UNITED NATIONS DEVELOPMENT PROGRAMME

PROJECT DOCUMENT [Republic of Serbia]



Project Title: EU for Enabling a More Responsive Healthcare System
Project Award Number: 00136378
Project Output Number: 00127313
Implementing Partner: UNDP

Start Date: February 6,2023. End Date: February 5, 2027. PAC Meeting date: February 21, 2023

Brief Description

Serbia is moderately prepared for health-related emergencies. In the coming years, it should strengthen the overall managerial capacity, human resources and financial sustainability of the health system. In the area of public health, legislation on healthcare is partly aligned with the EU acquis. The national plan for human resources in the health sector has still not been implemented, while the number of physicians leaving the country still remains high. The EU-funded centralized electronic health record system is still not used and compliance with EU health indicators is not yet ensured. On serious cross-border health threats, including communicable diseases, the surveillance and response capacity remains limited and needs to be modernized. A centralized health information and communication system has yet to be implemented. Harmonizing Serbian legislation with the Directive on the application of patients' rights in cross-border healthcare has yet to be completed. An e-health unit at the Ministry of Health should be established to coordinate the complex activities involved in setting up a comprehensive health information system at all levels of care.

Additional work is needed on using laboratory data for surveillance; on quality and biosafety and biosecurity management systems and on strengthening diagnostic capacities. This will include reconstruction and upgrade of the laboratories that are part of the Ministry of Health network in the context of an increased health system resilience to emergencies. Serbia has a good primary health care structure with 158 primary health care canters (PHCs) in each municipality with links to local self-governments, which creates a solid base for response to potential emergencies. Nevertheless, there is a need to work on capacity building and better connectivity with all local partners, including the civil sector, which can make a significant contribution in responding to emergencies.

The Action will contribute to the development of effective, efficient and sustainable organizational structures for preparedness and response to major public health threats of different nature at all levels of health care. This Action will support the health sector in Serbia to meet its national policy objectives as prescribed by the Public Health Strategy 2018-2026, Strategy on Development of Mental Health Protection, National Program for Health and Environment and accompanying action plans.

Contributing Outcome (UNDAF/CPD): UNDAF 2016-2020 Outcome 4: By 2020, high quality, inclusive, equitable, gender-sensitive, and age-appropriate	Total resources required:	EUR 12,000,000.00 (As per January 13 th , 2023, UNORE: USD 12,917,115.18)		
health services that protect patient rights are available and utilized by all	Total resources			
Indicative Output(s) with gender marker: GEN 1	allocated:	UNDP TRAC:		
Output 3.3: Natural and human induced risks effectively addressed		Donor: EU	EUR 12,000,000.00	
Output 1.3: Digital transformation of public administration		Government:		
accelerated		In-Kind:		
	Unfunded:			

Agreed by (signatures):

UNDP	DocuSigned by:
Yakup Beris, UNDP Resident Representative to the Republic of Serbia	Yakup Beris
Date: 09-Mar-2023	

I. DEVELOPMENT CHALLENGE

Serbia responded well to the challenges posed by the public health crisis of COVID 19. There was significant investment in the health sector, with purchase of consumables, medical equipment, and the construction of three completely new COVID hospitals, two new and several renovated laboratories for molecular diagnostic of COVID 19. Strengthening the health sector with the aim of improving access to quality public health care for all citizens is one of the priority tasks of the Republic of Serbia (RS).

The Government focus will be on strengthening the capacities in the health care system, including primary health care as fundamental in the response to potential emergencies in the future. As a step in that direction, the Government of the Republic of Serbia is committed to further expanding the application and integration of Digital Health technologies and solutions and to strategically address some of the current challenges. In early 2021, Serbia's government established a Digital Health steering committee, chaired by the Prime Minister and co-chaired by the Minister of Health. The Digital Health Coordinating Committee includes members of public, private and not-for-profit sectors with an objective to provide a strategic direction regarding the creation of a Digital Health Program (as a strategic document) and Action Plan, along with creating working groups in support of priority projects. In addition, the Coordination Committee being informal stakeholders' coordination mechanism, the Government of Serbia established an official Working Group as advisory and supervisory board of implementation of the Digital Health Agenda. Working group used the "WHO eHealth Strategy Toolkit" as basis for collaborative stakeholders' engagement and delivery of the Program and Action Plan. In addition to this, the SOCI (Stages of Continuous Improvement) methodology was used for assessment of the current situation and projection of a desired situation. Working group performed assessments of the existing legal framework, infrastructure and software solutions, standards, management structure and leadership in healthcare digitization, financing, workforce and took into account best international practices and recommendations. In February 2022, the Government approved the Digital Health Program 2022-26, while the Action Plan 2022-23 was adopted in May 2022.

Serbia is moderately prepared for health-related emergencies. In the coming year, it should strengthen the overall managerial capacity, human resources and financial sustainability of the health system. In the area of public health, legislation on healthcare is partly aligned with the EU acquis. The national plan for human resources in the health sector has still not been implemented, while the number of physicians leaving the country still remains high. The EU-funded centralized electronic health record system is still not used and compliance with EU health indicators is not yet ensured. On serious cross-border health threats, including communicable diseases, the surveillance and response capacity remains limited and needs to be modernized. A centralized health information and communication system has yet to be implemented. Harmonizing Serbian legislation with the Directive on the application of patients' rights in cross-border healthcare has yet to be completed. An e-health unit at the Ministry of Health should be established to coordinate the complex activities involved in setting up a comprehensive health information system at all levels of care. Additional work is needed on using laboratory data for surveillance: on guality and biosafety and biosecurity management systems and on strengthening diagnostic capacities. This will include reconstruction and upgrade of the laboratories that are part of the Ministry of Health network in the context of an increased health system resilience to emergencies. Serbia has a good primary health care structure with 158 primary health care centers (PHCs) in each municipality with links to local self-governments, which creates a solid base for response to potential emergencies. Nevertheless, there is a need to work on capacity building and better connectivity with all local partners, including the civil sector, which can make a significant contribution in responding to emergencies.

The direct impact of the COVID-19 outbreak on the health system and the provision of health services, as well as the indirect effects of the pandemic exacerbating chronic conditions, mental health, domestic violence, interpersonal violence, and poor diet, have shown that if the health system does not have an adequate response, the consequences in the country are far-reaching and affect all other systems (economy, social protection, security, education, transport, tourism, etc.). The lack of capacity to detect, assess, inform and respond to public health and cooperation, risks to ensure good resilience, timely response and better coordination of health with other sectors, which was a major problem throughout the COVID-19 pandemic. A lack of capacities is

recognized in monitoring of the implementation of the International Health Regulations (2005) provisions and the integrated all-hazards approach of the WHO, covering all categories of threat regardless of their origin. Intra-sectoral, vertical and horizontal work is not satisfactory and there is a need to develop general/specific guides for preparedness and response to major public health threats of different nature at all levels of health care.

In response to the COVID-19 pandemic, Serbia applied measures foreseen by the Law on Population protection against communicable diseases and aligned its actions with the recommendations of the World Health Organization. The outbreak of COVID-19 showed that it is necessary for a country to improve its capacities to better face the existing and potential hazards to human health, thus improving the level of protection of its population. Significant efforts to improve monitoring, early warning and response to serious health hazards are needed in upgrading the Disaster Risk Register to include public health related risks.

II. STRATEGY

Successful implementation of this Action shall contribute to UNDAF Outcome 4: By 2020, high quality, inclusive, equitable, gender-sensitive, and age-appropriate health services that protect patient rights are available and utilized by all and corresponding outputs of UNDP Country Programme Document (2021-2025): Natural and human induced risks effectively addressed (Op. 3.3) and Digital transformation of public administration accelerated (Op. 1.3).

The Action will contribute to the development of effective, efficient and sustainable organizational structures for preparedness and response to major public health threats of different nature at all levels of health care. This Action will support the health sector in Serbia to meet its national policy objectives (Public Health Strategy 2018-2026, Action Plan for Improvement of Communicable Diseases Surveillance and Response system in Serbia 2017-2020, National Health Emergency and Response Plan, National Chemical, Biological, Radiological and Nuclear Hazards Defence Plan, Strategy on Development of Mental Health Protection, National Program for Health and Environment). The intervention related to health clearly contributes to attaining the Public Health Strategy 2018-2026 objectives with the most pronounced contribution to its Objective 3 – Preventing and Countering Disease and Health Risks. Within the strategy's Objective 3, the proposed Action particularly contributes to the achievement of Specific Objectives 3.1 (Enhancing Epidemiological Surveillance for Disease, Injury, and Health Risks) and 3.2 (Enhancing system performance on early detection and countering of epidemics).

The Action is also important for achieving results envisaged by the corresponding Action Plan for 2018-2026 adjacent to the Public Health Strategy, specifically its results 3.1.1- 3.1.3 and Result 3.2.2. In addition to this, the intervention will contribute to achievement of three more objectives of the Strategy, namely:

- Objective 1 Improving health and reducing heath inequalities
- Objective 4 Developing actions to promote health in community, and
- Objective 5 Supporting development of available, good quality and efficient health care.

The focus of this intervention will be on the strengthening of primary health care capacities, to better respond to the needs of the population in the context of the health-related emergencies.

The Action is linked to the National Strategy for Protection and Rescue in Emergency Situation (2011, currently under revision) objective to improve functional cooperation between the subjects of the protection and rescue system at national and local level, i.e., to strengthen capacities of healthcare institutions in charge of first response in situations of increased risk of spreading communicable diseases and reacting in emergency situations. The health sector strategic framework is aligned with the requirements of the Law on the Planning System. It relies on the inter-institutional and coordination bodies' consultation process, with the participation of a wide range of stakeholders. The strategic documents contain an analytical base for identified objectives, priorities, and measures, a defined monitoring framework with deadlines and indicators of progress, and competent implementing institutions. The strategies have defined their monitoring and reporting mechanisms and are part of the Unified Information System, established working

groups or working bodies for mandatory monitoring, and reporting on the implementation of policies for relevant strategy.

The Action will foster the implementation of the UNCT COVID-19 Socio-Economic Response Plan (SERP), which sets the recommendation for the mitigation of future crises, by embedding sustainability and resilience in the national development planning and reform process.

The proposed intervention shall ensure sustainable improvement of public health policies, processes, and operational arrangements of concern for health hazard prevention, planning, and management. The Action shall contribute to a better public understanding of health-related risks and risk-informed decision-making, taking into account the specific needs of the vulnerable groups. The Action shall also reinforce the linkages and ensure synergies among public health-related undertakings and the National Disaster Risk Reduction Action Plan's complementary measures.

The Action is addressing the need to develop effective, efficient and sustainable organizational structures for preparedness and response to major threats of different nature at all levels of health care and emergency management. The Action will support increasing the number of fully operational laboratories, complying with the requirements defined by the 4th edition of the WHO's Laboratory biosafety manual (LBM4).

Apart from enhancing the capacities of medical and emergency response professionals for planning, prevention and reaction to emergencies, the Action will also put in place the core, heightened, and maximum laboratory measures in support to surveillance of emerging and reemerging communicable diseases in Serbia, ensuring a more efficient response to emergencies.

Having in mind the importance of primary health care as a gatekeeper, special attention will be placed on capacity building and strengthening existing, as well as creating new modalities of collaboration at the level of local municipalities, to plan and ensure adequate response in potential health emergencies.

This Action will build the laboratory capacities of all 24 Institutes of Public Health in Serbia through the reconstruction and improvement of laboratory quality and biosafety management systems. The capacities of 1,231 women (75% of overall number of employees of IPHs) to respond in emergency situations will be strengthened. The Action will also render support to local selfgovernments in Serbia and respective primary care health centers to develop emergency preparedness and response plans. Within the primary care sector out of 26,178 healthcare professionals, 22,142 are women, which makes 85%. Thus, the Action will also support women's legal entitlements and practical access to assistance and services in relation to disaster management such as basic health services, including reproductive and sexual health services, compensations, cash transfers, insurance, social security, credit, employment.

Public health emergency management training programmes and an emergency awareness raising events will be streamlined to include gender sensitive approaches in all training and emergency simulations content. Both women and men should be included as instructors and trainees. Specific needs and limitations of men and women, boys and girl with disabilities, autism or spinal issues, and pregnant women shall be taken into account.

Gender considerations will be implemented through gender-responsive procurement as the selection of services, goods and civil works that considers their impact on gender equality and women's empowerment and respond to the needs of both women and men as well as the protection of girls and boys. During infrastructural upgrades, equipping, and installation of specific laboratory systems in the Bio-Safety Laboratories UNDP will uphold the minimum standards for prevention and response to GBV in emergencies.

The Disaster Risk Register Public Health related risks upgrade shall integrate gender considerations of importance for public health risk management, such as comorbidities, chronical health state, exposure and vulnerability of single headed households with children, elderly households and illegal settlements, and other health status of relevance to risk management. This will also enable women's equal access to information, including early warning, training, education and capacity building to strengthen their self-reliance and ability to claim their rights. Starting from the 2022 census, Register will enable a continuous and systematic collection and use of sex and age disaggregated data, and gender analysis in vulnerability, risk-, damage and loss assessments- and contingency planning. Furthermore, the integration of sexual and reproductive health and rights into public health risk management efforts shall be enhanced.

The overall objective of the Action is: To enhance the resilience, responsiveness, and capacity for emergency management of serious national public health threats, while

The specific objective is: To improve Serbia's health care system capacities for response to emergencies in line with EU and international standards.

The outcome of the Action is: Improved planning and response capacities of health system in times of crisis

III. **RESULTS AND PARTNERSHIPS**

All descriptions of specific activities and interventions (purchase of equipment, construction of infrastructure, provision of services and training) are provided based on the approved IPA III Action Document for Enabling a More Responsive Healthcare System for the year 2021. The following description provides an overview for each activity.

The Action follows the result chain presented below:

IF	THEN	BECAUSE
Laboratory technical capacities upgraded in line with WHO Laboratory biosafety manual, 4th edition (LBM4) and international quality standards; procedures for reaction and response in emergency (SOPs, etc.); human capacities (Health Care Practitioners, Sanitary Inspectors', psycho-social support) for detection, risk assessment and reaction improved.	Serbia' capacity for emergency management will be improved sufficiently to establish a resilient and responsive public health care system at national and local level.	Operational, technical and human capacities in managing biological and chemical hazards are enhanced, procedural framework established effective, efficacy, case-sensitive and risk-informed emergency responses.
Digital capacities (Disaster Risk Register health upgrade, E-health) increased, awareness the general public on how to behave in a crisis and the role of public institutions raised, and National Action Planning for Health Security (NAPHS) implemented.		More coherent and comprehensive planning and regulatory framework, informed decision making, biological and chemical hazards risk governance strengthened, digitalized public healthcare system, overall health status of the population improved.

UNDP and WHO will achieve the objectives in close cooperation with the Ministry of Health as its primary beneficiary, and other beneficiaries of the Action: National Institute of Public Health of Serbia (NNIPH), Office for Information Technology, and eGovernment of the Government of Serbia (ITE), Prime Minister Office (PMO), Sector for Emergency Management of the Ministry of Interior, Republic Geodetic Authority (RGA), and network of institutes for public health, primary health care centers, local communities, administrations, and civil society organizations.

