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ANNEX IV

to the Commission Implementing Decision on the Annual action plan in favour of the Republic of North Macedonia for 2024

Action Document EU for Health

ANNUAL ACTION PLAN

This document constitutes the annual work programme in the sense of Article 110(2) of the Financial Regulation, and annual and multiannual action plans and measures in the sense of Article 9 of IPA III Regulation and Article 23(2) of NDICI - Global Europe Regulation.

1. SYNOPSIS

1.1. Action Summary Table

Title	EU for Health Annual action plan in favour of North Macedonia for 2024
OPSYS	OPSYS business reference: ACT-62393
ABAC	ABAC Commitment level 1 number: JAD.1354913
Basic Act	Financed under the Instrument for Pre-accession Assistance (IPA III)
Economic and Investment Plan (EIP)	Yes Health Resilience – 100%
EIP Flagship	Yes Flagship: VIII Digital Infrastructure” – 67%
Team Europe	No
Beneficiary	The Action shall be carried out in North Macedonia
Programming document	IPA III Programming Framework
PRIORITY AREAS AND SECTOR INFORMATION	
Window and thematic priority	Window 4: Competitiveness and inclusive growth Thematic Priority 1: Education, employment, social protection and inclusion policies, and health (100 %)
Sustainable Development Goals (SDGs)	Main SDG 3: Ensure healthy lives and promote well-being for all at all ages. Other significant SDGs : SDG 1: End poverty in all its forms everywhere SDG 5: Achieve gender equality and empower all women and girls
DAC code(s)	121 Health, General (20%)

	12110 Health policy and administrative management (20%) 123 Non-communicable diseases (NCDs) 80% 12310 NCDs control, general (50%) 12350 Other prevention and treatment of NCDs (30%)			
Main Delivery Channel	12000-Recipient Government			
Targets	<input type="checkbox"/> Climate <input checked="" type="checkbox"/> Gender <input type="checkbox"/> Biodiversity			
Markers (from DAC form)	General policy objective	Not targeted	Significant objective	Principal objective
	Participation development/good governance	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Aid to environment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Gender equality and women's and girl's empowerment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Reproductive, maternal, newborn and child health	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Disaster Risk Reduction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Inclusion of persons with Disabilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Nutrition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RIO Convention markers	Not targeted	Significant objective	Principal objective
	Biological diversity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Combat desertification	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Climate change mitigation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Climate change adaptation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Policy objectives	Not targeted	Significant objective	Principal objective
	EIP	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	EIP Flagship	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
	Tags:	YES	NO	
	Transport	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Energy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Environment and climate resilience	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Digital	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Internal markers and Tags

Economic development (incl. private sector, trade and macroeconomic support)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Human Development (incl. human capital and youth)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Health resilience	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Migration and mobility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Agriculture, food security and rural development	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Rule of law, governance and Public Administration reform	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Digitalisation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tags	YES		NO
digital connectivity	<input checked="" type="checkbox"/>		<input type="checkbox"/>
digital governance	<input checked="" type="checkbox"/>		<input type="checkbox"/>
digital entrepreneurship	<input type="checkbox"/>		<input checked="" type="checkbox"/>
digital skills/literacy	<input type="checkbox"/>		<input checked="" type="checkbox"/>
digital services	<input checked="" type="checkbox"/>		<input type="checkbox"/>
Connectivity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tags	YES		NO
digital connectivity	<input checked="" type="checkbox"/>		<input type="checkbox"/>
energy	<input type="checkbox"/>		<input checked="" type="checkbox"/>
transport	<input type="checkbox"/>		<input checked="" type="checkbox"/>
health	<input checked="" type="checkbox"/>		<input type="checkbox"/>
education and research	<input type="checkbox"/>		<input checked="" type="checkbox"/>
Migration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduction of Inequalities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COVID-19	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BUDGET INFORMATION

Amounts concerned	<p>Budget line: 15.020201</p> <p>Total estimated cost: EUR 14 160 000</p> <p>Total amount of EU budget contribution: EUR 12 000 000</p> <p>This action is co-financed in parallel co-financing by the national budget of North Macedonia for an amount of EUR 2 160 000</p>
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MANAGEMENT AND IMPLEMENTATION

Implementation modalities (management mode and delivery methods)	<p>Direct management through:</p> <p>- Procurement</p>
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	Indirect management with entrusted entities
Final Date for conclusion of Financing Agreement	At the latest by 31 December 2025
Final date for concluding contribution / delegation agreements, procurement and grant contracts	3 years following the date of conclusion of the financing agreement, with the exception of cases listed under Article 114(2) of the Financial Regulation
Indicative operational implementation period	72 months following the conclusion of the Financing Agreement
Final date for implementing the Financing Agreement	12 years following the conclusion of the Financing Agreement

1.2. Summary of the Action

The Action focuses on improving the health and well-being of the citizens of North Macedonia by modernising and digitalising the healthcare system. It includes strengthening teleradiology services, integrating mobile primary healthcare services into the e-health system, upgrading the Emergency Medical Service's information technology, and enhancing the health cloud infrastructure. This EU assistance will significantly improve health data collection and utilisation, enabling North Macedonia to contribute, in a medium-term perspective, to EU teleradiology and e-health platforms. The Action also extends lung and colorectal cancer screening programmes and modernises the ambulance fleet to meet international and European standards. These efforts aim to enhance healthcare services, improve patient outcomes, and prevent non-communicable diseases.

The Action is contributing to the objectives of IPA III Programming Framework¹, Thematic Priority 1 under Window 4 in the field of public health. More precisely, it is contributing to health systems reform by raising the coverage and standards of care provided, including health security. It is complementary to the Economic and Investment Plan (EIP) for the Western Balkans² objectives. It is crucial for improving investments in the healthcare system outlined in the EIP, considering lessons learned from the COVID-19 pandemic. Equally, the Action is contributing to SDG 3: Ensure healthy lives and promote well-being for all at all ages.

1.3 Beneficiary of the Action

The action shall be carried out in North Macedonia.

