion of competition and improvement of the competitive position of the recipient compared to other companies with which it competes, within the meaning of Art. 107, para. 1 of the TFEU. The medical services and care provided by the MI-MoI are referred to it by law and are not subject to free competition in a liberalized market.

## **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.**

Any similar projects have not been implemented.

### **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.**

No similar projects are envisaged to be implemented under the Partnership Agreement programs, the centrally managed facilities of EU or the Trust Transition Fund. At the same time, the Ministry of Health, as a specific beneficiary, is implementing a large investment project BG16RFOP001-4.001-0001 "Support for the development of the emergency medical care system", funded by the Operational Program "Growing Regions" 2014 - 2020. The main goal of the project is to provide appropriate and efficient health infrastructure, contributing to the improvement of the quality and safety of medical care and to ensuring equal access to quality medical care in emergencies in accordance with the best European practices and requirements. The project provides the necessary investment for the renovation and modernization of this sector of primary health care in the country, and as a result of the implementation of the planned activities will provide equal health care to the citizens, incl. those living in remote and hard-to-reach areas. The project will also help in creating the necessary conditions to increase the efficiency of the hospital sector with expected effects of reducing hospitalizations and hospital stays by building a network of branches with opportunities for up to 24 hours of treatment, monitoring and diagnostics.

The efforts of the Ministry of Health to support the pre-hospital care continue in the upcoming new programming period, in which the main priorities for which funding will be sought are aimed at supporting the development of services provided by the general practitioners (GPs) and group practices (under Operational Program "Development of the regions" 2021 - 2027 and to the implementation of measures for the improvement of the promotion and prevention (under the Operational Program "Human Resources Development" 2021 - 2027).

## **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.**

Regarding the Council's recommendations, addressed to Bulgaria in the framework of the European Semester in the period 2017-2020, the project proposal is aimed at strengthening the sustainability, accessibility and capacity of the health system in the country. That is why the project proposal is aimed at strengthening the capacity of medical institutions for hospital care, which are key to the health system in the country. With the envisaged measures for modernization and renovation of the material and technical base, significant savings of funds from the increased energy efficiency, the reduced costs for maintenance of the facilities and the equipment will be achieved. This will lead to optimization of costs in state and municipal medical institutions and will improve the level of health services provided to patients there. As an added value, the pollution of the environment and the air will be reduced, both directly from the activity of the medical establishments and indirectly - through the reduced energy consumption.

The Medical Institute of the Ministry of Interior renders free medical aid to: 1. employees of the Ministry of Interior; 2. civil servants who, upon termination of their official service relationship, have acquired the right to a pension; 3. the cadets of the Academy of the Ministry of Interior; 4. the members of the families and the parents of these persons; 5. detained persons; and 6. third-country nationals.

CCB of the Ministry of Interior provides emergency medical care to persons who have sought such, regardless of their health insurance status.

The Medical Institute serves (provides diagnostics, treatment and medical expertise) foreign citizens detained under the Ministry of Interior Act and accommodated in the Special Homes of the Migration Directorate - Ministry of Interior. On the basis of an agreement concluded with the State Agency for Refugees, the Ministry of Interior also serves the persons seeking international protection, accommodated in the centers of the Agency.

In order to provide quality and effective health care to these persons, it is necessary to provide modern material and technical base, as well as medical devices and modern equipment provided under this project. This will improve access to the public health system for a wide range of people, including people representing vulnerable groups such as migrants and those seeking international protection in Bulgaria.

In order to attract and retain highly qualified medical staff, measures will be taken to improve the working environment, introduce modern medical equipment and provide the necessary consumables in the MI-MoI. The purpose of the envisaged measures is to significantly increase the efficiency of the medical staff by reducing the time for administrative activity and creating an opportunity to devote more time to the actual medical care.

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

The project has been prepared and is in support to the reform in the Healthcare Sector, fully complying with the measures and tasks set in the National Health Strategy regarding the implementation of Policy 2.5. "Optimized hospital care". With its implementation, goals related to the modernization of medical institutions, the provision of better and safer services and facilitation of access to hospital care will be met, incl. and for disadvantaged people.

The project also supports the implementation of Policy 2.8. "Ensuring the quality and safety of health care" of the National Health Strategy 2020. The provision of quality health services, in addition to accessibility, timeliness and quality, includes safety and efficiency. The implementation of the project activities will significantly increase the efficiency and safety of the services offered in the medical centres.