The expected results of the Action are listed down below:

Component I - Strengthening the public health laboratory system

Laboratory detection is the foundation of every response to different public health hazards.

Serbia's national laboratory system (microbiology testing and diagnostics in human medicine) comprises 25 public health laboratories within the network of institutes of public health, and approximately 50 more laboratories in secondary and tertiary hospital care facilities. A Decision on Reference Laboratories for Communicable Diseases Control, adopted in 2009 and defines 14 national reference laboratories (NRLs) for different communicable pathogens. Among them, six NRLs are part of the network of public health laboratories.

The National Action Plan for Health Security (NAPHS) defines the following gaps in the national public health laboratory system:

- lack of a quality assurance program,
- the use of advanced diagnostic methods being limited to several diseases,

• lack of national guidelines and standard operating procedures (SOPs) compliant with international standards regulating collection, packing and transport of specimens – in particular of high-priority specimens in emergencies.

Activity 1.1 Implementation of the Laboratory Quality Management System (LQMS) in the microbiology laboratories

Diagnostic tests for laboratory confirmation of infectious diseases which undergo surveillance for the analysis of human specimens in Serbia are aligned the EU recommendations. Ensuring and maintaining the quality of laboratory services is crucial to diagnosing and effective response to health threats and challenges.

There are inconsistencies in the implementation of LQMS between the existing diagnostic laboratories in the country. Full application of the LQMS will demonstrate the abilities of the laboratories to consistently provide laboratory results and services that meet customer and management requirements and to demonstrate continuous improvement.

The WHO will support the implementation of LQMS together with the Ministry of Health and the NIPH based on the international ISO 15189 standard. The WHO will provide training and support through mentorship for the laboratories in further implementation of the standardized quality system.

The WHO developed a **Laboratory Quality Management System (LQMS) training toolkit** to support countries in the implementation of quality management systems in different types of laboratories in terms of providing rapid, reliable, and accurate laboratory results, and the detection of emerging and re-emerging pathogens. The WHO provides training of mentors to establish such a system.

Outputs:

- Ten mentors trained for LQMS through two 3 days trainings, using the WHO LQMS training toolkit and the Laboratory Quality Stepwise Implementation (LQSI) tool (WHO);
- 50 laboratory staff trained for LQMS and implementation of the LQSI tool secured (WHO);
- 3 Quality manuals for the three Institutes of Public Health and critical SOPs developed (WHO);
- 25 public health laboratories supported through national mentors to develop or improve LQMS under WHO guidance (WHO).

Activity 1.2 Laboratories reconstruction and upgrade in line with Laboratory Biosafety Management System

The EU's Twining Light Project titled "Improving microbiology diagnostic system quality in the function of surveillance of communicable diseases (CD) in the Republic of Serbia", implemented 2017-2018, mapped out the public and private microbiology laboratory capacities, their core functions and capacities of National Reference Laboratories (NRLs), and developed a roadmap for improving the diagnostic system for surveillance of communicable diseases in compliance with EU standards and the EU acquis adoption process. This roadmap laid out identified gaps in laboratory equipment; software and IT hardware; infrastructure and human capacities and diagnostic methods; technology and reporting; as well as the functions of NRLs in the national public health system related to reference diagnostics, material resources, scientific advice, collaboration, research, and monitoring, alert and response, accompanied with external quality assurance; and put forward the absence of minimum biosafety standards in certain diagnostic labs, and the need for implementation of core, heightened, and maximum heightened measures. To address identified gaps, improve response to communicable diseases and ensure biosafety and biosecurity in the laboratories, it is necessary to conduct a reconstruction, equipping, and reorganization of the existing microbiology laboratories of the public health system of Serbia, and implement the Laboratory Biosafety Management System.

The WHO published the 4th edition of the *Laboratory Biosafety Manual (LBM)* in December 2020. The LBM encouraged countries to accept and implement basic concepts in biological safety, and to develop national codes of practice for the safe handling of biological agents in laboratories within their geographical borders. This novel evidence and risk-based approach allows optimized

resource use and sustainable laboratory biosafety and biosecurity policies, and practices that are relevant to individual circumstances and priorities, enabling equitable access to clinical and public health laboratory tests, and biomedical research opportunities, without compromising safety.

The 4th edition of the WHO Laboratory Biosafety Manual (LBM4) focuses on training and applying an evidence-based approach to biosafety and biosecurity. It covers good microbiology practices and procedures (GMPP), risk assessment and control measures, engineering controls, PPE, and biosafety program management.

By end of November 2021, the MoH/NIPH provided UNDP/WHO with a list of 6 (six) priority locations that require further laboratory upgrades in terms of biosafety in Serbia. From December 2021 – February 2022, a WHO Laboratory Technical Officer and a UNDP Engineering Expert conducted an assessment of identified locations in Belgrade, Kragujevac, Nis, Vranje, Uzice, and Cacak through field visits and a review of available technical documentation. The UNDP/WHO team analyzed the condition of facilities, equipment, and organization of work in the listed public health institutions; verified compliance with the requirements in the 4th edition of the WHO Laboratory Biosafety Manual (LBM); and conducted a qualitative and quantitative review of the required scope of interventions for providing the required conditions in the laboratory diagnostic techniques and equipment in place, identifying the gaps in types of containment equipment and training needs, so as to enable the harmonization of sampling and tests for communicable diseases.

UNDP/WHO consulted the Assessment Report with the Ministry of Health, NIPH and end users, guiding the plan for replacement or introduction of new containment equipment in the reconstructed laboratories, and thus improving the overall public health laboratory surveillance systems through pathogen isolation and outbreak control at NRL level.

UNDP/WHO team observed that the identified locations are quite obsolete, with pronounced gaps in reaching biosafety standards, especially in terms of the layout and use of premises and laboratory space. The assessment foresees that an adequate reconstruction, accompanied with equipping of the six identified laboratories with necessary medical devices, shall take up significant financial resources which go beyond the funds envisaged within the Project.

UNDP and WHO presented a detailed technical report to the MoH and the NIPH "Dr Milan Jovanovic Batut". Following consultations with MoH/Batut and national partners, three laboratories (in Belgrade, Kragujevac and Nis) have been prioritized for full reconstruction and upgrade to core, heightened, and maximum heightened measures. In parallel, an ongoing World Bank loan will enable the upgrade of the "Torlak" laboratory to Biosafety level 3 requirements In addition, The GoS has also successfully completed construction of two mass-testing laboratories for SARS-COV-2, a modern Centre for Genome Sequencing and Bioinformatics at the Institute of Molecular Genetics and Genetic Research (IMGGI) in the fall of 2021. Currently, UNDP is supporting the GoS in constructing BIO4 Campus. The Government of Serbia is planning to establish BIO4 Campus located in the immediate vicinity of the Institute for Vaccines and Serums "Torlak", as a powerful platform for cooperation between various stakeholders.

The assessment of the WHO Laboratory Technical Officer and UNDP Engineering Expert revealed significant discrepancies between the existing situation in the prioritized laboratories and standards defined in the 4th edition of the WHO Laboratory Biosafety Manual (LBM), as described below.

SELECTED LABORATORY	NIPH "Dr Milan Jovanović - Batut", Belgrade	IPH Nis	IPH Kragujevac
Overall assessment	Arranging and equipping the premises of the laboratories at the Institute of Microbiology to achieve implementation of the core and heightened control measures requires a thorough, technically complex and financially extensive renovation of the existing facility as well as procurement of containment equipment.	Arranging and equipping the premises of the laboratories of the Institute of Microbiology in order to achieve implementation of the core and heightened control measures requires a thorough, technically complex and financially extensive renovation of parts of the existing facility as well as procurement of containment equipment.	Arranging and equipping the premises of the laboratories of the Institute of Microbiology in order to achieve implementation of the core and heightened control measures, requires partial renovation of the existing facility, some organizational changes, as well as procurement of containment equipment.

An overview of LBM requirements for facility, premises and installations is provided in the following table:

		SELECTE	NIPH "Batut" Belgrade	IPH Nis	IPH Kragujevac	
No.	ROOM / ELEMENTS / FINISHING LAYERS		REQUIREMENTS	Yes / No	Y / N	Y / N
1.	Working rooms					
1.1.	Organization /	1.1.3.	Standard clear height is - min. 3.00 m	partly	partly	partly
	protection	1.1.11.	Evacuation routes for accident situations and exits leading to open space have been formed.	N	Ν	Ν
		1.1.11.	The required types of fire extinguishers are adequately distributed.	Ν	Ν	Ν
1.4.	Communications	1.4.1.1.	Communications meet the requirements of fire protection.	Y	Y	Y
		1.4.1.2.	The minimum width of communications is 1.50 m.	Y	Y	Y
		1.4.1.3.	Equipment in corridors and passages. Communication is congested and narrow (not allowed).	Y	Y	Y
2.	Building elements					
2.1.	General requirements	2.1.1.	Permanent elements and materials were used for the construction of laboratories, suitable for maintenance.	N	N	partly
		2.1.2.	Surface finishing materials are resistant to the chemical corrosion of disinfectants and chemicals.	N	N	Ν
		2.1.3.	The resistance of applied materials to fire is ensured, in accordance with the special requirements of fire protection regulations.	N	Ν	partly
2.2.	Doors	2.2.1.	The minimum clear door width is 1.00 m.	Y	Y	Y
		2.2.2.	Locking and access control is at the main entrances.	Ν	Ν	Ν
		2.2.3.	The opening of the door panel is in the field and there is an automatic closing.	Ν	N	Ν
		2.2.4	There are glazed areas on the door panel for visual contact.	Ν	Ν	Ν
		2.2.5.	An open door (panel) narrows the required width of the evacuation corridor (not allowed).	N	N	Ν
		2.2.6.	Treated surfaces are resistant to cleaning and disinfecting agents and chemicals.	Ν	N	Ν
		2.2.9.	There is additional security against burglary (appropriate fittings).	Ν	N	Ν

		NIPH "Batut" Belgrade	IPH Nis	IPH Kragujevac		
No.	ROOM / ELEMENTS / FINISHING LAYERS		REQUIREMENTS	Yes / No	Y / N	Y / N
2.3.	Windows	2.3.1.	The construction and materials of the windows provide the necessary hygienic conditions, and simple and easy washing and disinfection.	N	Ν	partly
		2.3.2.	The windows are glazed with thermal insulation glass.	N	partly	partly
		2.3.3.	Windows and glazed partitions of sterile rooms are fixed-glazed and completely sealed.	N	N	Ν
		2.3.4.	The scheme of the windows (division and manner of opening) are adapted to the work in the laboratory and the position of the desks and equipment under the windows.	Y	N	Ν
		2.3.5.	The windows that open are equipped with insect and animal protection nets.	N	N	Ν
		2.3.6.	There is protection from excessive sun exposure and it is located on the outside.	N	N	Ν
		2.3.8.	There is additional security against burglary (appropriate fittings).	N	Ν	Ν
2.4.	Floors	2.4.1.	Floor coverings prevent the penetration and collection of impurities.	Ν	Ν	Ν
		2.4.2.	Floor coverings are easy to clean.	Ν	Ν	partly
		2.4.3.	Flooring materials absorb liquids (not allowed).	Y	Y	partly
		2.4.4.	Floor-covering materials are slip-resistant (min. Class R9).	N	Ν	Ν
		2.4.5.	Floor covering materials are resistant to the harmful effects of chemicals and hygienic agents and disinfectants.	N	N	partly
		2.4.6.	Floor coverings are monolithic or have a minimum number of glued joints (PVC, rubber or linoleum).	N	N	N
		2.4.7.	There is a cove height of min. 10 cm at the junction with the wall.	N	Ν	Ν
		2.4.8.	There are drains, channels and gratings in the floor (not allowed).	Y	Y	partly
2.5.	Wall and ceiling surfaces	2.5.1.	The wall surfaces are flat, without cracks, unsealed penetrations and untidy joints with the ceiling and floor.	N	N	partly
		2.5.2.	Wall surfaces are impermeable and suitable for washing and disinfection.	Ν	Ν	Ν
		2.5.3.	Wall surfaces are resistant to the chemicals that are used.	N	Ν	Ν
		2.5.4.	Surface treatment materials are washed with strong detergents and disinfectants.	Ν	Ν	Ν
		2.5.5.	Wall materials and finishes are resistant to mechanical damage.	Y	Y	Y
		2.5.6.	The ceilings are lowered below the floor constructions and installations.	N	N	partly
		2.5.7.	The ceilings are composed of smooth panels that meet hygiene requirements.	N	N	Ν
		2.5.8.	There are installations under the ceiling.	Y	Y	Y
		2.5.9.	Installation channels and pipes are minimal, and all their exposed surfaces are smooth and eacy to clean	N	N	Ν
2.6.	Furniture	2.6.0.a	Furniture materials absorb liquids (not allowed).	Y	Y	Y
		2.6.0.b	Furniture materials are resistant to harmful effects of chemicals and disinfectants.	N	N	partly
2.6.1.	Working desks	2.6.1.1.	The height of the work surfaces for working from the chair is 75 cm.	Y	Y	Y

		NIPH "Batut" Belgrade	IPH Nis	IPH Kragujevac		
No.	ROOM / ELEMENTS / FINISHING LAYERS		REQUIREMENTS	Yes / No	Y / N	Y / N
		2.6.1.2.	Height of work surfaces for standing work is 90 cm.	Y	Y	Y
		2.6.1.3.	The width (depth) of work surfaces for working with laboratory equipment is 75 cm.	Y	Y	Y
		2.6.1.4.	The work surface for setting up computer equipment is 60 cm wide.	Y	Y	Y
		2.6.1.5.	Workbenches are made of liquid-absorbing material (not allowed).	Y	Y	partly
		2.6.1.6.	Workbenches are made of materials resistant to slipping and wear.	N	Ν	partly
		2.6.1.7.	Workbenches are made of materials resistant to harmful effects of chemicals and disinfectants.	N	N	partly
		2.6.1.8.	Plates of workbenches are monolithic or with little interconnection.	N	Ν	partly
		2.6.1.9.	The built-in elements under the work surfaces are completely sealed.	N	Ν	Ν
		2.6.1.10	Built-in elements under the work surfaces are easily removed.	N	Ν	partly
		2.6.1.11	Sockets in the spray zone are protected.	Ν	Ν	partly
		2.6.1.14	There is a water supply and a drain in the sewers on and under the workbenches.	Y	Y	Y
2.6.3.	Material storage shelves	2.6.3.1.	The depth of the wall shelves is 35 - 40 cm.	Y	Y	Y
		2.6.3.2.	There are open shelves.	Y	Y	Y
		2.6.3.3.	There are shelves with lockable doors.	Y	Y	Y
2.6.4.	Laboratory baths	2.6.4.1.	General laboratory bathtubs are made of impact-resistant materials.	Ν	Ν	partly
		2.6.4.2.	General laboratory bathtubs are made of materials resistant to chemicals and disinfectants.	Y	Y	Y
		2.6.4.3.	General laboratory bathtubs are completely sealed at the joints with work surfaces.	N	Ν	Y
		2.6.4.4.	Drainage of water from general laboratory bathtubs is channeled into the sewer system through a siphon.	Y	Y	Y
		2.6.4.5.	For special laboratory bathtubs, there is a drain in the equipment for purification of biologically and chemically polluted waters.	N	N	Ν
2.6.5.	Washbasins	2.6.5.1.	There are clinical hand washbasins with hot and cold water in the laboratory.	partly	partly	partly
		2.6.5.2.	Sink faucets are hands-free (sensor based or similar).	N	Ν	Ν
2.6.6.	Showers and eyewash equipment	2.6.6.1.	There is a cabin with a body shower near the laboratory.	N	Ν	Ν
2.8.	Special safety requirements for other equipment	2.8.5.8.	Refrigerators, freezers and cabinets are installed in hallways, stairs or on escape routes. (not allowed)	Y	Y	Y
2.9.	Lighting	2.9.1.	The laboratory has windows and is naturally	Y	Y	Y
		2.9.2.	There is external protection against excessive sunlight and glare from work and other surfaces.	N	N	N
		2.9.3.	The luminous intensity for general artificial lighting in the laboratory is 500 Lx.	N	N	N
		2.9.4.	The brightness of the laboratory with color testing equipment is 1000 Lx.	Ν	N	Ν
		2.9.5.	The intensity of lighting in hallways and waiting rooms, pantries, rest rooms and	N	N	Ν