¹ Commission Implementing Decision C(2021)8914 of 10 December 2021 on the Instrument for Pre-Accession Assistance (IPA III) Programming Framework for the period 2021-2027.

² COM (2020) 641 final of 6.10.2020

2. RATIONALE

2.1. Context

North Macedonia has established a robust and comprehensive legal framework for regulating public health. Fundamental laws governing healthcare, health insurance, public health, health records, and patient rights are in place. The country has undertaken substantial reforms to enhance its healthcare system. Notable initiatives include establishing a *Health Network* to strategically plan healthcare resources, implementing *Moj Termin*, a health information system, and revising the *Health Insurance Law*, which extended public insurance coverage to over 90% of the population. In February 2019, the Ministry of Health launched a national reform to introduce an integrated and patient-centred care model within the primary healthcare system. This reform seeks to enhance health coverage and improve the overall healthcare experience for all citizens.

From a strategic perspective, North Macedonia has developed the *National Health Strategy 2021-2030* with extensive public participation in its formulation. This strategy provides a clear direction and roadmap for modernising and developing the country's health system, aiming to improve the population's health status and enhance the healthcare experience for all citizens.

Health expenditure in the country is relatively low compared to EU and South-Eastern European countries, per capita and as a percentage of gross domestic product (GDP). Over the years, there has been a decline in spending on health as a percentage of GDP, dropping from 8,9% in 2000 to 7,3% in 2019³. Despite more than half of health spending coming from public sources (57%), the per capita public expenditure still needs to be improved. In 2019, North Macedonia spent 775 US\$ PPP (purchasing power parity) per capita on healthcare, the second lowest in South Eastern Europe, with Albania having the lowest at 377 US\$ PPP). The proportion of public spending on health as a share of GDP also experienced a decline, decreasing from 5% in 2013 to 4,3% in 2019⁴.

The country's Public Health Sector comprises the National Institute for Public Health and ten regional Public Health Centres responsible for promoting health and preventing diseases. There is a network of primary care providers at the municipal level, although these were privatised between 2004-2007, resulting in a diverse provider market. The Health Network was created in 2012 to establish a well-distributed network of certified public and private healthcare providers contracted by the Health Insurance Fund (HIF) to provide services under the health insurance system.

Enhancing coordination among primary care providers is essential to realise the Health Network's vision of establishing a new primary healthcare model with multidisciplinary and integrated teams. While the network of secondary and tertiary care providers is well-developed, there exists significant variation in the capacity utilisation among hospitals classified similarly. Since 2017, North Macedonia has experienced a decrease in hospital beds per capita, resulting in a lower hospital-bed ratio compared to the EU average. However, despite this decrease, hospitals are operating well below their total capacity, and bed occupancy rates are among the lowest in Europe. Furthermore, there is an uneven distribution of hospital beds, with more than half of all hospitals in Skopje.

The health sector in North Macedonia needs an increased number of physicians, nurses, midwives, and particularly specialists, to meet the growing demand for healthcare services. While salaries have been raised as part of a retention policy, medical staff are moving to the private sector or seeking employment abroad. In 2019, the total health system workforce was estimated to be 33,544, representing an increase of over 6,500 from 2010. Although the number of physicians has shown improvement, nearing the EU average, the nurse-to-population ratio remains less than half of the average. Therefore, concerted efforts should be made to retain medical staff and attract qualified professionals from other countries.

³ Global Health Expenditure Database (WHO 2022a).

⁴ Global Health Expenditure Data Base (WHO 2022a).

North Macedonia has significantly invested in medical equipment over the past decade; however, it still falls behind the EU average in modern diagnostic imaging technologies. As of 2018, the country had only 3.9 MRI units per million population, whereas the EU average stood at 17.4 units. Similarly, North Macedonia had 8.7 CT units per million inhabitants, representing 39% of the EU average. In the same year, there were 26 mammography units available, equivalent to 1.25 units per 100,000 population. Nevertheless, the country has taken proactive measures to enhance its medical infrastructure. The EU has played a vital role by donating cutting-edge equipment to eight regional medical centres nationwide. Consequently, MRI and computed tomography devices have been efficiently distributed to various hospitals nationwide, bolstering the diagnostic capabilities of healthcare facilities.

North Macedonia is currently experiencing an ageing population trend, which poses potential challenges to its health system. One important factor contributing to this situation is the fertility rate, below the EU average and falls significantly below the replacement level⁵. Additionally, the country's life expectancy is also lower than the EU average⁶. In 2019, the infant mortality rate was higher than the EU average, and regional variations exist in premature mortality. Although premature mortality is decreasing with the increase in life expectancy, there is still a significant difference between the best- and worst-performing regions.

Non-communicable diseases (NCDs) account for an estimated 95% of all deaths, with cardiovascular diseases accounting for 61% and cancer for 21%. The most significant cancer contributors are lung, colorectal, pancreatic, and prostate cancer. Diabetes and chronic respiratory diseases comprise most of the remaining NCD burden⁷.

Several high-risk factors contribute to premature mortality, morbidity, and disability related to NCDs. These factors include tobacco use, alcohol consumption, psychoactive drug abuse, high blood pressure, lack of physical exercise, and unhealthy diet. It is concerning that North Macedonia is experiencing an increase in rates of overweight and obesity and smoking prevalence among individuals aged 15-64. This trend is particularly alarming for vulnerable populations. Additionally, particulate air pollution poses a significant public health issue in urban centres, particularly in Skopje. This type of pollution is a known risk factor for various health problems. The Government of North Macedonia has recognised this concern and has adopted a plan to consistently implement smoking protection laws, including strengthening smoking control in public places.

North Macedonia has implemented a comprehensive nationwide e-health system called "Moj Termin". Initially designed to manage appointments in the hospital sector, this cloud-based system has evolved to cover a wide range of services offered by both public and private healthcare institutions. One of its key strengths lies in its modular structure, allowing seamless integration with other healthcare applications. "Moj Termin" comprises various modules that have significantly improved healthcare delivery. These modules include a digital scheduling system, an electronic health record, e-referrals, laboratory and imaging services ordering, and e-prescriptions. By incorporating these functionalities, the system has effectively reduced waiting times for diagnostic imaging and clinical appointments, enhancing patient care and satisfaction.