In addition to the implementation of the reform in the health sector, the project envisages the implementation of energy efficiency measures and optimization of energy resources, which will meet the objectives and priorities, set in the Integrated National Plan "Energy and Climate". In particular, the project will contribute to the increase of the energy efficiency of the medical establishments, related to the set goals for reduction of the initial and final energy consumption in comparison with the base forecast PRIMES 2007.

The implementation of the project will allow the establishment of specialized centres for diagnostics and treatment of various groups of diseases, which centres will serve the population both from the specific area where the hospital is located and the population from the border areas. In this way the activities of the medical centres will be diversified, which will also optimize the existing structures in the separate hospitals.

According to Priority 4 “Strengthening the capacity of public health” of the national concept “Health goals 2020”, moving the public health care to be implemented by the Centre for health improvement, requires investing in public health services and considering it as a long term investment for the health and well-being of the population as a whole.

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

The project activities are aimed at reconstruction and modernization of the existing health infrastructure of the hospitals, as well as the introduction of innovative technologies in hospitals in order to provide high quality, effective and efficient health care to the population throughout the country. The implementation of the envisaged measures will significantly increase the energy efficiency of the medical centres’ building stock, which will contribute to a significant reduction of the costs for energy resources of the companies. The opportunities for diagnostics and treatment, as well as the types of health services that hospitals offer will increase with the introduction of innovative technologies. In turn, this will allow the generation of a larger volume of funds from the activity, which will be reinvested in the further development of the individual medical institutions and the provision of new medical services for the served patients. By increasing the health status of the population, the time of temporary incapacity of the employees will be reduced, as a result of which the labour productivity and the gross domestic product of the country will increase.

The so described connection between the realization of the planned investments and the expected results from them, will guarantee the achievement of sustainable economic development.

The project will contribute to the achievement of PRIORITY 36: "Overcoming regional imbalances and ensuring functional interaction between the different levels of medical care", Objective 124: "Improving access and improving the quality of medical care" - the Government Management Program of the Republic Bulgaria in the period 2017 – 2021.

With regard to hospital care, efforts will be made to optimize it, and the focus will be to increase the efficiency of the MI-MoI and its local structures. The structures of the Medical Institute - Ministry of Interior in the capital and in other towns will be modernized and equipped with modern medical equipment, guaranteeing the employees of the Ministry of Interior and their families, migrants and persons, seeking international protection, equal access to health services in outpatient and inpatient care. The aim is to achieve a territorial focus on interventions that will improve access to health care in the country.

The National Concept for Health Goals 2020 states that the good health of the population benefits all sectors and the whole society, which makes it a valuable resource. It is a basic prerequisite for economic and social development.

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

The project contributes to Priority 12 - Health and Sports of the National Development Program BULGARIA 2030 and in particular in terms of reducing premature and preventable mortality of people by increasing the knowledge and skills of health professionals. In this sense, the project activities will contribute to the implementation of Objective 3 "Ensuring a healthy life and promoting the well-being of all at all ages" of the UN Sustainable Development Goals. This priority states that with regard to hospital care, efforts will be made to optimize it, and the focus will be to increase efficiency. Emphasis is placed on improving the quality of health services provided locally by taking measures to improve the material and technical base of state hospitals in regional cities, as well as to increase their provision with medical equipment and medical professionals. In addition, the project contributes to another goal - namely overcoming the unfavourable perspective associated with the increased migration of medical professionals and the reduced number of nurses, by increasing employee satisfaction in terms of opportunities to acquire and implement the newest world achievements in healthcare in Bulgaria. The project is in line with

the goals of sustainable development of the UN goals and specifically Goal 3 – “Ensuring a healthy life and promoting the well-being of all at all ages”.

**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.**

The project is entirely directed at implementing a number of activities aimed at increasing energy efficiency and providing state-of-the-art medical equipment. As a result of the project implementation, the consumption of electricity and the harmful emissions from the activity of the medical centres will be reduced. The implementation of energy efficiency measures and rehabilitation of the building stock, as well as the change of energy sources with more environmentally friendly ones, will support the implementation of the goals and priorities set out in the Integrated National Plan "Energy and Climate" in terms of energy efficiency of the medical establishments, related to the set goals for reduction of the initial and final energy consumption in comparison with the basic forecast PRIMES 2007.