No. nood / Lissensy / mession of Lis		NIPH "Batut" Belgrade	IPH Nis	IPH Kragujevac	
auxiliary rooms is 200 Lx. 2.9.6. The light intensity in the rooms for disinfection and sterilization is 300 Lx. N N N Pathology 2.9.7. There is panic evacuation lighting with autonomous power supply. N N N panetopower supply. 3.1. Electrical installations 3.1.1. There is a neat wiring harness to power the lamps. N N Panetopower supply. 3.1. Electrical installations 3.1.2. There is a neat wiring harness for the device and equipment connectors. N N Panetopower supply. 3.1.1. There is a backup power supply for sensitive equipment with US devices. N N Panetopower supply. 3.1.3. There is a backup power supply for lighting and equipment from a disel generator. N N Panetopower supply. 3.2. Ventilation of the laboratory's forced ventilation or laboratory be forced ventilation or laboratory are in operation. N N Panetopower supply. 3.3. Gas supply 3.3.1. There is a central technical gas supply system in the laboratory. N N Panetopower supply. 3.3. Gas supply 3.3.1. There is a central technical gas supply system in the laboratory. N N	No. ROOM / ELEMENTS / FINISHING LAYERS	REQUIREMENTS	Yes / No	Y / N	Y / N
2.9.6. The light intensity in the rooms for disinfection and sterilization is 300 Lx. N N N Principlant 2.9.7. There is panic evacuation lighting with autonomous power supply. N N N paniciplant 3.1. Installations 3.1.1. There is a necessary lighting with autonomous power supply. N N paniciplant 3.1. Installations 3.1.2. There is a neat wiring harness for the device and equipment connectors. N N paniciplant 3.1.1. There is a backup power supply for sensitive equipment with UPS devices. N N paniciplant 3.1.1. There is a backup power supply for lighting and equipment from a disel generator. N N paniciplant 3.1.1. Ventilation and heating / cooling 3.1.1. Ventilation of the laboratory is forced ventilation system is operational. N N paniciplant 3.3. Gas supply 3.3.1. There is a central technical gas supply system in the laboratory. N N Paniciplant 3.3. Gas supply 3.3.1. There is a central technical gas supply system in the laboratory. N N N N N 3.4.<		auxiliary rooms is 200 Lx.			
2.9.7. There is panic excutation lighting with autonomous power supply. N N panic 3. Installations 3.1. Electrical installations 3.1.1. There is a neat wiring harness to power the autonomous power supply. N N panic 3.1. Electrical installations 3.1.1. There is a neat wiring harness to power the autonomous power supply for sensitive equipment with UPS devices. N N panic 3.1.3. There is a backup power supply for lighting and equipment from a disel generator. N N panic 3.2. Ventilation and heating / cooling 3.1.1. Ventilation system is operational. N N panic 3.3. Gas supply 3.1.3. There is a central technical gas supply system in the laboratory forced ventilation of laboratory. N N panic 3.3. Gas supply 3.3.1.4. Reom cooling is solved by individual SPLIT systems. N N panic 3.3. Gas supply 3.3.1.4. Room cooling is solved by individual SPLIT system. N N N N 3.3. Gas supply 3.3.1. Free protection N N N N <th></th> <th>2.9.6. The light intensity in the rooms for disinfection and sterilization is 300 Lx.</th> <th>N</th> <th>N</th> <th>N</th>		2.9.6. The light intensity in the rooms for disinfection and sterilization is 300 Lx.	N	N	N
2.9.8. There is a necessary lighting with autonomous power supply. N N paar 3.1. Electrical installations 3.1.1. There is a neat wiring harness to power the lamps. N N Paar 3.1. Electrical installations 3.1.1. There is a neat wiring harness to power the lamps. N N Paar 3.1.1. There is a neat wiring harness to power the lamps. N N Paar 3.1.2. There is a backup power supply for sensitive equipment with UPS devices. N N Paar 3.1.3. There is a backup power supply for lighting and equipment from a diesel generator. N N Paar 3.1.4. There is a backup power supply for lighting and equipment from a diesel generator. N N Paar 3.1.4. There is a chract eventilation system is operational. N N Paar 3.1.2. The laboratory forced ventilation of laboratory parts are in operation. N N Paar 3.3. Gas supply 3.1.1. Room cooling is solved by individual SPLIT systems. N N N N 3.3. Gas supply 3.1.1. Wastewater from showering and washing (or similar) is connected to the domestic sewer, without prior treatment. N N N N 3.4.		2.9.7. There is panic evacuation lighting with	N	N	partly
3. Installations 3.1. Electrical installations 3.1.1. There is a neat wiring harness to power the lamps. N N Para 3.1.2. There is a neat wiring harness for the device and equipment connectors. N N Para 3.1.3. There is a backup power supply for sensitive equipment with UPS devices. N N Para 3.2. Ventilation and heating / cooling 3.1.1. Ventilation of the laboratory is done naturally, through the windows. N N Para 3.1.3. There is a backup power supply for lighting and equipment from a disel generator. N N Para 3.1.4. Ventilation of the laboratory is done naturally, through the windows. Y Y Y 3.1.3. Partial systems of forced ventilation of laboratory parts are in operation. N N Para 3.3. Gas supply 3.3.1. There is a central technical gas supply system in the laboratory. N N N 3.3. Sever installation 3.2.1. Watswater from showering and washing for similar) is connected to the domestic sever, without prior treatment. N N N <th></th> <th>2.9.8. There is a necessary lighting with autonomous power supply.</th> <th>Ν</th> <th>Ν</th> <th>partly</th>		2.9.8. There is a necessary lighting with autonomous power supply.	Ν	Ν	partly
3.1. Electrical installations 3.1.1. There is a neat wiring harness to power the lamps. N N paint installations 3.1.2. There is a neat wiring harness for the device and equipment connectors. N N paint installations 3.1.2. There is a neat wiring harness for the device and equipment connectors. N N paint installations 3.1.3. There is a backup power supply for sensitive equipment from a diseig generator. N N N paint installation 3.2. Ventilation and heating / cooling 3.1.1. Ventilation of the laboratory is done naturally, through the windows. N N N N N paint is operational. 3.1.3. There is a central technical gas supply system in the laboratory. N N N N N N Paint in the laboratory. 3.3. Gas supply 3.3.1. There is a central technical gas supply system in the laboratory. N	3. Installations				
3.1.2. There is a neat wiring harness for the device and equipment connectors. N N paid equipment connectors. 3.1.3. There is a backup power supply for sensitive equipment with UPS devices. N N paid equipment from a diesel generator. 3.2. Ventilation and heating / cooling 3.1.1. Ventilation of the laboratory is done naturally, Y Y Y 3.2. Ventilation and heating / cooling 3.1.1. Ventilation of the laboratory is done naturally, Y Y Y 3.2. Ventilation and heating / cooling 3.1.1. Ventilation of the laboratory is done naturally, Y Y Y Y 3.3. Sates supply 3.1.2. The laboratory's forced ventilation system is operational. N N Paid aboratory parts are in operation. 3.3. Gas supply 3.3.1. There is a central technical gas supply system N N N N 3.3. Sewer 3.2.1. Wastewater from showering and washing (or similar) is connected to the domestic sewer, without prior treatment. N N N N 3.4. Booratory. 10.1. Fire protection and prevention is provided in the laboratory. N N N N	Electrical 3.1. installations	3.1.1. There is a neat wiring harness to power the lamps.	Ν	Ν	partly
3.1.3. There is a backup power supply for sensitive equipment with UPS devices. N N parallelistic 3.1.4. There is a backup power supply for lighting and equipment from a diesel generator. N N N r 3.2. Ventilation and heating / cooling 3.1.1. Ventilation of the laboratory is done naturally, through the windows. Y		3.1.2. There is a neat wiring harness for the device and equipment connectors.	Ν	Ν	partly
3.1.4. There is a backup power supply for lighting and equipment from a diesel generator. N N N 3.2. Ventilation and heating / cooling 3.1.1. Ventilation of the laboratory is done naturally, through the windows. Y Y Y 3.1.1. Ventilation of the laboratory is done naturally, through the windows. Y Y Y Y 3.1.2. The laboratory's forced ventilation system is operational. N N N partial systems of forced ventilation of laboratory parts are in operation. N N N partial systems. 3.3. Gas supply 3.1.1. There is a central technical gas supply system in the laboratory. N		3.1.3. There is a backup power supply for sensitive equipment with UPS devices.	Ν	Ν	partly
3.2. Ventilation and heating / cooling 3.1.1. Ventilation of the laboratory is done naturally, through the windows. Y Y Y 3.1.2. The laboratory's forced ventilation system is operational. N N parallelity of the systems of forced ventilation of laboratory parts are in operation. N N parallelity of the systems of forced ventilation of laboratory parts are in operation. 3.1.3. Partial systems of forced ventilation of laboratory parts are in operation. N N parallelity of the systems. 3.3. Gas supply 3.3.1. There is a central technical gas supply system in the laboratory. N N N Parallelity of the systems. 3.3. Sewer installation 3.2.1. Wastewater from showering and washing (or similar) is connected to the domestic sewer, without prior treatment. Y Y Y 3.2.2. Siphons for laboratory bathtubs and drainpipes are made of materials resistant to chemicals. N N N Parallelity of the laboratory. 10. Fire protection 10.1. Fire protection and prevention is provided in the laboratory. N N N N 11. Laboratory equipment management 10.3. Defined number and position of fire exitinguishers type A, B, C exists		3.1.4. There is a backup power supply for lighting and equipment from a diesel generator.	Ν	Ν	Ν
3.1.2. The laboratory's forced ventilation system is operational. N N pail 3.1.3. Partial systems of forced ventilation of laboratory parts are in operation. N N pail 3.1.3. Partial systems of forced ventilation of laboratory parts are in operation. N N pail 3.1.4. Room cooling is solved by individual SPLIT Y Y Y 3.3. Gas supply 3.3.1. There is a central technical gas supply system in the laboratory. N N N N Y<	3.2. Ventilation and heating / cooling	3.1.1. Ventilation of the laboratory is done naturally, through the windows	Y	Y	Y
3.1.3. Partial systems of forced ventilation of laboratory parts are in operation. N N partial systems of forced ventilation of laboratory parts are in operation. 3.1.4. Room cooling is solved by individual SPLIT systems. Y Y Y 3.3. Gas supply 3.3.1. There is a central technical gas supply system in the laboratory. N N N N 3.3. Sewer installation 3.2.1. Wastewater from showering and washing (or similar) is connected to the domestic sewer, without prior treatment. Y Y Y 3.2.2. Siphons for laboratory bathtubs and drainpipes are made of materials resistant to chemicals. N N N N 10. Fire protection 10.1. Fire protection and prevention is provided in the laboratory. N N N N 10.2 The shortest emergency escape routes have been identified and protected. N N N N N 11. Laboratory equipment management 10.4. The laboratory has a system for automatic fire detection and alarm. N N N N N N 11. Laboratory equipment management 11.1. - Engineering plants and room N </th <th></th> <th>3.1.2. The laboratory's forced ventilation system is operational.</th> <th>N</th> <th>Ν</th> <th>partly</th>		3.1.2. The laboratory's forced ventilation system is operational.	N	Ν	partly
3.1.4. Room cooling is solved by individual SPLIT systems. Y Y Y 3.3. Gas supply 3.3.1. There is a central technical gas supply system in the laboratory. N N N N 3.3. Sewer installation 3.2.1. Wastewater from showering and washing (or similar) is connected to the domestic sewer, without prior treatment. Y Y Y Y 3.3. Sewer installation 3.2.1. Wastewater from showering and washing (or similar) is connected to the domestic sewer, without prior treatment. Y Y Y 3.2.2. Siphons for laboratory bathtubs and drainpipes are made of materials resistant to chemicals. N N N N 10. Fire protection 10.1. Fire protection and prevention is provided in the laboratory. N N N N 10.2 The shortest emergency escape routes have been identified and protected. N N N N N 10.3. Defined number and position of fire extinguishers type A, B, C exists. N N N N N 11. Laboratory equipment management 10.4. The laboratory has a system for automatic fire namagement and control system (BMS) includes: <th></th> <th>3.1.3. Partial systems of forced ventilation of laboratory parts are in operation.</th> <th>Ν</th> <th>Ν</th> <th>partly</th>		3.1.3. Partial systems of forced ventilation of laboratory parts are in operation.	Ν	Ν	partly
3.3. Gas supply 3.3.1. There is a central technical gas supply system in the laboratory. 3.3. Sewer installation 3.2.1. Wastewater from showering and washing (or similar) is connected to the domestic sewer, without prior treatment. Y Y 3.2.1. Wastewater from showering and washing (or similar) is connected to the domestic sewer, without prior treatment. Y Y Y 3.2.2. Siphons for laboratory bathtubs and drainpipes are made of materials resistant to chemicals. N N N N 10. Fire protection 10.1. Fire protection and prevention is provided in the laboratory. N N N N 10.2 The shortest emergency escape routes have been identified and protected. N N N N 10.3. Defined number and position of fire extinguishers type A, B, C exists. N N N N 11. Laboratory equipment management 11.1. - Engineering plants and room N N N N		3.1.4. Room cooling is solved by individual SPLIT systems.	Y	Y	Y
3.3. Sewer installation 3.2.1. Wastewater from showering and washing (or similar) is connected to the domestic sewer, without prior treatment. Y Y Y 3.2.2. Siphons for laboratory bathtubs and drainpipes are made of materials resistant to chemicals. N N N N 10. Fire protection 10.1. Fire protection and prevention is provided in the laboratory. N N N N Paragement 10. Fire protection 10.1. Fire protection and prevention is provided in the laboratory. N N N Paragement 10.2 The shortest emergency escape routes have been identified and protected. N N N N N 11. Laboratory equipment management 10.4. The laboratory has a system for automatic fire detection and alarm. The management and control system (BMS) includes: N N N N	3.3. Gas supply	3.3.1. There is a central technical gas supply system in the laboratory.	Ν	Ν	Ν
3.2.2. Siphons for laboratory bathtubs and drainpipes are made of materials resistant to chemicals. N <t< th=""><th>3.3. Sewer installation</th><th>3.2.1. Wastewater from showering and washing (or similar) is connected to the domestic sewer, without prior treatment.</th><th>Y</th><th>Y</th><th>Y</th></t<>	3.3. Sewer installation	3.2.1. Wastewater from showering and washing (or similar) is connected to the domestic sewer, without prior treatment.	Y	Y	Y
10. Fire protection 10.1. Fire protection and prevention is provided in the laboratory. N N paint of the laboratory. 10.2 The shortest emergency escape routes have been identified and protected. N N N N N N 10.3. Defined number and position of fire extinguishers type A, B, C exists. N N N N N N 11. Laboratory equipment management 10.4. The laboratory has a system for automatic fire detection and alarm. N N N N N 11. Laboratory equipment management 11.1. - Engineering plants and room N N N N		3.2.2. Siphons for laboratory bathtubs and drainpipes are made of materials resistant to chemicals.	Ν	N	N
10.2 The shortest emergency escape routes have been identified and protected. N N N N 10.3. Defined number and position of fire extinguishers type A, B, C exists. N N N N N 10.4. The laboratory has a system for automatic fire detection and alarm. N N N N N 11. Laboratory equipment management 11.1. - Engineering plants and room N N N	10. Fire protection	10.1. Fire protection and prevention is provided in the laboratory.	Ν	Ν	partly
10.3. Defined number and position of fire extinguishers type A, B, C exists. N N N 10.4. The laboratory has a system for automatic fire detection and alarm. N N N 11. Laboratory equipment management 11.1. - Engineering plants and room N N N		10.2 The shortest emergency escape routes have been identified and protected.	Ν	Ν	Ν
10.4. The laboratory has a system for automatic fire detection and alarm. N N N 11. Laboratory equipment management The management and control system (BMS) includes: N N N 11.1. - Engineering plants and room N N N		10.3. Defined number and position of fire extinguishers type A, B, C exists.	Ν	Ν	Ν
11. Laboratory equipment The management and control system (BMS) includes: management 11.1. – Engineering plants and room		10.4.The laboratory has a system for automatic fire detection and alarm.	Ν	Ν	Ν
management 11.1. – Engineering plants and room N N	11. Laboratory equipment	The management and control system (BMS) includes:			
equipment.	management	11.1. – Engineering plants and room equipment.	Ν	N	Ν
11.2. – Measurement and recording of energy N N N	System	11.2. – Measurement and recording of energy	Ν	N	N
11.3. – Centralized monitoring of temperature-sensitive equipment such as refrigerators, freezers and the like is		11.3 Centralized monitoring of temperature-sensitive equipment such as refrigerators, freezers and the like is	N	N	N