Primary care providers and emergency care units in Health Centres and hospital emergency wards provide emergency services in North Macedonia. However, the demand for emergency care has proliferated in the past decade, resulting in increased pressure on services, department overcrowding, and long waiting times. The EMS system has improved its medical response capabilities across all situations in recent years, with EMS vehicles primarily run by non-specialist-trained physicians. The country uses a standard emergency call number (112) adopted throughout Europe, and 86 ambulance vehicles were added to the system in 2013 to improve efficiency. However, in rural areas with poor road conditions can take over an hour to reach the nearest emergency care unit.

⁵ <https://ec.europa.eu/eurostat/databrowser/view/tps00199/default/table?lang=en>

⁶ https://ec.europa.eu/eurostat/databrowser/view/sdg_03_10/default/table?lang=en

⁷ Institute of Health Metrics and Evaluation, <https://www.healthdata.org/macedonia>.

The Action is designed to contribute to the achievement of the specific objective of the IPA III Programming Framework⁸, Thematic Priority 1 **Education, employment, social protection and inclusion, and health** within **Window 4: Competitiveness and inclusive growth**, and, more specifically, to support North Macedonia in ensuring equal opportunities, access to the labour market, fair working conditions, social protection and inclusion, and a *high level of human health protection* and, where appropriate, contribute to *health system reforms concerning raising the coverage and standards of care provided to the population as a whole*.

The proposed Action is in line with the country's IPA III **Strategic Response**. It addresses Objective 1.4 in Window 4, Thematic Priority 1, aiming to improve the population's health, well-being, and healthcare by providing a sustainable and high-quality patient-centred health system. In particular, it addresses the following areas of the intervention included in the Strategic Response: 1. Raise the coverage and standards of care provided to the population by improving the infrastructure and equipment in healthcare institutions; 2. Improve the system for self-reported unmet needs for medical care. 3. Inclusion of the electronic health system at all levels in the health system and incorporation of the integrated health information system into the EU electronic cross-border data transmission system; 4. Improve standards of care for communicable and non-communicable diseases.

The Action will enable policy advice and support for the implementation of the national far-reaching horizontal cancer prevention measures thus tackling the recommendations in the **Commission's 2023 Report on North Macedonia**⁹ asking for adequate funding and specialised knowledge for early detection of cancer.

The Action is in line with the European Commission policy initiative towards **European Health Union**¹⁰ and its objectives of better protecting the health of citizens and improving the resilience of Europe's health systems by investing in secure, trustworthy, and efficient use of health data and uptake on cancer screening. It is contributing to **EU4Health programme** by building stronger, more resilient, and more accessible health system in North Macedonia. The Action is contributing to **Europe's Beating Cancer Plan**¹¹ by investing in prevention and early detection. The Action will make use of best practices developed under **Horizon Europe** funding, especially its project "Personalized CANcer Primary Prevention research through Citizen Participation and digitally enabled social innovation" where North Macedonia is one of 11 participating countries. The proposed Action aligns with the **Economic and Investment Plan (EIP)** for the Western Balkans¹² and contributes to its objectives. In the health system reform context, the Action is crucial to improving investments outlined in the EIP, considering lessons learned from the COVID-19 pandemic. By reducing costs and ensuring better treatment accessibility for all citizens, the Action promotes sustainable economic growth and prosperity.

Furthermore, this Action aligns with the **United Nations' 2030 Agenda for Sustainable Development** by contributing to Goal 3 (Good Health and Well-being). It specifically targets 3.4, which aims to reduce premature mortality caused by non-communicable diseases through prevention and treatment and promote mental health and overall well-being.

2.2. Problem Analysis

Short problem analysis

Healthcare system digitalisation

⁸ C(2021) 8914 final of 10.12.2021 on the Instrument for Pre-Accession Assistance (IPA III) Programming Framework for the period 2021-2027.

⁹ 2023 Commission Report on North Macedonia. https://neighbourhood-enlargement.ec.europa.eu/system/files/2023-11/SWD_2023_693_North_Macedonia_report.pdf

¹⁰ [European Health Union - European Commission \(europa.eu\)](https://ec.europa.eu/eu4health/european-health-union/)

¹¹ [Europe's Beating Cancer Plan - European Commission \(europa.eu\)](https://ec.europa.eu/eu4health/europe-beating-cancer-plan/)

¹² COM (2020) 641 final of 6.10.2020

In 2011, North Macedonia established the National System for e-Health - "Moj Termin". Initially, the system offered only basic functionalities. However, it has undergone several updates, particularly in the last two years, to incorporate COVID-19-related diagnostic and vaccination indicators. Currently, "Moj Termin" is utilised by approximately 19,000 professional users, including more than 10,000 doctors, with primary, secondary, and tertiary healthcare levels represented by 4,800, 3,700, and 900 doctors, respectively." Despite its accomplishments, the further adoption of the system faces legal and operational barriers. For instance, the integration of diagnostic images into the platform and providing access to specific healthcare providers are hindered due to these barriers.

Nevertheless, ongoing efforts are to address these challenges and promote the system's expansion. In 2023, a portal for patients and a mobile application – Moe zdravje (My Health) <https://e-zdravstvo.mk/en/moe-zdravje> were developed and launched, through which patients become direct users of the system. Over 1.8 million active patient records are expected to be generated. Through the portal, patients have access to their health data. It is planned that by end 2023, patients will be able to schedule visits to family doctors or vaccination appointments online. Patients will become direct system users, and it is expected that the system will generate over 1.8 million active patient files.

To ensure security and business continuity, the system must be upgraded¹³. Full system availability should be guaranteed for the entire working day - 99.95% of the time - while the lowest degree of unavailability should be less than 4.38 hours annually. Additionally, a critical challenge is the mobility of some health services that do not occur on health institution premises but are conducted in the field. While supporting such services in the interest of patients, data security, connection, and synchronisation with the centralised working environment must be ensured. Finally, this Action complements the IPA III 2022 Action "EU for Health, Social Protection, and Gender Equality," which will define Enterprise Resource Planning (ERP) and electronic laboratory operation (LOINC) standards for public health institutions and laboratories and consolidate the Ministry of Health and Health Insurance Fund IT systems.

Mortality due to cancer

North Macedonia faces a challenge with the decreasing number of radiologists and inadequate medical diagnostic and treatment services in rural and peripheral areas. Cancer is the country's second most common cause of death, with lung cancer being the leading cause, accounting for 12.9% of all cancer cases. The mortality rate for bronchus and lung cancer has been increasing, particularly among men, from 64.8 in 2010 to 66.9 in 2014 and 67.6 per 100,000 men in 2020. Colorectal cancer represents 5.8% of all cancer cases, and only 14% are detected early. North Macedonia lacks a systematic screening programme for colorectal cancer across the country. A screening programme based on the Faecal Occult Blood Test (FOBT) has only been implemented in Skopje, but its accuracy is facing some critical challenges.

This Action aims to strengthen radiology services and improve the early diagnosis of non-communicable diseases, particularly colorectal cancer. This initiative complements the IPA 2022 Action "EU for Improved Health, Social Protection, and Gender Equality," which focuses on strengthening screening programmes and methodology for oncological diseases, enhancing medical skills, and upgrading equipment and technologies related to breast and cervical cancers. This IPA 2024 Action will extend the screening programme's coverage to include lung cancer, expand activities to prevent colorectal cancer and increase the use of teleradiology. Furthermore, this Action aims to improve the national teleradiology system to allow remote access to radiological data and establish a national database of medical imaging recordings from various diagnostic equipment.

Emergency Medical Service

North Macedonia provides healthcare to its citizens through a tiered system, and emergency care is free for everyone. Early steps have been taken to create a more modern version of an effective EMS system.

¹³ Where General hospital and health centers are merged

Further progress should be made in developing an integrated emergency medical services network through reconfiguring facilities to create modern integrated receiving hospital departments with appropriate technologies and capacities, e.g., integral diagnostic imaging, minor operating and treatment rooms, 24-hour observation beds, etc. All elements require investment in human resource development education and training to create the skills and capacities necessary for a modern system.

The Emergency Medical Services (EMS) network is based on thirty-three (33) primary level Health centres covering the entire country territory. Each EMS provides diagnostic and therapeutic services for life-threatening and urgent intervention cases and is on the front line in crises and emergencies. The EMS undertakes on-the-spot resuscitation and intensive care measures and ensures transport to the nearest healthcare institution for the necessary treatment, rehabilitation, and reintegration. Currently, the EMSs have a fleet of 160 vehicles, of which 90% have been in use for more than ten years, and 50% have for more than 15 years. Most vehicles must be equipped up to the EU standards (CEN standard 1789:2020), are high-energy intensive and in poor technical status, and their use and maintenance could be more efficient and effective. Moreover, North Macedonia needs an adequate system to manage and monitor the entire fleet of ambulance vehicles nationwide.

The Action aims to improve the pre-hospital and hospital response to emergency medical, surgical and trauma situations in line with international and European standards. This will be achieved by renewing part of the ambulance fleet and upgrading the EMS ICT technologies. The Action has chosen ambulances with EURO 6 standards over electric ambulances, hybrid vehicles, or those with solar panels due to their lower cost for procurement and maintenance, longer range, and not requiring any additional infrastructure. While electric ambulances, hybrid vehicles, and solar panels have environmental benefits, ambulances with EURO 6 standards may be more practical due to cost, range, reliability, speed and infrastructure.

Main stakeholders

- The **Ministry of Health (MoH)** is responsible for setting the health system's strategic direction, developing legislation and policies, monitoring performance, planning funding models, and ensuring guidelines are met. It is also responsible for occupational medicine activities. It grants authorisations to healthcare institutions to practice occupational therapy based on evaluations of their minimum criteria, keeping a register of such institutions.
- The **Health Insurance Fund (HIF)** purchases public health services through performance-based contracts with public and private health providers.
- The **Institute of Public Health (IPH)** performs healthcare-related activities per the Law on Health Protection. This includes monitoring the population's health status, studying risk factors, planning prevention and early disease detection measures, and promoting health and the environment. The IPH also monitors the work of public health centres and keeps health statistics for North Macedonia.
- The **e-Health Directorate** is a state administration body within the Ministry of Health with the capacity of a legal entity that performs professional work relevant to developing and promoting the integrated health information system. It is responsible for upgrading, optimisation, execution, regulation, maintenance, control, education of the health staff and analysis of all processes and functionalities related to the integrated health information system that health institutions use within the health network, the Ministry of Health, the Health Insurance Fund, the Drug Agency or other entities in the field of health.
- The **University Clinic for Pulmonology and Allergology** and the **University Clinic for Gastroenterohepatology** are public health institutions providing tertiary health care. They can perform screening programmes for lung and colorectal cancer.

2.3. Lessons Learned

Before the COVID-19 pandemic, the EU assistance for the health sector was limited to the context of the migration crisis in 2015/2016. The pandemic has revealed the vulnerability of the health systems and pushed for a more ambitious response to the pandemic and other health challenges. While the EU assistance of EUR 20 million is still under implementation, the following lessons have crystallised:

- The reforms in the health sector are resource-intensive and require strong political commitment and national consensus in a medium to long-term perspective. The sector policy dialogue must be intense and inclusive, effectively channelling various inputs, visions, and concerns. Therefore, the sector working group on health must be significantly strengthened, and the inclusion of patients' organisations must be ensured.
- The significant investments needed in the healthcare sector must be closely linked to sector reforms to improve the effectiveness of the investments. Research shows lung cancer incidents are linked to high pollution, smoking and unhealthy lifestyle. Prevention and early detection of lung cancer require, along with investments in health care, enhancement of the national anti-tobacco policy and significant measures to decrease urban pollution due to outdated transport and heating systems. To address this finding, the Action also encompasses a policy advisory contract to guide the authorities in taking suitable policy measures.
- The administrative capacity of the Ministry of Health to work with the EU assistance and EU counterparts is very low as the experience is limited and primarily accumulated in the COVID-19 context. The Ministry must establish a well-staffed and prepared project management unit to channel and coordinate external assistance for sector reforms. With this purpose, a policy advisory contract is planned within the scope of this action.