An overview of the LMB requirements for the laboratory equipment and organization is provided in the following table:



No.	o. SECTION		J	NIPH "Dr Milan Jovanović - Batut", Belgrade	IPH Nis	IPH Kragujevac
2	and devices	1.1.	Findings	Necessary equipment for microbiology diagnostics is available. BSC II is provided in bacteriology and molecular diagnostic laboratories. PCR cabinets are also provided in molecular diagnostic laboratories. CO ₂ cylinders (backup for freezers or CO ₂ incubators) and liquefied petroleum gas cylinders are exposed and unsecured.	Necessary equipment for microbiology diagnostics is available. Two BSC II and PCR cabinets are provided in the molecular diagnostics laboratory. BSC II is provided both in mycology and in the coproculture laboratory.	Necessary equipment for microbiology diagnostics is available. As regards the primary protection equipment, the Institute has four BSC II - one in each of the two molecular diagnostic laboratories, one in the RNK extraction container for SARS-CoV-2 and one in the tuberculosis detection laboratory; three PCR cabinets- two for SARS- CoV-2 diagnostics and one for
2.	Equipment	1.2.	Recommendations	It is necessary to provide primary containment equipment for protection in the laboratory: - BSC III cabinet; - BSC III cabinet- one for mycology and one for sample reception; - IT equipment; - Laboratory furniture.	Primary protective equipment must be provided: - BSC II equipment - for serology, for sampling and one for bacteriology; - equipment for staining microscope slides; - a dry block thermostat. - IT equipment; - Laboratory furniture.	another laboratory. Primary protective equipment must be provided: - BSC equipment (for serology, sampling, and bacteriological laboratories); - equipment for staining microscope slides; - a dry block thermostat. - IT equipment; - laboratory furniture
3.	Work organization	1.1.	Findings	Laboratories for microbiology are united within the Centre for Microbiology, which has a chief and the following departments and sections: 1. Department for reference laboratories which includes: - Reference laboratory for Salmonella, Shigella, Vibrio cholerae, Yersinia enterocolitica; - Reference laboratory for Syphilis, Leptospirosis and Lyme borreliosis; - Reference laboratory for Sample collection and transport to the EU Reference Laboratory for Diphtheria and Whooping Cough. 2. Department for production of substrates. 3. Section for mycology and parasitology. 4. Section for urogenital infections. 5. Section for molecular microbiology. 7. Sample reception Section.	Laboratories for microbiology are united within the Center for Microbiology with the following departments and sections: 1. Department of bacteriology; 2. Department of parasitology and mycology; 3. Department of virology; 4. Section for reception of materials and issuance of results; 5. Section for preparation of substrates, sterilization and decontamination (bacteriology kitchen).	 Laboratory furniture. Laboratories for microbiology are united within the Center for Microbiology, which has a chief and two working units: 1. Department of clinical microbiology with material reception section 2. Department for preparation of substrates, sterilization and washing.
		1.2.	Recommendations	The Institute has to: 1. reorganize the laboratory space and the work process and to 2. prepare: - a Biosafety and Biosecurity Management Program and a Biosafety and Biosecurity Manual; - organizational structure for biosafety and biosecurity management; - manual for laboratory quality management; - waste management manual; - program for initial and continuous staff training.	The Institute has to: 1. reorganize the laboratory space and the work process and to 2. prepare: - a Biosafety and Biosecurity Management Program and a Biosafety and Biosecurity Manual; - organizational structure for biosafety and biosecurity management; - manual for laboratory quality management; - waste management manual; - program for initial and continuous staff training.	The Institute has to: 1. reorganize the laboratory space and work process and to 2. prepare: - a Biosafety and Biosecurity Management Program and a Biosafety and Biosecurity Manual; - organizational structure for biosafety and biosecurity management; - manual for laboratory quality management; - waste management manual; - program for initial and continuous staff training.

The above presented conclusions and recommendations indicate necessity to establish or improve a laboratory quality management system with biosafety and biosecurity and the development of a laboratory quality manual, manual for biosafety and biosecurity, critical SOPs, and to provide continuous training of laboratory staff (covering various aspects) on laboratory quality, biosafety and biosecurity.

During the inception phase of the Project, UNDP will, jointly with WHO, revisit the prioritized locations and follow-up with the development of technical documentation for the reconstruction of the facilities. Once technical documentation is completed, UNDP will engage an independent verifying company, with specific expertise, as an additional quality assurance layer. Upon completion of technical documentation and issuance of necessary permits defined by the Law on Planning and Construction, UNDP will tender the works and ensure works supervision. In parallel with physical reconstruction of the assigned facilities, the UNDP shall, in close cooperation with NIPH 'Batut' and the MoH, and in line with recommendations of the WHO Laboratory technical officer, prepare detailed technical specifications for the procurement of necessary laboratory equipment. Following the reconstruction and equipping of the facilities, the WHO will deliver a set of biosafety and biosecurity - related trainings, thus enabling a swift adaptation to continuously increased public health needs and pressures

Outputs:

- 3 laboratories reconstructed and equipped to be fully operational and compliant with the international and WHO Biosafety standards (UNDP);
- 50 laboratory staff of 25 IPHs trained on biosafety, biosecurity and risk assessment (WHO);
- 50 laboratory staff of 25 IPHs trained on waste management (WHO);
- Biosafety risk assessment preformed and mitigation plan for improvement developed for the three Institutes of Public Health with reconstructed laboratories (WHO);
- Biosafety manual developed for the three Institutes of Public Health with reconstructed laboratories (WHO).

Component II - Capacity building and strengthening of the health system for emergency preparedness and response with a focus on primary health care

Activity 2.1 Development of procedures for healthcare system response to emergencies at the national and local level, and public health emergency management training for health system employees, including sanitary inspectors

The International Health Regulations (IHR) (2005) are an instrument of international law that is legally binding for 196 countries, including the 194 WHO Member States. It creates rights and obligations for the participating countries, including the requirement to report on public health events. In 2018, the WHO conducted a peer-to-peer Joint External Evaluation (JEE) of the IHR core capacities of the Republic of Serbia. All of the 19 technical areas to fulfil national obligations under the IHR were assessed, and findings with recommendations provided to the Government of Serbia.

This evaluation provided the best basis for developing the comprehensive National Action Plan for Health Security (NAPHS) in Serbia, drafted in 2019. NAPHS is based on One Health, all-hazards, and whole-of-government approaches and it aims to strengthen capacities for the implementation of the IHR in the country. The NAPHS defines a comprehensive list of activities necessary to improve the national capacity to prevent public health threats, early detection of events, and rapid response in case of events of public health importance.

Even though Serbia faces different types of emergencies relatively often (seasonal floods, earthquakes, severe cold, etc.) there is lack of available training on public health emergency management for health system employees, as all these emergencies have a strong impact on public health.

An effective response to an emergency requires multisectoral and multidisciplinary approaches, including efficient alert and response systems, trained professionals, and developed standard operating procedures (SOPs), with defined roles and responsibilities among all institutions. While

there are many bodies and committees to deal with health emergencies, there is a lack of predefined procedures and algorithms that determine their actions, interconnections, and coordination for all three levels of health care. Based on the existing experience at the country level, as well as WHO expertise in this field, support will be provided in the development of training curricula, and a set of SOPs in the area of emergency preparedness and response, as prioritized in the NAPHS. Since the PHCs are the first point of contact, WHO Serbia will focus on strengthening their capacities in this regard, including the capacities of at least 100 Local Public Health Councils at the local self-government level.

WHO has a strong competency, capacity, and experience in the development of emergency management training within its Health Emergencies program and the WHO Academy. Based on already developed WHO training packages, the training for Health System employees (primary, secondary, and tertiary health care level, including sanitary inspectors) will be developed to build their capacities for emergency management.

Outputs:

- Methodology (template) for public health emergency preparedness and response plans developed for local level, including the curriculum for training for municipal health councils, PHCs, NIPH, and other relevant entities from various sectors (WHO);
- 6 SOPs at the national level with defined responsibilities at the local level developed for:
 - o Coordination and information exchange in case of public health threats,
 - Mass trauma management;
 - Dealing with radiological accidents,
 - The response in case of public health threats at points of entry (PoE),
 - o PHC preparedness response in emergencies,
 - Hospital preparedness and response in emergencies (WHO).
- 30 trainers trained on methodology for the development of public health emergency preparedness and response plans conducted for representatives from 24 district IPHs (WHO);
- 50 representatives of 100 municipalities trained on methodology for the development of public health emergency preparedness and response plans in all 24 districts (representatives of municipal health councils, PHCs, and other relevant entities from various sectors) (WHO);
- Training curricula for sanitary inspectors on detection of public health threats, risk assessment, and response in public health emergencies developed and 150 sanitary inspectors trained (WHO).

Activity 2.2 Disaster Risk Register upgrade with Public Health related risks

Article 22 of the Law on Disaster Risk Reduction and Emergency Management requires establishing the Disaster Risk Register containing the relevant data for risk management. The law prescribes the content, the manner of establishment, and the maintenance of the Risk Register. The Sector for Emergency Management (SEM) bears overall responsibility for managing and endorsement of the Register content, and the Republican Geodetic Authority (RGA) is responsible for hosting and maintaining technical infrastructure for access and use of geospatial data. By the Decision of the Minister of Interior, the Government of Serbia established a Working Group for the development of the Register (WG), which consists of representatives of the line ministries, governmental bodies, and organization holders of risk-related data of relevance for the Register. The WG is comprised of high-level representatives of:

- Mol (Risk and Emergency Management Directorate, and Fire and Rescue Directorate),
- Ministry of Mining and Energy,
- Ministry of Public Investments,
- RGA,
- Republic Water Directorate and Forest Directorate of the Ministry of Agriculture, Forestry and Water Management,

- Republic Hydrometeorological Service,
- Geologic Survey of Serbia,
- Seismological Survey of Serbia
- State Enterprises for Forest Management 'Srbijasume', and
- Public Water Management company 'Srbijavode'.

Within the "EU for Civil Protection and Disaster Risk Resilience in the Republic of Serbia" (IPA 2019), the UNDP, in cooperation with SEM, PIMO and RGA, and the Working Group members, established the Risk Register. The Register operates as a subsystem of the national geospatial data infrastructure system and fully complies with the EU INSPIRE Directive and the EU Initiative to Enhance Data Operability. The Register is a unique and powerful analytical tool for managing risks, risk-informed response and investment planning, which will not only be used by public authorities involved in Disaster Risk Response (DRR) and emergency management, but also by a wider public to allow protection of citizens' investment, safety, and sustainable development.

Within the same project, the UNDP provided technical support to responsible members of the WG in acquiring, digitizing, and harmonizing risk-related data of relevance for more prominent risks in Serbia. By July 2022, the system holds over 330 data sets including:

- Data from local self-government's risk assessments and rescue and protection plans,
- Flood-prone zones on First order watercourses (state-managed),
- Landslide data covering 50% of the territory of Serbia,
- Forest fires data,
- Climate data with forecasts up to 2040,
- Data on rehabilitated buildings, households, and public infrastructure from 2014 onwards,
- Data on cultural heritage,
- Data on public health institutions,
- Underground installations data,
- Data on investment locations, etc.

For the purpose of this Action, the SEM, as the chair of the WG, with the support of the UNDP, extended the mandate and the scope of the WG to include public health-related risks in accordance with the National Disaster Risk Assessment. This WG will focus on acquiring health risk data with major health implications such as:

- Communicable diseases outbreaks
- Torrential floods in 2nd order water and streams,
- Air and water quality,
- Water treatment plants,
- Regional landfills,
- Unsanitary landfills,
- Mining waste and tailing landfills,
- Import, storage, and traffic of hazardous chemicals,
- Major accidents hazards (The SEVESO II Directive 96/82/EC)
- Radiation,
- Protected areas of nature,
- Harmful plant pathogens,
- Animal and plant diseases,
- Food safety,
- Technological accidents,
- Energy facilities (production, transport and storage of electricity, gas and oil)

Acquired data sets will also contain information on corresponding infrastructure, equipment, and human response capacities. MoH and the NIPH 'Batut' will lead the data collection of historical and accompanying data on communicable and non-communicable diseases, and data of importance for the monitoring of the public health situation and mitigating potential outbreaks. The data sets acquired by the UNDP in the described manner will be an input to WHO to apply their tool/methodology for a public health risks assessment – STAR (Strategic Tool for the Analysis of Risks) software. This software will be embedded into the existing platforms and will produce reliable public health risk assessment (public health risk profile for any given territory) with data to be entered coming from the national data appropriators.