3. DESCRIPTION OF THE ACTION

3.1. Intervention Logic

The **Overall Objectives/Impact** of this Action is:

To improve the health and well-being of the citizens of North Macedonia.

The **Specific Objective (Outcome)** of this Action is:

Enhanced digitalisation and modernisation of the Healthcare System.

This Outcome will be achieved through the delivery of the following **Outputs**:

Output 1. Improved National Teleradiology System to allow remote use of radiology data

Output 2. Improved prevention and control of non-communicable diseases

Output 3. Improved health cloud infrastructure

Output 4. Improved mobile primary healthcare service

Output 5. Modernised Emergency Medical Service (EMS) (5(a) ICT technology; 5(b) ambulances)

3.2. Indicative Activities

The Action will be implemented through the following main activities:

Output 1: Improved National Teleradiology System to allow remote use of radiologic data

This output will be attained through the following activities:

- Establishing a national database of medical image recordings from various diagnostics (tomography, magnetic resonance imaging and mammography) reliable for scientific and professional analysis. In addition to defining the requirements and the scope of medical imaging recordings and putting the database in place, the Action will also establish a governance system to ensure that the data is collected, managed, and used responsibly and ethically. Data security and privacy will be addressed - access will be provided to authorised users, such as healthcare

professionals, researchers, and policymakers. In contrast, measures to protect the data from unauthorised access, use, or disclosure will be implemented in line with the data protection laws and regulations. The intervention will follow best practices of EU Open Science standards with FAIR (Findable, Accessible, Interoperable and Re-usable data) and open data sharing.

- Simplifying the implementing procedures for quality control of the operation of radio diagnostic cabinets nationwide and comprehensive training to the technicians who operate the radio diagnostic cabinets to apply the standardise procedures, conduct regular maintenance of the radio diagnostic and ensure the proper use of the equipment and its optimal performance. The new protocols will allow data collection automatisation, simplifying the monitoring process, reducing the risk of errors and streamlining the reporting procedures.
- Purchase and installation of the ICT hardware and software solutions connecting and integrating the radiological equipment with the National e-Health System. The process will involve software upgrades, configurations, custom solutions and/or standardised protocols such as DICOM (Digital Imaging and Communications in Medicine) for setting secure connections and interfaces between the radiological equipment and the e-health system to ensure that data is exchanged seamlessly, accurately and securely. Appropriate security measures must be implemented to protect the data and ensure it is only accessible to authorised personnel.

Output 2: Improved prevention and control of non-communicable diseases

This output will be achieved through the following activities:

- Policy advice and support for the implementation of the national far-reaching horizontal cancer prevention measures, such as aligning the anti-tobacco policy with the EU standards for free-of-smoke public areas, analysing the exposure of youth, girls and women to higher pollution, raising the awareness of the citizens on the causes of lung cancer, particularly smoking and air pollution and promotion of a healthy lifestyle. The awareness campaigns should be focused on the following aspects:
 - Smoking is the leading cause of lung cancer: It is essential to highlight the link between smoking and lung cancer. Cigarette smoke contains numerous chemicals that can damage the cells in the lungs and lead to cancer. It's important to emphasise that smoking harms the smoker and those around them through second-hand smoke.
 - Air pollution can also cause lung cancer: Air pollution is a significant risk factor. In North Macedonia, sources of air pollution include industrial emissions, vehicle exhaust, and burning solid fuels for heating and cooking. It's essential to educate the public about the steps they can take to reduce their exposure to air pollution.
 - Early detection is crucial: Early detection of lung cancer can significantly improve the chances of successful treatment. Encouraging people to get screened for lung cancer, especially those at high risk due to smoking or exposure to air pollution, can help identify cancer earlier.
 - Prevention is key: The best way to prevent lung cancer is to avoid smoking and reduce exposure to air pollution. The campaign could provide information on smoking cessation resources, such as counselling and nicotine replacement therapy, as well as tips for reducing exposure to air pollution, such as using public transportation, walking or biking instead of driving, and supporting policies that reduce pollution.
 - Support for those affected: The campaign could also provide information on support resources for those affected by lung cancer, such as support groups and counselling services.
- Put in place a lung cancer screening programme which will define the criteria for enrolment in the screening programmes, the qualification and responsibility of the personnel involved, modules for lung cancer screening, quality standards, and technical requirements for imaging. More specifically, this lung cancer screening programme involves several steps, including:

- Establish a multidisciplinary team to plan and implement the screening programme. This team should include radiologists, pulmonologists, thoracic surgeons, oncologists, and epidemiologists.
 - Define the target population for the screening programme. This population includes current or former smokers who meet specific criteria, such as age and smoking history.
 - Develop enrolment criteria for the screening programme. This may include age, smoking history, and other risk factors for lung cancer.
 - Define the screening protocol, which includes the imaging modality (e.g. low-dose CT) and the frequency of screening.
 - Define the qualifications and responsibilities of the personnel involved in the screening programme, including radiologists, technologists, and support staff.
 - Establish quality standards, including quality assurance and quality control measures.
 - Develop technical requirements for imaging, including equipment specifications and image interpretation guidelines.
 - Develop a referral and follow-up process for individuals with suspicious lesions on imaging.
 - Develop a data management plan to ensure that data collected during the screening programme is securely stored and managed appropriately.
 - Evaluate the programme to determine its effectiveness in reducing lung cancer mortality and improving patient outcomes. This evaluation should include ongoing performance and outcomes monitoring and periodic programme reviews and updates as needed.
- Establish an operational screening programme for colorectal cancer¹⁴ encompassing modernised colonoscopy equipment and an integrated IT solution to link all actors in diagnosing and treating colorectal cancer (primary health care doctors, specialists, university clinics, pathology labs, etc.). The improved screening programme will be piloted in Skopje, covering 5,000 women and men aged 50-74 per year.

Output 3: Improved health cloud infrastructure

When a medical institution acquires imaging data they can utilise the EOSC (European Open Science Cloud for research purposes). The health cloud infrastructure in this output refers to the operational infrastructure for governance of the E-Health system. Connecting the E-Health system to other cloud infrastructures is an option upon the successful completion of the proposed improvements and upgrades.

This output will be achieved through the following activities:

- Providing a cloud infrastructure to support the e-Health system security, business continuity, and numerous potential points of the outage. This will bring the following benefits related to security, business continuity, and outage management:
 - Enhance the security of e-Health systems by providing advanced security features such as data encryption, access control, and threat detection. These features can help protect sensitive patient information and prevent unauthorised access, data breaches, and cyber-attacks.

¹⁴ This activity will build upon the IPA 2022 Action “EU for Improved Health, Social Protection and Gender Equality”, which will provide funding for the development of a national cancer control plan/Strategy and a plan for implementation and quality control for the national population-based screening programmes for breast, cervical and colorectal cancer.

- Ensure business continuity by offering reliable and scalable computing resources that can support the continuous operation of the e-Health system. In case of hardware or software failures, the cloud can automatically redirect traffic and computing resources to alternative servers or data centres, minimising downtime and preventing service disruptions.
- Provide a robust outage management system with real-time monitoring, automated alerting, and rapid recovery mechanisms. In an outage or service disruption, the cloud can quickly identify the root cause, notify the relevant stakeholders, and activate the recovery procedures.
- Setting up an integrated modular security solution that includes Endpoint, Network and Data Centre security, which involves:
 - Identifying Security Requirements on the grounds of assessing the potential vulnerabilities and threats to the organisation’s network, endpoints, and data centre infrastructure.
 - Select the appropriate security technologies that can address those requirements. This can include firewalls, intrusion detection and prevention systems, endpoint protection software, data encryption, access control technologies, and other security tools.
 - Design the integrated modular security solution.
 - Deploy and configure the security technologies. This can involve installing hardware and software components, configuring network devices, and creating security policies and rules.
 - Testing and validation to ensure the security solution is effective in detecting and preventing security threats.
 - Ongoing management and maintenance to ensure it remains effective over time. This involves monitoring security events, updating security policies and rules, and conducting regular security assessments to identify new threats and vulnerabilities.
- Elaborating a model for business continuity with a level of unavailability lower than 43 seconds per day.
- Establishing a solution without a Single Point of Failure will create a resilient system that can continue functioning even if one part fails. This approach would help to prevent critical breakdowns in the healthcare system and improve overall patient care.
- Providing the component of the health cloud infrastructure (hardware components, system hosting and internet connections, database system licenses, migration of the “Moj Termin” system to the new infrastructure).

Output 4: Improved mobile primary healthcare services

This output will connect the emergency services, patronage, medical duty service, home treatment, vaccination, and rural doctor to the e-Health system. It will be achieved through:

- Providing hardware and network infrastructure for virtualisation of operations (servers, storage, networking) installed at the central location.
- Providing local units with equipment and work devices -static and mobile.
- Providing an integrated IT solution based on “Moj Termin” as a separate module for mobility services and telemedicine.

Output 5: Modernised Emergency Medical Service (EMS)

This output will be achieved through the following activities:

5 (a) ICT technology

Upgrading the EMS ICT technologies - Establishing fully-functional dispatch centres connecting them with a new ICT system for managing the EMS. The country uses a standard emergency call number (112) adopted throughout Europe, and 86 ambulance vehicles were added to the system in 2013 to improve efficiency. The new system will allow the EMS to collect, track and dispatch emergency and accident-related information and crew report data. Interoperability and data traceability will be achieved with the 112 Emergency Centre, hospital emergency departments and the digital health system. The expected results include:

- Improved response times – the new system will allow the emergency medical service to respond quickly to emergencies. The system will enable the collecting, tracking, and dispatching of information in real time, significantly reducing response times and improving patient care outcomes.
- Improved patients care - The new system will allow emergency crews to quickly access critical information about a patient’s medical conditions and history and transfer information on the patient’s status to the hospital receiving the patient. This information can help inform treatment decisions, leading to better patient outcomes.
- Enhanced coordination: interoperability and data traceability will facilitate communication and coordination between emergency response teams, leading to more seamless emergency response.
- More efficient use of resources: the new system will allow emergency crews to collect and record data more efficiently, which can help reduce the burden on the healthcare system and improve the quality of care.
- Improved data management: The system will provide better management of data related to emergency incidents, which can help improve the overall quality of care and inform policy decisions.

5 (b) Ambulances

Replacing 50 technologically old and far from the standard emergency health care vehicles to strengthen the emergency response at the site of events/accidents and in transit, which at the same time will enable low emission of gases in line with gas emission standard EURO 6. The vehicles will be distributed throughout the established network of emergency health care. The expected results are decreased time of response, better utilisation of the existing teams for emergency health care, and an increasing number of emergency teams in place. This will significantly improve the patients’ care outreach.

3.3. Mainstreaming

Environmental Protection, Climate Change and Biodiversity

As part of a broader obligation to sustainable development, the EU is committed to addressing environmental concerns in its assistance programmes. This Action does not pursue specific environmental and climate change objectives. Still, its implementation will address environmental challenges concerning pollution and energy efficiency. Promoting tobacco-free public spaces and a healthier lifestyle will support the change in the mindset and gradual shift to a more conscientious behaviour towards the environment. This will be paired with investment in digitalisation and purchasing ambulances, materials and equipment compliant with the EU environmental standards (i.e. EURO 6 for the ambulances). The Action will be an important reference during planned North Macedonia’s preparation of the National Adaptation Plan with health as a sector of focus, thus contributing to the country’s Nationally Determined Contributions (NDC).