In parallel, UNDP will support the RGA in upgrading software performances and adding additional functionalities and sub-components needed for processing and analytics of health-related risks. The existing risk data in the Register, accompanied by the historical data and capacities of the public health institutions, complemented with the upcoming Census data to be made available in the spring of 2023, will form a powerful analytical tool for evaluating the impact and exposure to various risks on infrastructure, institutions, and people, with detailed insight into micro-locations throughout the territory of the Republic of Serbia from a single point.

Outputs:

- Disaster Risk Register system extended, operational and functional for the incorporation of health-related risks (UNDP);
- Public health risk analysis in the context of emergencies (incl. identification, quantification and prioritization), based on WHO methodology, conducted at local level for 150 municipalities, involving municipal health councils, PHCs, NIPH and other relevant entities from various sectors (WHO);
- At least 200 platform managers, data providers, and end-users trained for platform management, data preparation, exchange protocols, and everyday use (UNDP).

Activity 2.3 Training of professionals for psycho-social support to groups affected by public health crises and emergencies based on a defined psycho-social support manual

Adults and children affected by emergencies experience a substantial and diverse range of mental, substance use, and neurological problems. In terms of mental health, health-related emergencies are associated with significant stress and psychosocial difficulties in the population. Existing data also indicate that some mental health conditions could arise after an emergency and lead to long-term negative consequences for families, communities, general population and vulnerable groups. Care for the mental health of everyone, especially the health care workers (HCWs) should be one of the priorities in cases of health-related emergencies. Appropriate psychological interventions should be dynamic and adapted to the various stages of the emergencies, that is, in the initial stages, during and after the emergencies.

The Mental Health Gap Action Programme (mhGAP) is WHO Programme that seeks to address the lack of care for people suffering from mental, neurological and substance use (MNS) conditions. As part of this Programme, the mhGAP Intervention Guide (mhGAPIG) was issued in 2010 as a clinical guide on mental, neurological and substance use disorders for general health-care providers who work in nonspecialized health-care settings. The mhGAP Humanitarian Intervention Guide contains first-line management recommendations for mental, neurological and substance use conditions for non-specialist health-care providers in humanitarian emergencies, where access to specialists and treatment options is limited. It is a simple, practical tool that aims to support general health facilities in areas affected by humanitarian emergencies in assessing and managing acute stress, grief, depression, post-traumatic stress disorder, psychosis, epilepsy, intellectual disability, harmful substance use and risk of suicide.

In addition, the UN's Inter-Agency Standing Committee (IASC), and WHO, have indicated that mental health and psychosocial support (MHPSS) should be a core component of any public health emergency response, including response to the COVID-19 pandemic. IASC and WHO have developed comprehensive guidelines and training packages to address mental health and

psychosocial needs of a population during emergencies, including the COVID-19 pandemic specifically.

Two Serbian national institutions dealing with mental health, the Institute for Mental Health in Belgrade and the Clinic for Psychiatric Diseases "Dr Laza Lazarevic" in Belgrade, developed online training for the provision of mental health and psychosocial support for HCWs, based on these guidelines, as an integral part of the health sector response to emergencies. Under this activity, a curriculum for implementation of the training was defined with presentations and working materials. Based on the mhGAP methodology, as well as on the experience gained through implementation and coordination of online trainings for HCWs on MHPPS in the context of the COVID-19 outbreak, the primary health care level training program will be updated and implemented with leading national mental health experts and institutions, i.e. the Institute for Mental Health in Belgrade, Clinic for Psychiatric Diseases "dr Laza Lazarevic" and the NIPH.

Outputs:

- Training curricula for PHC health care professionals updated and accredited with the National Health Council of Serbia (WHO);
- 150 primary health care level professionals trained for psycho-social support for groups affected by public health crises and emergencies (WHO).

<u>Component III - Strengthening of the Health Information system with a focus on</u> <u>surveillance for CDs and implementation of an e-Health platform</u>

Activity 3.1: Digitalization and E-Health

According to the Law on Health Documentation and Records, the Integrated Health Information System of the Republic of Serbia (ISIS) consists of the health statistical system, information system of health insurance organization and information systems of health institutions, private practices and other legal entities. The health statistical system includes several central components developed and established by the Ministry of Health (MoH) and the Institute of Public Health of Serbia "Dr Milan Jovanović Batut" (NIPH). The health insurance information system is maintained and developed by the Republic Heath Insurance Fund (RHIF) internally. Information systems of health care providers are established by these organizations using one or more systems developed by different commercial vendors.

According to the Law, the Electronic Health Record (EHR) is an excerpt from the basic medical records kept in electronic form for each patient. The electronic medical file combines all health data that are important for his long-term health condition, and which would be available in the future provision of health care, if necessary. It contains patient data from multiple physicians and institutions and provides a holistic, long-term 360 degrees view of patient health. It includes demographic data, test results, medical history, current medical history and medications.

The structure of the current system:



The digital healthcare providers information sharing system is still not fully implemented nor fully regulated. Clinical data to be shared between providers, sourced from the originating systems, are not fully standardized, which prevents the use of information technology to process information in a consistent manner and to use it as a reliable source for analytics and reporting. In addition to this, citizens of Serbia have minimal or no access to parts of their personal health information in a digital form. At this moment, there is no strategic plan nor overarching governance mechanism across public and private sectors which would effectively and methodically address identified issues and set the stage for further Digital Health development in Serbia.

Since 2019, the Government of Serbia has initiated legal changes enacted to promote Integrated Health Care as a concept that brings together inputs, delivery, management, and organization of services related to diagnosis, treatment, care, rehabilitation, and health promotion. While the process of integration starts with legal and changes in a physical structure, the digitalization and secured information flow are main prerequisites for implementing the Integrated Health Concept.

The Digital Integrated Health Information System shall entail e-Referrals, electronic appointment bookings, electronic specialists' reports, e-Prescribing and view of prescribed medications, access to diagnostic imaging reports and images, and electronic health data exchange.

UNDP has already commenced with the preparatory assessments for the establishment of the Digital Integrated Health Information System performing an initial GAP analysis in order to identify the current high-level state and potential area of improvement. Key finding from the GAP analyses shows that although there have been a lot of activities and development of separate systems including Electronic Health Record System (EHR), if EHR is to become a viable resource of the health system, a clear management role must be established for all participants in the EHR. It also must integrate all processes in the format which allows entries and integration of the clinical pathways produced by various institutions. Furthermore, monitoring and evaluation pathways need to be established as a systematic and inclusive manner that measures the outcomes being delivered, corrects them if needed, and demonstrates achievements. Furthermore, the standards established by the EHR design, repositories, and associated services.

UNDP assessment coincides with the Government of Serbia-led processes embodied in the two newly formed working groups for the development of the Digital health Strategy and Digital Health System creating necessary prerequisites for the establishment of the system itself.

In accordance with the main goal of the Digital Health Strategy – Digitalization of the Heath system and safe use of services and technology for better, more efficient and more accessible health care and five objectives:



WHO support tool describes HISs as complex, multilevel systems aimed at producing health intelligence to inform decision-making at various levels, most notably national and subnational strategic policy development, policy evaluation and planning by health-care authorities, and benchmarking, performance improvement, quality control and resource planning at the health-care facility or provider level. This definition reflects that the function of the HIS goes far beyond collecting data; it starts with defining a conceptual approach, after which data are collected, analyses are performed, and knowledge is generated and actively brought into policy and practice. HISs play an important role in health system governance.

WHO will support the implementation of comprehensive in-depth analysis, in close cooperation with the Ministry of Health (e-Health Unit) of the current ISIS with the proposed plan for further improvement and scaling. In addition, and based on the Ministry of Health request, WHO will support the creation of the HIS architecture defining all necessary elements for functional and technical specifications for three components of ISIS – radiology, medication and drugs interactions and human resources for health. WHO will also strengthen the capacities of health care workers and citizens to use health information systems, through organized training for health workers. In order to secure sustainability and implementation of the E-Health structure and

modalities focusing on the WHO's role in E-Health governance within the health system the WHO will strengthen the capacity of the Ministry of Health through the engagement of two national experts within the MoH.

WHO has a long tradition of supporting its member states in strengthening their health information systems and E-Health governance by developing tools and guidance documents, organizing capacity-building events and performing assessments. As such, there is a lot of experience and materials that can be built on. Furthermore, this technical support is in line with WHO mandate as requested by its Member States in the Global Digital Health Strategy 2020-2025 and the Regional Digital Health Action Plan for WHO European Region 2023–2030, an ambitious agenda that will leverage digital transformation in Europe and central Asia with the aim of improving people's health and well-being.

Meeting on 12 September 2022 at the 72nd session of WHO Regional Committee for Europe, the ministers and delegates approved a resolution recognizing the critical role and potential of digital tools in the health sector and building on the lessons learned during nearly 3 years of the COVID-19 pandemic.

Based on the Task Force inputs, the establishment of the digital services and secure and integrated information and communication structure will be supported through design of the necessary missing parts of the system which have been identified so far trough development of the Digital Health Strategy and Action plan as well as trough commenced analysis- eRadiology, Medical Interactions and Human Resources.

Guided by the WHO and the Ministry of Health, UNDP and WHO will develop the functional and technical specification of the systems, including the architecture of the solution, infrastructural requirements, interoperability standards, and security requirements. The functional and technical Specifications shall inform the development of the ToR for software development, followed by the UNDP-led procurement process.

UNDP will closely monitor the system development process. Once completed, UNDP will support incorporation of Digital Integrated Health Information System in the infrastructure of the Government Data Centre in Kragujevac.

In accordance with the assessment and needs of the Ministry of Health WHO and UNDP, will support development and rollout of standardized training programmed for the health information system. In close cooperation with all national counterparts, WHO and UNDP will support organization of a promotional campaign introducing citizens to the EU-funded system and its advantages.

Outputs:

- Two assessments of main functions of the Health Information System conducted complementing and building on the results of the digital analysis (WHO).
- Electronic Health Record system upgraded (UNDP and WHO).
- Health records data governance platform established and functional (UNDP and WHO).
- End users, managers, and administrators capacitated for the usage of digital health solution (300 end users and 10 trainers) (UNDP and WHO);
- At least 150,000 citizens trained on site (UNDP).
- 156 PHC provided with E-Health training and outreach material (WHO and UNDP).

<u>Component IV - Capacity building for communication in emergencies including raising</u> <u>awareness</u>

Activity A 4.1: Implementation of the RCCE Plan, including trainings, SimEx, development SOPs, etc.

During outbreaks or emergencies, the communication landscape is flooded with information from many sources, and the media are thirsty for news. Addressing people's concerns and perceptions at these times requires special attention. For this reason, risk communication capacity is a core requirement for countries within the IHR framework.

Developing the RCCE capacity involves improving understanding of RCCE principles and practices as well as developing, testing and implementing national RCCE plans. At present, many countries in the WHO European Region do not have an all-hazard RCCE plan within the IHR framework. WHO is planning to strengthen national capacities through guidance documents, as well as the provision of workshops, trainings, mentorship and support using the WHO Ten-Step RCCE Package.

In the context of the COVID-19 pandemic, with WHO support, NIPH developed an RCCE strategy that can serve as a baseline for the development of a generic one with an all- hazards approach.

Outputs:

- Multi-sectoral coordination mechanism established at national level (WHO);
- 5 SOPs and tools to support RCCE developed, together with informational-educational materials on different topics (WHO);
- Training curriculum for RCCE developed (WHO);
- 55 public health professionals trained on RCCE (WHO);
- Simulation exercise for RCCE at all levels of healthcare system conducted (WHO).

Activity 4.3 Emergency Awareness Raising Events

UNDP and WHO will deliver this activity within the broader communication-based framework offering a better understanding of health-related hazards and encouraging activism and engagement in disaster risk reduction affairs. UNDP and the WHO will conduct focus groups discussion (including a simulation exercise) on prevailing attitudes, perception of expected and desirable roles, motivation, and behavioral patterns in emergencies. Following the findings, partner agencies shall identify key communication messages for target groups and identify the most effective communication channels as per specificities of each group (care providers, children, youth, elderly, persons with disabilities, underprivileged and marginalized groups).

To maximize the impact of the communication activities, the UNDP and the WHO will organize a testing and adjustment of pre-identified communication messages and associated communication channels through a set of focus groups with targeted recipients. The targeted intervention shall contribute to raise awareness, as well as to improve communication in case of emergencies, potential consequences, and credible sources of information during emergencies.

It will also contribute to increasing of the level of knowledge on the importance of prevention and harm reduction, and familiarity with emergency protection protocols, and to increase civic engagement in this process.

To achieve the objectives listed above, the UNDP and the WHO will develop and deliver four groups of events, targeting specific audiences:

- I. **General Public** information dissemination and awareness-raising data (development of specific informational-educational materials, marking of important dates, promotion of publicly available datasets (e.g., Disaster Risk Register, e-Health), including organization of a simulation exercise for the public;
- Services Providers care, health, education, and child protection providers and beneficiaries of those services, when appropriate (development of communication protocols for each group);
- III. Community based events realized with the support of community leaders and local services providers on community-specific risks, corresponding protocols, prevention, and mitigation measures;
- IV. Vulnerable groups tailor made events developed and delivered in cooperation with the vulnerable group support organizations (Roma, residents of informal settlements, beneficiaries of social welfare institutions, refugees and migrants, persons with disabilities, single-parent households, etc).

Communication activities will be subject to continuous monitoring, evaluated, and modified every six months to respond to a dynamic environment and newly identified goals.

Outputs:

- Simulation exercise for local communities organized including at least 10 awarenessraising events (UNDP);
- At least 500,000 people reached through communication activities (UNDP).

Risks and Assumptions

The following assumptions and preconditions need to be fulfilled for efficient implementation of this action:

Full commitment to action's objectives from the participating national and local institutions and organizations. The participating national and local institutions and organizations are expected to fully support the UNDP/WHO efforts. They are expected to be committed in training and capacity building activities. National and local level institutions and organizations are expected to commit to maintenance of the infrastructure and equipment provided from the project.

Full commitment towards efficient and consistent resolution of issues of public health system resilience at the national level is expected. The UNDP/WHO assume that the Government of Serbia and relevant national institutions will continue their efforts to ensure better communication and cooperation between all involved relevant stakeholders in the public health system. National entities involved directly in project activities are expected to embrace the concepts developed and ensure continuation after the project closure.

Risk	Probability	Impact	Mitigation
Institutional			
Political changes at the local and national level	Medium	Medium	 The topics tackled in this project are considered high priority for both the national and local level. As such, they would be supported by any national/local government regardless of political orientation. The UNDP/WHO will maintain regular contacts and coordination with authorities at all levels. In case of changes, they will approach the new structures with transparent and independent presentation of project activities, broader significance and impact.
Lack of motivation and commitment from national and local institutions and organizations to fully participate	Low	Medium	 This proposal is prepared in close partnership with relevant national institutions. All proposed activities were checked for commitment by the final beneficiaries. The target institutions and organizations have expressed commitment for maintenance of facilities developed in the project. The UNDP/WHO will maintain a close collaboration with relevant stakeholders to encourage commitment.
Technical			

The following table presents the analysis of risks and contingency scenarios:

Delays in deliveries of equipment, materials and/or infrastructure upgrade due to poor performance by contractors	Low	Medium	 Possibility to apply UNDP procurement procedures (as pillar-assessed organizations) represents an important advantage of this partnership. It will increase efficiency, decrease reaction time and improve control over subcontractors. Each infrastructure and supply activity will be thoroughly reviewed in the preparatory phase. Technical and logistical arrangements will be made in such a way so as to decrease risk. All facts will be presented to the PSC before a decision is made. UNDP/WHO will maintain close control and communication with sub-contractors. Their performance will be incorporated into the internal monitoring system. UNDP/WHO will put efforts in risk management during implementation of different contracts
Delays in finalization of procedures relating to obtaining relevant permits for (re) construction of laboratories and primary health care centers/facilities for detection of reaction and response in case of emergency.	Low	Medium	 Relevant IPH and health center appointed staff to deal with permitting procedure. UNDP/WHO shall establish close cooperation with all authorities having jurisdiction, to ensure receipt of all required approvals, permits and location conditions in due time. MoH resumes the responsibility to liaise with the responsible national and local institutions ensuring no delays in the issuance of the necessary documentation. UNDP shall engage in-house engineering capacities for monitoring of the implementation of the contract.
Lack of availability of relevant staff for project implementation at national and local level.	Medium	Medium	 Institutions and organizations to nominate relevant staff (member and deputy member) for the implementation of the project. National health professionals' retention plan.

Stakeholder Engagement

The tailored methodological approach combines WHO international leadership in health risk reduction, as well as in other elements of health emergency management (from prevention, through preparedness and response to recovery) and support to delivery of health services in a fragile setting, and anchorage of UNDP global operations on principles of resilience and all-inclusiveness in services delivery. The convergence among WHO public health reform, quality assurance capacities, and UNDP operational ability to effectively deliver tangible support in times of crises, coupled with a leading role in digital transformation of Serbia, ensures a swift realization of activities defined by the Action in accordance with the highest public health policy standards. In the context of primary health care, the Action will rely on the WHO resolution on primary health care "*Realizing the potential of primary health care: lessons learned from COVID-19 pandemic and implications for future directions in the WHO European Region*" adopted at the 71st Regional Committee for Europe held in September 2021. Overall, the action is in line with newly adopted WHO Roadmap for Health and well-being in the Western Balkans 2021-2025 as an integral plan of the WHO European Programme of Work 2020-2025.

UNDP and WHO shall be responsible for Disaster Risk Register Public Health Upgrade and development of an e-Health System. UNDP will be primarily responsible for infrastructure upgrades and procurement of laboratory and other equipment, while WHO shall primarily be responsible for developing and ensuring application of policy coherence for public health approach for health emergency management, including epidemiology, microbiology, virology, molecular biology, chemical and radio nuclear accidents, with capacity building for the national health system (including e-Health) in this regard.

The proposed interventions shall ensure sustainable improvement of public health policies, processes, and operational arrangements relevant to health hazard prevention, planning, and management. The Action shall contribute to a better public understanding of the health-related risks and risk-informed decision-making, taking into account the specific needs of vulnerable groups.

The Ministry of Health is the main project stakeholder in the health sector. The National Institute of Public Health (NIPH) "Dr Milan Jovanovic Batut" deals with health sector related crises. NIPH Batut, with the network of 24 district IPHs and the relevant health institutions, is responsible for monitoring of the epidemiological status of diseases and informing the public, issuing guidelines and standard operating procedures to health institutions, and to all institutions involved in emergency management. The network of 158 primary healthcare centers is the key pillar of service delivery and the gatekeeper and first contact point for patients entering into system, especially in the context of emergency. The Ministry of Interior, Sector for Emergency Management (SEM) is responsible for maintaining and improving the ability of the entire nation to act preventively to risks, as well as to respond to challenges and mitigate the consequences of various disasters that may affect Serbia. According to the Law on Disaster Risk Reduction and Emergency Management, the corresponding by-laws and regulations, the SEM has overall responsibility for establishment and validation of risk related data, development of the National Risk Assessment, and managing the Disaster Risk Register. The Republic Geodetic Authority (RGA) is responsible for establishing and maintaining the technical infrastructure of the Disaster Risk Register, the sub-system of the National Spatial Data Infrastructure (NSPI, i.e. Geosrbija) a comprehensive system that includes cross-sectorial risk related data.

In addition to direct contacts with beneficiary institutions at national and local level, and with the final beneficiaries, other project stakeholders include professional organizations, media, civil society organizations, etc. The following stakeholders' matrix indicates some of the coordination aspects which will be considered in the implementation phase.

Stakeholders							
	Contracting Authority	Involved Line Ministries and bodies of the Government of Serbia	Target groups and final beneficiaries	Media	NGO Sector	Other stakeholders (professional organizations, opinion groups etc.)	
Coordination, contract management, decision making	Contract management, amendments, checking of reports, monitoring	Contract supervisory and advisory function. Participation in the project SC.					
Project management	Review of the level of achievement. Specific advice in the implementation phase	Advice provided if necessary	Beneficiaries - feedback communicated				
Professional advice, contributions with specific activities/results	Alignment of activities/results with EU standards	Specific professional advice provided for specific segments in line with Ministries' coverage and competencies	Recipients and beneficiaries of activities and results. Feedback communicated	Advice provided in relation to visibility aspects of activities and results per each Activity	Specific advice provided in the implementation phase. Direct cooperation in activities, for example, events	Specific advice provided. Participation in activities, for example, development of models, capacity building	
Promotion and visibility	Ensuring that EU visibility requirements are followed	Participation in promotion events. Ensuring visibility for Government's sector policies	Recipients and beneficiaries. Active participation in specific segments	Direct partners in the visibility and promotion process. Advice provided if necessary.	Support function. Distributing information through networks	Support function. Distributing information through networks.	

UNDP and WHO shall involve all the beneficiaries and end recipients, represented by national and local level institutions, recognized under this Action, in each stage of preparation of tender

documentation (e.g. technical documentation, specification of the equipment, development of ToRs, etc.) with full respect of the confidentiality of the tendering process. The national counterparts can also participate as observers in the selection process of the most advantageous offer to ensure that the specific priorities and needs are properly addressed

Communication and coordination with external organizations will be set up at different levels and around specific themes/areas of cooperation. Continuous observing of external conditions and measuring of feedback will ensure that current actual challenges/needs are addressed. The internal and external organization will be the basis for flexibility and responsiveness when necessary.

The day-to-day activities of the Action, including procurement, disbursement, financial management, and monitoring, will be carried out by the UNDP / WHO. The UNDP / WHO will carry out the Action with due diligence and efficiency, enable on-site visits on the locations which are subject of the Action and ensure that all goods and services financed under this Action are used exclusively for their purpose.

The UNDP will perform procurement procedures and award contracts in line with its regulations and rules for procurement assessed by the European Commission.

South-South and Triangular Cooperation (SSC/TrC)

COVID-19 caused the need to review the system for monitoring, early warning of, and combating serious cross-border threats to health, as well as the coordination of policies and programmes in the field of public health to ensure high level of human health protection (Decision 1082/2013/EU on serious cross-border threats to health), which is also in line with WHO International Health Regulation, IHR (2005) revision to Annex 7 adopted by the Sixty-seventh World Health Assembly in 2014. Primary Health Care Centers (PHCs) are the first contact point in Serbia, and they are at the crossroads of integrated health services delivery. PHCs are publicly owned primary care centers and a natural environment to manage these conditions in a person-center approach coordinating care with secondary and tertiary settings. Strengthening linkages with public health services, social services, as well as across the continuum of health care services, and securing quality of care in the context of emergencies, is aligned with recent developments of healthcare legislation in Serbia, lessons learned from COVID-19 pandemic, and the recommendations of the operational framework set out in the WHO Declaration of Astana. The Action will contribute to the development of effective, efficient and sustainable organizational structures for preparedness and response to major public health threats of different nature at all levels of health care including more effective management of cross-border risks.

Knowledge

The Action will contribute to the implementation and development of strategic, operational documents and SOPs increasing the preparedness and responsiveness of responsible institutions in health emergencies. The Action will enable introduction and application of Laboratory Quality Management System in National and 24 regional institutes of public health of Serbia. Some 150 public health practitioners will receive on the job training for application of the quality management standards, biosafety, biosecurity and risk assessment. Furthermore, staff in three laboratories with upgraded biosafety level will benefit from custom made Quality Manuals, risk assessment and mitigation plan, critical SOPs ensuring the continuity in application of quality assurance procedures.

Proposed activities will also enable implementation of One Health, all-hazards, and whole-ofgovernment approaches and it aims to strengthen capacities for the implementation of the international health regulations in the country, including development of the Methodology for public health emergency preparedness and response plans for local level, the curriculum for training for municipal health councils, PHCs, NIPH, and other relevant entities from various sectors. This activity also entails long term investment in human capacities in emergency and health sectors trough Training of Trainers for public health emergency preparedness and response plan and training of 150 sanitary inspectors for detection of public health threats, risk assessment, and response in public health emergencies.

The Disaster Risk Register as an innovative analytical tool will offer better understanding of public health related risk on observed micro location and their corelation with existing infrastructure, human and technical capacities, enabling risk-informed decision making and public and private investments.

To further expand the application and integration of digital health technologies and solutions and to strategically address some of the current challenges, in cooperation with the Ministry of Health, NIPHS and the Government of Serbia Office for IT and eGovernment, UNDP and WHO will support development of the Digital Integrated Health Information System which enables authorized information sharing across healthcare providers based on increasingly and incrementally standardized digital health data. Furthermore, the system will empower citizens with information and tools to manage good health or health issues more effectively. At least 150,000 citizens and employees of 156 PHC in Serbia will receive eHealth onsite training.

Effective risk communication and community engagement (RCCE) ensures that risk managers, stakeholders and affected communities are informed and engaged at all stages of the risk assessment process so that they can make informed decisions. RCCE relies on timely and transparent information sharing, coordination, information delivery, and public and stakeholder participation in the emergency response.

Dissemination and replication of outcomes:

UNDP will prepare presentations of results in a way to allow their use in other initiatives and areas (each result will be presented with its background, main actions and lessons learned). Channels used in the process will include:

Press-releases and media publications. UNDP will issue regular press-releases and ensure media publications. These will be aimed at the general public, promoting governmental efforts, significance of EU financing and sector issues.

Professional publications. The project results (capturing the relation between project outputs and impact) will be presented in professional publications and in the media dealing withhealth hazards, for further dissemination and replication.

Events planned by the project will be an opportunity for presentation of results to extended audience.

Direct contacts. UNDP will be available throughout the duration of the project for presentation of lessons and experiences to other interested parties, policy makers, etc.

Visibility and communication are important elements of this project due to the specifics and importance of the themes covered. The main messages communicated throughout the implementation will be:

- The purpose of visibility activities will be the introduction of the issues and challenges of raising prevention, preparedness and responsiveness in emergency management to the local population.
- Significance of EU funding and support. The visibility activities will promote the positive impact of EU funding initiatives in Serbia. This should contribute to better awareness/perception of the EU in general sense.

Visibility activities will be implemented at the overall project level. Here, visibility and communication activities will be implemented horizontally through all the activities. Messages in this segment will promote the sector, EU initiatives, governmental efforts and UN support. The main channels of communication will include public events in Serbia, conferences/field visits, media interactions, written documents, global meetings and forums organized under the auspices of the UN. Participation of a UN Agency in the project represents an added value in all respects.

The visibility activities will be specifically designed to promote improved national and local infrastructure and services related to emergency management and civil protection among the general Serbian public. They will highlight the joint work and cooperation between the EU, Government of Serbia and UN in this important endeavour and the positive impact they make on the progress of the EU accession processes in Serbia. All visibility and promotion activities will be implemented in line with the relevant contractual requirements and the Joint Visibility guidelines for EC-UN in the field.

Sustainability and Scaling Up

The action is designed in a way to provide a direct answer to challenges at the national and local level.

Direct immediate impact (technical)

Project activities and results are providing solutions to limited national and local capacities, resources and facilities related to public health system and emergency management. The project's direct impact will be the strengthening of the health emergency management system and public health care system as whole, to react in the case of biological and chemical accidents and interact with the existing civil protection system at national and local level. Equipment, potential constructions and reconstructions, along with capacity development, will address some of the most pressing issues of disaster management in the health sector at national and local level, contributing to resilient infrastructure and responsive services. By creating an integrated healthcare information system, the digitalization of the healthcare sector shall almost immediately augment its capacities and capabilities to provide quality services to the general public, with fewer time constraints and optimal utilization of public health system resources at the public's disposal. The Project will restrain from introducing new structures in already cumbersome and overburden public health system. It will keep a focus on strengthening existing once and decreasing maintenance costs.

Long-term impact (societal)

Cultural, gender specific and vulnerable groups needs will be particularly considered when upgrading the Disaster Risk Register public health system data. This will enable national stakeholders and local communities in designing case-based risk reduction measures and proper allocation of resources during emergency response, which will, in case of disasters that are likely to happen in the near or distant future, directly result in the number of lives saved. Activities will include strengthening of systems and mechanisms for inclusion and participation in risk governance at national and local level; coordination with national disaster management authorities and the national system for emergency management, and building collaboration for disaster risk reduction; promoting good practices in disaster risk reduction, including supporting the organization and training of local healthcare professionals, as well as other actors involved in biological and chemical hazards management system. **At least 70% of project beneficiaries should be women and girls**.

Policy level impact

The Action will create conditions for embedding preventive and responsive health sector planning in the national strategic and planning framework and will establish an adequate procedural and regulatory framework for detection, risk assessment and reaction. Especially important is the encouraging cooperation and inter-institutional coordination between the public health sector and the existing system for risk reduction and emergency response, established on the basis of Law on Disaster Risk Reduction and Emergency Management and the Public Health Law.

Dissemination and replication of outcomes

The UNDP/WHO will prepare presentations of results in a way to allow their use in other initiatives and areas (each result will be presented with its background, main actions and lessons learned). Channels used in the process will include:

- Press-releases and media publications. The UNDP/WHO will issue regular press-releases and ensure media publications. These will be aimed at the general public, significance of EU financing, promoting governmental efforts, and sectoral issues.
- Professional publications. The project results (capturing the relationship between project outputs and impact) will be presented in professional publications and in the media dealing with emergency management and civil protection issues, for further dissemination and replication.
- Events planned by the project will be an opportunity for presentation of results to an extended audience.
- Direct contacts. The UNDP/WHO will be available throughout the duration of the project for presentation of lessons and experiences to other interested parties, policy makers, etc.