Gender equality and empowerment of women and girls

As per OECD Gender DAC codes identified in section 1.1, this action is labelled as G1. This implies that the Action is gender-sensitive. TheWHO/Europe assessment of North Macedonia has identified

important gender equity gaps in the health system¹⁵, starting from the lack of a systemic approach to collecting sex-disaggregated data through healthcare coverage and reaching to discriminative practices. Gender-based violence, unintended pregnancies, early and forced marriage, and harmful gender norms make girls and women more frequent healthcare system users or push them to take health risks and not seek help or health care in time, aggravating their health status. Improving the health care system is, therefore, for the benefit of the women of North Macedonia, who would benefit most from an equitable, adequate health care system. In addition, the Action also invests in health sector reforms by strengthening policy making and monitoring the health reforms (including disaggregated data in the e-health system) and improving health workers' employment conditions and efficiency, primarily women.

Human Rights

North Macedonia is committed to being a reliable partner in the implementation of the EU Action Plan on Human Rights and Democracy 2020-2024, which sets out the priorities of the EU and its Member States on human rights in relations with third countries and the 2030 Agenda for Sustainable Development and Universal Health Coverage. The Action will support the government to reinforce the right to health care for all, paying particular attention to the needs of those at risk of poverty, representing 40% of the country's population¹⁶. These people face financial insecurity, poor living conditions, gender inequality, and insecure employment. The majority are located in rural and remote areas. The intended improvements in emergency medical services and the enhanced digitalisation will support these citizens and families, as well as people with acute or chronic conditions obtain adequate medical care and escape health inequities.

Disability

As per OECD Disability DAC codes identified in section 1.1, this action is labelled as D2. This implies that this Action will improve the health and living standards and the medical services for the citizens of North Macedonia, particularly for the most disadvantaged people, notable people with disabilities, vulnerable people, and other disadvantaged groups, who are the primary users of social and health services. Moreover, investing in health care will add to the prevention of disabilities in the country.

Civil Society

This Action has been developed in an inclusive process involving civil society as a part of the established sector policy dialogue. This approach will also apply in the next stage, as civil society organisations are part of the Sector Working Groups (SWG), channelling the policy dialogue on sector priorities, IPA programming and reporting. Moreover, the participation of civil society is important for promoting a new health culture and life style, compliant with the EU environmental norms.

3.4. Risks and Assumptions

Category	Risks	Likelihood (High/Medium/Low)	Impact (High/Medium/Low)	Mitigating measures
People and the organisation	Lack of political will to continue the demanding reforms in the health sector.	M	H	Engage in continuous policy dialogue with national authorities through the Sector Working Group on Health engaging authorities, donors and

¹⁵ <https://www.who.int/europe/news/item/04-11-2022-who-europe-accelerates-efforts-to-advance-health-equity-in-north-macedonia-with-data-and-research>

¹⁶ <https://www.who.int/europe/news/item/04-11-2022-who-europe-accelerates-efforts-to-advance-health-equity-in-north-macedonia-with-data-and-research>

				international partners and civil society organisation.
Planning, process and system	Weak administrative capacity and experience with EU assistance	H	M	The ongoing Public Administration Reform (PAR) is expected to address the high staff turnover in all institutions by proposing a viable retention and merit-based policy and modern human resource management. As intermediate mitigation approach, technical assistance and capacity building measures, including by this action, will be put in place.

External Assumptions

The following assumptions should hold true to guarantee the success of the intervention:

- There is a political commitment to continue the health sector reforms, improve the healthcare funding model, and channel investments to healthcare institutions.
- The population becomes more aware of the health risks created by certain behaviours and adjusts accordingly.
- There is an improvement in public awareness of the need and benefits of early screening and health prevention.

3.5. Indicative Logical Framework Matrix

Results	Results chain: Main expected results	Indicators	Baselines (values and years)	Targets (values and years)	Sources of data	Assumptions
Impact	Improved health and well-being of the citizens of North Macedonia	Life expectancy at birth (years) ¹⁷	Total: 76.34 Male: 74.39 Female: 78.29 (2017-2019)	Total: ≥ 77,30 Male: ≥ 75,30 Female: ≥ 79,30 (2031)	Annual Yearbook of the State Statistical Office	<i>Not applicable</i>
		Healthy life expectancy at birth (years) ¹⁸	66.14 (2019)	≥ 67.70 (2031)	WHO	
		Percentage of new lung cancer cases by sex ¹⁹	21% (males) 7,2% (females) (2020)	≤ 17% (males) ≤ 5.9% (females) (2031)	The Global Cancer Observatory (WHO) Report	
		Colon cancer mortality rate (per 100 000 inhabitants) by sex	6% (2020)	≤ 3% (2031)	Cancer registry IPH	
Outcome 1	Enhanced digitalisation and modernisation of the Healthcare System	Percentage of the population with access to its health records	0% (2022)	20% (2028)	E-health monitoring system	Government continues investing in the health protection Population becomes more aware of the health risks created by certain behaviours and adjusts it accordingly
		Proportion of early detected CRC	14% (2021)	≥ 50% (2028)	MoH- Program for early detection and screening of malignant diseases	
		Rate of ambulances available (100 000 inhabitants)	160/1,836,000x100,000 = 8.7 (2022)	210/1,836,000x100,000 = 11,4 (2028)	MoH Directorate for Medical Equipment	
		Number of emergency teams in effective operation	176 (2022)	≥ 308 (2028)	MoH Directorate for Medical Equipment	
Output 1	Improved National Tele-radiology System to allow remote use of radiology data	Number of radiologists using tele-radiology system	0 (2023)	≥ 140 (2028)	MoH- Directorate for E-Health ²⁰	There are sufficient resources, including financial and human resources, to implement and sustain the proposed interventions.
		% of results of CT, MRI, Mammography, PET CT read 2 day plus the exam is done	25% (2021)	≤ 5% (2031)	MoH	
Output 2	Improved prevention and control of non-communicable diseases	Number of people annually dying of lung cancer	984 (2020)	< 645 (2028)	MoH- Program for early detection and screening of malignant diseases	Improved public awareness on early screening and health prevention. Reforms in the health sector continue, and the funding model for health care is improved.
		Number of people per year encompassed with the CRC (Colorectal Cancer) screening	0 (2023)	≥5000 (2028)	MoH- Program for early detection and screening of malignant diseases	
Output 3	Improved health cloud infrastructure	Level of information security (scale 7-10)	7 (2022)	10 (2028)	MoH Directorate for E-Health ²¹	Collaboration and partnerships between Government agencies, civil society organisations, health professionals, and communities will
		Average response time (API)	145ms (2021)	≤50ms (2028)	MoH Directorate for E-Health ²²	