Sustainability of the action after completion:

Financial sustainability: The project focuses on strengthening existing public institutions and organizations, operated and maintained by public funds. Initiatives proposed in the project (infrastructure and equipment upgrades) are already a part of the beneficiaries' assets and are regularly represented in their annual budgets, with a legal obligation to national and local institutions to operate, staff and maintain the infrastructure and equipment. The improvements may even bring positive financial benefits by reducing the energy loss as a result of introducing energy efficient measures and solution. The equipment purchased from the project will in most cases replace obsolete or equipment at the end of its life span. The new equipment will ensure more efficient and effective implementation of services, thus reducing overall cost of rendered services and facility maintenance costs. The capacity building activities accompanying infrastructure and equipment upgrades will raise the competencies and efficiency of participating staff and reduce dependence on international assistance funding, while the development of procedural and improvement of the regulatory framework will result in decrease in use of contingencies, as well as streamline preparedness and response in a more structured and foreseeable manner, easy to monitor and manage.

Institutional sustainability: In all its activities, the project will produce relevant and important deliverables and results that contribute to strengthening the institutions involved. The project does not envisage creation of new institutions; rather, all efforts will be focused on ownership of results by existing institutions, enabling institutions to function better, and enabling better vertical and horizontal relations among institutions.

UNDP/WHO will intensively work on building capacities of health care workers, public health system employees and first line responders, sanitary inspectors, laboratory staff, and other relevant stakeholders.

The training and workshop support delivered will equip the participating staff with significant knowledge and experience in implementation of activities aimed at supporting health emergency management and civil protection. The knowledge and experience gained from the project will be used during and after the conclusion of the implementation period. The trainees (health system employees and sanitary inspectors) will have their competencies confirmed with certificates.

The Project will directly contribute to strengthening of the national and local level institutions. It will introduce better standards and models based on EU and international good practices, and, as a result, the partner institutions will have better capacity and will be more efficient in delivery of their services, even after the closure of the project. The continuous support to national mechanisms for coordination in case of emergency brings better quality to the coordination process, and also helps expand the coordination and networking to a wide range of stakeholders and groups.

Policy level sustainability: The project contains significant elements, which bring added value to existing policy practices and show the perspective for sustainability at this level.

Lessons learned from the development of the Disaster Risk Register will assist policy development and encourage the development of new mechanisms, which would effectively support the development of the health sector resilience.

Environmental sustainability: The interventions planned in the project have close linkages to environmental issues. The infrastructure improvements will have a positive impact on reducing energy consumption by implementing energy efficiency measures: using more efficient heating systems, efficient electrical appliances and cooling devices; improved insulation; climate change mitigation measures, specifically to reduce emission of CO2 as one of the main greenhouse gasses. Moreover, an integrated approach to building design will apply the use of energy efficient materials and constructions practices and efficient waste and water management practices. Recyclables like paper, metal, glass and plastics will be collected separately in both reconstructed buildings and delivered to persons permitted to collect, treat and store such materials. Environmental monitoring of all construction operations will be required. During the reconstruction of buildings, a system for managing of construction and demolition waste will be established. Separate collection and preparation of the recyclable/reusable residues, where appropriate, will be mandatory for the construction company. In accordance with Article 35 of the Law on Waste Management, hazardous waste from the construction sites must be collected and transported separately. Hazardous waste fractions, if they exist (asbestos waste, etc.), will be kept separate, sampled, analyzed and removed from the construction site by licensed companies. Each reconstructed facility (Biosafety Level 2/2+ laboratories) will be equipped with medical waste management and disposal system in accordance with Rule Book on Medical Waste Disposal, as well as the EU and UN guidelines on infectious waste disposal.

IV. PROJECT MANAGEMENT

Cost Efficiency and Effectiveness

UNDP and WHO will implement internal evaluation at the key milestones of the project. Following this evaluation, reports will be prepared in line with the standard methodology. Effectiveness, efficiency, utility and sustainability will be among issues reviewed. The process will not only increase the impact of the project but will also provide valuable messages and lessons learned for the policy making level and participating stakeholders.

Project Management

The overall coordination at the level of the entire project will be ensured by the UNDP in collaboration with the WHO.

At the level of partnership, the responsibilities, resources and other inputs for each of the activities and results are pre-defined. The UNDP is committed to following regularly and thoroughly, and to report about achievements at the level of partnership.

The UNDP is administrative agent for the multiparter EU action with overall management and coordination of the Action, including overall financial management, reporting and any amendments of the contract. However, project management and coordination will be conducted together with the WHO through active participation of all the beneficiary institutions (final beneficiaries and end recipients) and regular coordination meetings.

The project is designed in a way that some of the activities are coordinated by the respective partner agencies, and some of them are coordinated in mutual synergy. The overall coordination at the level of the entire Action will be ensured by the UNDP. Responsibilities for the activities were allocated based on experiences and competencies of agencies. Close coordination with the EUD will be done in the process. At the level of partnership, the responsibilities, resources and other inputs for each of the activities and results are pre-defined. UNDP and WHO are committed to follow regularly and thoroughly their respective activities and to report about achievements at the level of partnership. The position of the partner agencies in the project is as follows:

UNDP - The lead agency will be responsible for overall management and coordination of the project. It will establish a coherent system of communication between partners and collect information about proceedings in specific activities. UNDP will be a focal point for communication with the Contracting Authority and will facilitate procedural issues (financial management, reporting, eventual amendments of the contract).

WHO - The partner agency will be responsible for implementation of the activities of concern of policy coherence and will support UNDP in by mainstreaming WHO international standards along the laboratory upgrades, Disaster Risk Register and eHealth.

Means of implementation of the action:

The core project team described in the previous point will carry out the overall implementation of the activities. To support the project team, per-diems/subsistence and travel costs will be allocated. Both segments are calculated in line with the existing UNDP and WHO standards. Travel and presence at local level is taken into account in planning of these resources.

The project funds will be allocated for purchase of equipment for institutions in organizations in the sector of health, digitalization and emergency management, precisely the Ministry of Health, National Institute of Public Health, respective laboratories of the public health system, the Serbian Office for IT and eGovernment, and the RGA. Purchase of equipment is planned in line with concrete and proven needs at national and local level. This proposal provides a list of equipment in the description of activities and the project budget. Furthermore, project funds will be allocated for (re)construction works of selected laboratories. Reconstruction works are planned in line with the proven needs and based on the already assessed technical documentation for the (re)construction at national and local level. This proposal provides a description of reconstruction works and the project budget.

Costs of local office included in the project budget are limited to the costs of the utilities and sundries (such as rent, depreciation costs, assets composing project office, maintenance/repair, consumables and supplies, IT and telecommunication, energy/water, facility/security costs) of the designated project office, which will be housed at the UNDP and WHO Serbia Country Offices respectively.

The UNDP and the WHO will engage external expert services in support of implementation of specific segments of activities. This external assistance will cover professional services which cannot be delivered by internal sources. An example of such an activity is the training needs assessment and training in the civil protection sector. External assistance will also be engaged in support services: implementation of events, translation services, printing of publications and promotional materials. As (re)construction works are an important part of the project, the UNDP and the WHO will engage external experts/companies in support of the following activities: design of technical documentation, development of technical specifications, technical control/independent verification of prepared documentation, construction works and independent supervision of works.

Government ownership:

All the specific support activities elaborated in this proposal (support services, equipment, infrastructure) are coming directly from the beneficiaries and end-recipients (Ministry of Health, NIPH, respective laboratories, PIMO, SEM and RGA). The institutions which have proposed the activities are strongly committed, and therefore full support in the implementation phase and continuation of activities/results after the conclusion of the project is expected. The UNDP and the WHO have checked the proposed activities and agreed that the overall project design and the specific support intervention correspond to the present priority needs.

Activities to ensure visibility of the action and EU funding:

Communication and visibility will be given high importance during the implementation of the Action and will demonstrate the achievement of agreed results and objectives, the EU support to Serbia and contribution to the accession process, as well as the specific benefits to the general public.

The main messages communicated throughout the implementation will be:

- Promotion of issues and challenges of public health system resilience and emergency management. The purpose of visibility activities will be the introduction of the issues and challenges of raising prevention and responsiveness in health emergency management to the health system professionals and local and general population.
- Significance of EU funding and support. The visibility activities will promote the positive impact of EU funding initiatives in Serbia. This should contribute to better awareness/perception of the EU in general sense.
- Significance of the positive leading role of the Government institutions and local selfgovernments in ensuring continuous improvement of the public health system and emergency management at the national and local level.

Visibility activities will be implemented at overall project level, horizontally through all activities. Messages will promote the sector, added value and impact of the EU's interventions, government efforts, UN support, promote transparency and accountability on the use of funds, and will as well aim at strengthening general public awareness on the results pursued and the change they bring to the individual and society as whole.

The main channels of communication will include public events in Serbia, conferences/field visits, media interactions, written documents, global meetings and forums organized under the auspices of the UN.

Participation of a UN Agency in the project represents an added value in all respects. The visibility activities will be specifically designed to promote improved national and local infrastructure and services related to public health system preparedness and response among the general Serbian public. They will highlight the joint work and cooperation between the EU, Government of Serbia and the UN in this important endeavor, and the positive impact they make on the progress of the EU accession processes in Serbia.

All necessary measures will be taken to publicize the fact that the Action received funding from the EU.. All visibility and promotion activities will be implemented in cooperation with EU Delegation to Serbia, in line with the relevant contractual requirements and the Joint Visibility guidelines for EC-UN in the Field and UNDP and WHO policies, regulations, rules and practices on donor visibility.

A visual identity of the project shall be designed in cooperation with EU Delegation to Serbia to be used and communicated throughout the implementation of the envisaged activities. The action shall be represented in the visibility platform #EUzatebe where information on the design of the project, expected results and project partners are available. The same platform shall be used for publishing of the project news and sharing info and material from visibility events. In this manner the Action is embedded in overall portfolio of the EU assistance to Serbia, besides its representation on the UNDP website and the WHO Country Office Facebook page. Furthermore, the visibility of the donor shall be achieved by branding of supplies procured, works performed and services rendered within this action, as well as in visual representation at workshops, training, meetings and public campaigns and the use and distribution of visibility material in these events.

V. **RESULTS FRAMEWORK**

Intended Outcome as stated in the UNDAF/Country Programme Results and Resource Framework: By 2020, high quality, inclusive, equitable, gender-sensitive, and age-appropriate health services that protect patient rights are available and utilized by all

Outcome indicators as stated in the Country Programme Results and Resources Framework, including baseline and targets:

Output 3.3: Natural and human induced risks effectively addressed

Output 1.3: Digital transformation of public administration accelerated

Indicative Indicator 1.3.1: User centricity of eGovernment services score

Baseline: 68 (2018)

Target: 74 (2025)

Indicative Indicator 1.3.2: Accessibility of public services indicator value

Baseline: 3 (2019)

Target: 4 (2025)

Applicable Output(s) from the UNDP Strategic Plan:

Natural and human induced risks effectively addressed

Digital transformation of public administration accelerated

Project title and Atlas Project Number: EU for a More Responsive Public Health System, Project number: 00127313

EXPECTED OUTPUTS	OUTPUT INDICATORS	DATA SOURCE	BASELINE		TARGETS (by frequency of data collection)				DATA COLLECTION METHODS & RISKS
			Value	Year 2023	Year 2024	Year 2025	Year 2026	Final Year 2027	
Activity A.1.1 Implementation of the Laboratory Quality Management System (LQMS) in the microbiological laboratories	1.1: Number of laboratories with trained staff for LQMS and LQSI tool	Programme/Project Reports Report on Implementation of Public Health Strategy Annual IHR/ECDC report Official Gazette of the Republic of Serbia	0	15	25	25	25	25	Monitoring progress over expected results Field visits Analysis of construction progress reports Analysis of supervision reports

Activity A.1.2 Laboratories reconstruction and upgrade in line with LBM4	1.2. Number of fully operational laboratories in line with the WHO LQMS (Belgrade, Nis, Kragujevac)	Project Reports Yearly Report of the MoH	0	1	2	3	3	3	Analyses of handover reports Field visits Analysis of construction progress reports Analysis of supervision reports
Activity A.2.1 Development of procedures for healthcare system response to emergencies at national and local level and public health emergency management training for the health system employees including sanitary inspectors	2.1: % local administration trained to apply methodology for risk assessment by the end of 2026	NIPH Reports Project Reports	0%	25%	50%	70%	90%	90%	Monitoring level of realisation against defined targets and expected results
Activity A.2.2 Disaster Risk Register upgrade with public health risks	2.2: Disaster Risk Register includes health related issues in Serbia	Republic of Serbia Reports of the Authority responsible for risk management	0	0	1	1	1	1	Monitoring progress over expected results Field visits Consultants Reports Technical Supervision Reports
Activity A.2.3 Training of the professionals for psycho-social support for groups affected by public health crisis and emergency based on the defined psycho- social support manual	2.3: Number of health care professionals trained for psycho-social support in emergencies	Implementation Progress Reports MoH Reports	100	75	75	150	225	250	Training Register Training Evaluation Reports

Activity A. 3.1 Digitalization and E- Health	3.1.1: e-Health System operational and functional3.1.2: Number of PHCs covered with E-Health training and outreach material	MoH Reports Yearly report on the works of the GoS	0	0	0	0	1 136	1 156	Monitoring progress over expected results Field visits Analyses of consultants Reports / Technical Supervision Reports
Activity A.4.1 Implementation of the RCCE Plan, including trainings, SimEx, development SOPs, etc	 4.1.1: Number of SOPs and tools for RCCE in emergencies 4.1.2: Number of public health professionals trained on RCCE in emergencies 4.1.3: Number of simulation exercise for RCCE 	Implementation Progress Reports Training Register Event Scenarios	0 0 0	1 0 0	2 0 0	4 20 2	5 40 4	6 55 6	Analyses of training reports
Activity A.4.2 Emergency Awareness Raising Events	 4.2.1 Simulation exercise for local communities organized including at least 10 awareness-raising events 4.2.2 Number of people reached through communication activities 	Implementation Progress Reports Media Reports Event Scenarios Lists of participance	0	0	3 150,000	6 300,000	9 400,000	10 500,000	Field visits Analysis of Media Reporting Written follow up with participants Evaluation of the Event

VI. MONITORING AND EVALUATION

UNDP and WHO will establish an internal system of monitoring and evaluation to regularly check the activities and results. The system will use the original benchmarks presented in this document as the basis. Each of the activities is related to specific outcome/outputs and equipped with quantified indicators. Throughout the implementation, the achieved results will be checked against original plans – time perspective/milestones will be taken into account. In case of discrepancies from plans, UNDP and WHO will introduce corrective measures. Normal procedure for elimination of discrepancies will be (a) identifying a discrepancy, (b) estimation of the level of discrepancy and potential impact (time, quality and quantity wise), (c) definition of reasons (internal, external), (d) preparation of the contingency plan (responsibilities, activities), (e) implementation of the contingency plan, (f) review. UNDP and WHO have clearly defined roles and responsibilities in the implementation phase. Each will contribute with their reports and inputs into the internal monitoring system.

Regular reporting will be established at the level of partnership. While monitoring will be a constant process, internal evaluation will be implemented at the key milestones of the project. Following this evaluation, reports will be prepared in line with the standard methodology. Effectiveness, efficiency, utility and sustainability will be among issues reviewed. The process will not only increase the impact of the project but will also provide valuable messages and lessons learned for the policy making level and participating stakeholders.

The project also anticipates the possibility of external evaluation by the EUD or nominated bodies as per contractual requirements. In this process, UNDP and WHO will ensure full cooperation and availability of project-related information.

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
Track results progress	Progress data against the results indicators in the RRF will be collected and analysed to assess the progress of the project in achieving the agreed outputs.	Quarterly, or in the frequency required for each indicator.	Slower than expected progress will be addressed by project management.	N/A	N/A
Monitor and Manage Risk	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.	N/A	N/A
Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners	At least annually	Relevant lessons are captured by the project team and used to inform management decisions.	N/A	N/A

Monitoring Plan

	and integrated back into the project.				
Annual Project Quality Assurance	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.	N/A	N/A
Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	At least annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.	N/A	N/A
Project Report	A progress report will be presented to the Project Board and key stakeholders, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk long with mitigation measures, and any evaluation or review reports prepared over the period.	Annually, and at the end of the project (final report)		N/A	N/A
Project Review (Project Board)	The project's governance mechanism (i.e., project board) will hold regular project reviews to assess the performance of the project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. In the project's final year, the Project Board shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences.	Monthly and on the ad hoc basis	Any quality concerns or slower than expected progress should be discussed by the project board and management actions agreed to address the issues identified.	N/A	N/A

Evaluation Plan

Evaluation Title	Partners (if joint)	Related Strategic Plan Output	UNDAF/CPD Outcome	Planned Completion Date	Key Evaluation Stakeholders	Cost and Source of Funding
EU outsourced evaluation	WHO	1	1	February 2027	MoH NIPH SEM MEI	N/A

VII. MULTI-YEAR WORK PLAN

			Planned Bud	get by Year			PLANNED BUDGET			
EXPECTED OUTPUTS	PLANNED ACTIVITIES	Y1	Y2	Y3	Y4	RESPONSIBLE PARTY	Funding Source	Budget Description	Amount in USD	
Output 1: Improved health care system for reaction in emergencies in line with EU and international standards Gender marker: GEN 1		487,644.49	479,683.63	479,683.63	479,683.63	UNDP/WHO	EU	71400 Contractual services - Individuals	1,926,695.37	
		1,614.64	717.62	717.62	717.62	WHO	EU	71600 Travel	3,767.49	
	Activity A.0.1	10,979.55	10,979.55	10,979.55	10,979.55	UNDP/WHO	EU	71600 Travel	43,918.19	
	Establishment and coordination of Decision- Making Process, (Project Management)	3,229.28	3,229.28	3,229.28	3,229.28	UNDP	EU	73000 - Rental & Maintenance- Premises	12,917.12	
		9,687.84	9,687.84	9,687.84	9,687.84	UNDP/WHO	EU	72500 - Supplies	38,751.35	
		-	-	-	10,764.26	UNDP	EU	74100 - Professional Services	10,764.26	
		19,698.60	15,464.66	15,464.66	15,464.66	UNDP/WHO	EU	74200 - Audio Visual&Print Prod Costs	66,092.57	
	Activity A.1.1	25,317.55	12,658.77	12,658.77	12,658.77	WHO	EU	75700 -Trainings and Workshops	63,293.86	
	Implementation of the Laboratory Quality Management System (LQMS) in the	26,350.91	13,175.46	13,175.46	13,175.46	WHO	EU	71200 - International Consultants	65,877.29	
	microbiological laboratories	45,209.90	22,604.95	22,604.95	22,604.95	WHO	EU	71300 - Local Consultants	113,024.76	
	Activity A.1.2 Laboratories reconstruction and upgrade in line with LBM4	164,836.74	164,836.74	164,836.74	-	UNDP	EU	72200 - Equipment and Furniture	494,510.22	

	16,146.39	2,691.07	2,691.07	-	UNDP	EU	71300 - Local Consultants	21,528.53
	1,076,426.26	1,971,742.73	1,971,742.73	-	UNDP	EU	72100 - Company contracts	5,019,911.73
Activity A.2.1 Development of procedures for healthcare system response to emergencies at national and local level and public health emergency management training for the health system employees including sanitary inspectors	50,053.82	54,359.53	54,359.53	54,359.53	WHO	EU	71300 - Local Consultants	213,132.40
	3,293.86	2,561.89	2,561.89	2,561.89 WHO EU I		71200 - International Consultants	10,979.55	
	37,072.12	28,833.87	28,833.87	28,833.87	WHO	EU	75700 -Trainings and Workshops	123,573.74
Activity A 2 2 Disaster Risk	60,258.34	73,649.09	-	-	UNDP	EU	71300 - Local Consultants	133,907.43
	97,362.76	118,998.92	-	-	UNDP	EU	72200 - Equipment and Furniture	216,361.68
	245,011.25	175,440.84	-	-	UNDP	EU	72100 - Company contracts	420,452.10
Register upgrade with public health risks	3,423.04	3,035.52	-	-	WHO	EU	71200 - International Consultants	6,458.56
	131,786.87	116,867.60	-	-	WHO	EU	71300 - Local Consultants	248,654.47
	7,416.58	6,576.96	-	-	WHO	EU	75700 -Trainings and Workshops	13,993.54
Activity A.2.3 Training of the professionals for psycho-social support for groups affected by public	-	3,767.49	3,767.49	-	WHO	EU	71300 - Local Consultants	7,534.98
health crisis and emergency based on the defined psycho-social support manual	-	10,495.16	10,495.16	-	WHO	EU	75700 -Trainings and Workshops	20,990.31
Activity A. 3.1 Digitalization and E-Health	71,540.06	476,360.18	476,360.18	476,360.18	UNDP	EU	71300 - Local Consultants	1,500,620.60

			50,457.48	50,457.48	50,457.48	UNDP	EU	74200 - Audio Visual&Print Prod Costs	151,372.44
		24,361.23	22,737.14	22,737.14	22,737.14	WHO	EU	71300 - Local Consultants	92,572.66
		116,424.00	108,662.40	108,662.40	108,662.40	WHO	EU	71200 - International Consultants	442,411.19
		20,678.72	19,300.13	19,300.13	19,300.13	WHO	EU	74200 - Audio Visual&Print Prod Costs	78,579.12
	Activity A.4.1	_	1,937.57	1,937.57	1,937.57	WHO	EU	71200 - International Consultants	5,812.70
	Implementation of the RCCE Plan, including trainings, SimEx, development SOPs etc.	10,764.26	9,149.62	9,149.62	9,149.62	WHO	EU	71300 - Local Consultants	38,213.13
		-	8,898.46	8,898.46	8,898.46	WHO	EU	75700 -Trainings and Workshops	26,695.37
	Activity A.4.2 Emergency	-	4,036.60	4,036.60	4,036.60	UNDP	EU	74200 - Audio Visual&Print Prod Costs	12,109.80
	Awareness Raising Events	39,289.56	13,275.92	13,275.92	13,275.92	UNDP	EU	75700 -Trainings and Workshops	79,117.33
			Sub	o-Total for O	utput 1				
Evaluation (as relevant)	EVALUATION						EU		
General Management Support	GMS 7%						EU		820,721.71
Contingency reserve							EU		371,797.63
TOTAL									12,917,115.18

VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

UNDP and WHO will jointly establish a Project Steering Committee (PSC) to ensure the national ownership and achievement of project objectives through the strategic level steering and informed decision-making process. Therefore, the overall progress, milestones and mitigation measures to potential difficulties and risks shall be agreed upon. The PSC will consist of representatives of: EU Delegation, Ministry of Health, NIPH "dr Milovan Jovanovic Batut", Ministry of Interior – SEM; Ministry of European Integration, UNDP and WHO. The final composition of the PSC, in terms of appointed persons, will be discussed and agreed upon at the beginning of the implementation of the Action. The PSC will take strategic decisions including decision on the usage of contingency reserve and supervise the proper implementation of the Action. The Steering Committee Members shall meet quarterly unless further ad hoc meetings are necessary.

UNDP with the support and programmatic input of WHO shall provide support to the PSC, including organizing meetings and drafting/circulation of agendas (2 weeks before meetings), documentation for consideration (1 week before meetings) and taking minutes (1 week after meetings). Implementation/non-implementation of PSC decisions shall be noted in the subsequent report.

Project activities will be implemented by a competent project team. Each of the beneficiaries will contribute to the team with experienced staff with first-hand technical experience in the themes covered within their respective activities and interventions. The following functions are proposed within the project team:

- UNDP Overall Portfolio Manager An 80% Portfolio Manager is proposed in the team, coordinating all project activities. He/she will be responsible for coordination and communication within the project team, relations with beneficiaries, end recipients and stakeholders and maintenance of procedural aspects. The Portfolio Manager will supervise the internal management proceedings and coordinate any corrective actions with beneficiaries. The assigned Portfolio Manager will ensure smooth coordination with UNDP Digital Portfolio in realization of the eHealth related activities. The Portfolio Manager will supervise communication and visibility activities at the horizontal level.
- UNDP Project Manager (100%) at operational level, the Project Manager will be directly primarily responsible for the Disaster Risk Register Public Health Upgrade, development of the e-Health system, infrastructure upgrades, procurement of laboratory and other equipment and realization of the Emergency Health Awareness Raising Events.
- UNDP Project Coordinator (100%) will bear the responsibility for Programme support and management of content activities within UNDP scope of work. Communication and reporting towards PM.
- eHealth Specialist (100%) Provides an expert input, coordination with the eHealth WG, MoH, WHO and coordination of the consultants within eHealth component. Reports to Portfolio Manager – Digital and works closely with Portfolio Manager assigned to the Action.
- UNDP Project Associate (100%) provides administrative support and communication activities. Office support, correspondence etc. Communication and reporting towards PM.
- UNDP Finance Associate (100%) and Finance and Administration Assistant (100%) will have the overall responsibility for financial management, consolidation of inter-agency financial transaction, and compliance with contractual rules and regulations. UNDP Finance and Admin Associate will support in consolidating financial reporting and expenditure compliance towards of both partner agencies.
- UNDP Procurement Associate (60%) has responsibility for implementation of the extensive amount of procurement cases including works, equipment and services.
- WHO Technical Officer for Emergency Preparedness and Health Systems (80%) will be primarily responsible for activities implemented by the WHO, related to capacity building and strengthening of the public health laboratory system and capacity of the health system for emergency preparedness and response. The Technical Officer for Emergency Preparedness and Health Systems will maintain regular communication with the Project Manager to review progress at activity level and contribution to overall project, focusing on the joint components,

with the UNDP, related to the e-Health system and emergency-awareness-raising. The Technical Officer for Emergency Preparedness and Health Systems will maintain contacts with respective stakeholders and target groups, in coordination with the Portfolio Manager.

- WHO Technical Officer for Risk Communication and Community Engagement (RCCE) with 20% of work engagement will manage activities related to capacity building for communication in emergencies and will be responsible for all visibility actions implemented by WHO within the Project. WHO Admin/finance Support (100%) will have the overall responsibility for financial management and compliance with contractual rules and regulations within activities implemented by WHO and will provide administrative support during project implementation.
- UNDP and WHO will also provide technical assistance to the MoH by engaging and deploying to the MoH three Technical Officers (two for 100% engagement in the period of 38 months and one at 60% of work time during implementation of the action) to facilitate implementation of the Action and coordination with the complementary actions.



IX. LEGAL CONTEXT

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of (country) and UNDP, signed on (date). All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

This project will be implemented by UNDP and WHO ("Implementing Partners") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

X. **RISK MANAGEMENT**

UNDP (DIM)

- 1. UNDP as the Implementing Partner will comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS.)
- 2. UNDP as the Implementing Partner will undertake all reasonable efforts to ensure that none of the [project funds]¹ [UNDP funds received pursuant to the Project Document]² are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq sanctions list.shtml. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
- 3. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).
- 4. UNDP as the Implementing Partner will: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
- 5. In the implementation of the activities under this Project Document, UNDP as the Implementing Partner will handle any sexual exploitation and abuse ("SEA") and sexual harassment ("SH") allegations in accordance with its regulations, rules, policies and procedures.
- 6. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.
- 7. UNDP as the Implementing Partner will ensure that the following obligations are binding on each responsible party, subcontractor and sub-recipient:
 - a. Consistent with the Article III of the SBAA [or the Supplemental Provisions to the Project Document], the responsibility for the safety and security of each responsible party, subcontractor and sub-recipient and its personnel and property, and of UNDP's property in such responsible party's, subcontractor's and sub-recipient's custody, rests with such responsible party, subcontractor and sub-recipient. To this end, each responsible party, subcontractor and sub-recipient shall:

¹ To be used where UNDP is the Implementing Partner

² To be used where the UN, a UN fund/programme or a specialized agency is the Implementing Partner

- i. put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- ii. assume all risks and liabilities related to such responsible party's, subcontractor's and sub-recipient's security, and the full implementation of the security plan.
- b. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the responsible party's, subcontractor's and sub-recipient's obligations under this Project Document.
- c. In the performance of the activities under this Project, UNDP as the Implementing Partner shall ensure, with respect to the activities of any of its responsible parties, sub-recipients and other entities engaged under the Project, either as contractors or subcontractors, their personnel and any individuals performing services for them, that those entities have in place adequate and proper procedures, processes and policies to prevent and/or address SEA and SH.
- d. Each responsible party, subcontractor and sub-recipient will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, subcontractors and sub-recipients in implementing the project or programme or using the UNDP funds. It will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.
- e. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to each responsible party, subcontractor and sub-recipient: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. Each responsible party, subcontractor and sub-recipient agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.
- f. In the event that an investigation is required, UNDP will conduct investigations relating to any aspect of UNDP programmes and projects. Each responsible party, subcontractor and sub-recipient will provide its full cooperation, including making available personnel, relevant documentation, and granting access to its (and its consultants', subcontractors' and subrecipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with it to find a solution.
- g. Each responsible party, subcontractor and sub-recipient will promptly inform UNDP as the Implementing Partner in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where it becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, each responsible party, subcontractor and subrecipient will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). It will provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

UNDP will be entitled to a refund from the responsible party, subcontractor or sub-recipient of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or sub-recipient under this or any other agreement.

Where such funds have not been refunded to UNDP, the responsible party, subcontractor or sub-recipient agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to such responsible party, subcontractor or sub-recipient for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

<u>Note</u>: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

- h. Each contract issued by the responsible party, subcontractor or sub-recipient in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from it shall cooperate with any and all investigations and post-payment audits.
- i. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project or programme, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.
- j. Each responsible party, subcontractor and sub-recipient shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to its subcontractors and sub-recipients and that all the clauses under this section entitled "Risk Management Standard Clauses" are adequately reflected, *mutatis mutandis*, in all its sub-contracts or sub-agreements entered into further to this Project Document.

XI. ANNEXES

- 1. Project Quality Assurance Report
- **2.** Social and Environmental Screening Template, including additional Social and Environmental Assessments or Management Plans as relevant.
- **3. Risk Analysis**. Use the standard <u>Risk Log template</u>. Please refer to the <u>Deliverable</u> <u>Description of the Risk Log</u> for instructions
- 4. Project Board Terms of Reference and TORs of key management positions
- 5. Feasibility Study for Construction Works
- 6. National Partner Capacity Assessment