Output 4	Improved mobile primary healthcare service	Number of local mobile units' equipment and work devices delivered	0 (2023)	≥30 (2028)	Final report	be fostered to ensure the success of the proposed interventions.
Output 5	Modernised Emergency Medical Service (EMS)	Number of newly equipped and operational ambulances	0 (2023)	≥ 50 (2028)	Final report	
		Number of fully functional dispatch centres connected with ICT system for managing the EMS	0 (2023)	≥ 30 (2028)	Final Report	
		Number of software prepared for integrating dispatch information and communication with hospital emergency departments	0 (2023)	1 (2028)	MoH Provisional/Final Acceptance	
		Number of software prepared for management and monitoring of vehicles for EMS	0 (2023)	1 (2028)	MoH Provisional/Final Acceptance	

¹⁷ <http://www.stat.gov.mk/Publikacii/SG2019/03-Naselenie-Population.pdf> (Population; T.03.02.1.; page 79.)

¹⁸ <https://www.who.int/data/gho/data/themes/topics/indicator-groups/indicator-group-details/GHO/life-expectancy-and-healthy-life-expectancy>

¹⁹ <https://gco.iarc.fr/today/data/factsheets/populations/807-north-macedonia-fact-sheets.pdf>

²⁰ <https://e-zdravstvo.mk/en/home#reports>

²¹ <https://e-zdravstvo.mk/en/home#reports>

²² <https://e-zdravstvo.mk/en/home#reports>

4. IMPLEMENTATION ARRANGEMENTS²³

4.1. Financing Agreement

In order to implement this Action, it is envisaged to conclude a financing agreement with North Macedonia.

4.2. Indicative Implementation Period

The indicative operational implementation period of this Action, during which the activities described in section 3 will be carried out and the corresponding contracts and agreements implemented, is 72 months from the date of conclusion of the financing agreement.

Extensions of the implementation period may be agreed by the Commission's responsible authorising officer by amending this Financing Decision and the relevant contracts and agreements.

4.3. Implementation Modalities

The Commission will ensure that the EU appropriate rules and procedures for providing financing to third parties are respected, including review procedures, where appropriate, and compliance of the action with EU restrictive measures²⁴.

4.3.1. Direct Management (Procurement)

Procurement will contribute to achieving all 5 outputs of the Action.

4.3.2. Indirect Management with a pillar-assessed entity

A part of this action may be implemented in indirect management with a pillar assessed entity, which will be selected by the Commission's services using the following criteria:

- Financial and administrative capacity
 - Existing country office in North Macedonia or regional office in the Western Balkans with sufficient operational capacities to allow effective and timely implementation of the project(s)/assignment(s) entrusted to the entity under this action.
 - Stable and sufficient financial resources.
- Technical capacity
 - Previous experience in the sector/subject areas addressed by the project(s)/assignment(s) to be entrusted to the entity under this action.
 - Previous experience in implementing projects/assignments similar to the one(s) entrusted to the entity under this action, preferably with EU financing.
 - Sufficient staff timely available with knowledge and experience in the areas addressed by the project(s)/assignment(s) to be entrusted to the entity under this action.

²³ This section is to be completed by the EU Office/Delegation.

²⁴ [EU Sanctions Map](#). Please note that the sanctions map is an IT tool for identifying the sanctions regimes. The source of the sanctions stems from legal acts published in the Official Journal (OJ). In case of discrepancy between the published legal acts and the updates on the website it is the OJ version that prevails.

4.3.3. Changes from indirect to direct management (and vice versa) mode due to exceptional circumstances

If the implementation modality under direct management, as defined in section 4.3.1, cannot be implemented due to circumstances beyond the control of the Commission, the modality of implementation by indirect management with a pillar-assessed entity would be used according to section 4.3.2.

4.4. Scope of geographical eligibility for procurement and grants

The geographical eligibility in terms of place of establishment for participating in procurement and grant award procedures and in terms of the origin of supplies purchased as established in the basic act and set out in the relevant contractual documents shall apply, subject to the following provisions.

The Commission's authorising officer responsible may extend the geographical eligibility on the basis of urgency or of unavailability of services in the markets of the countries or territories concerned, or in other duly substantiated cases where application of the eligibility rules would make the realisation of this action impossible or exceedingly difficult (Article 28(10) NDICI-Global Europe Regulation).

4.5. Indicative Budget

Indicative Budget components	EU contribution (amount in EUR)	Indicative third-party contribution, in currency identified
Methods of implementation – cf. section 4.3		
Outcome 1: Enhanced digitalisation and modernisation of the Healthcare System , composed of:	12 000 000	2 160 000
Procurement (direct management) – cf. section 4.3.1	N.A.	
Procurement – total envelope under section 4.3.1	12 000 000	2 160 000
Evaluation – cf. section 5.2	Will be covered by another Decision	N.A.
Audit/Expenditure verification – cf. section 5.3	Will be covered by another Decision	N.A.
Strategic Communication and Public diplomacy – cf. section 6	N.A.	N.A.
Contingencies	N.A.	N.A.
Totals	12 000 000	2 160 000

4.6. Organisational Set-up and Responsibilities

The Delegation of the European Union (EUD) to North Macedonia is in charge of implementing the Action. It will collaborate with the Ministry of Health and the NIPAC office within Secretariat for European Affairs (SEA), and all stakeholders and implementing partners.

At policy level, the implementing partners will be accountable to the SWG Health, the IPA Monitoring Committee and respective Sector Monitoring Committee.

At contract level, the implementation arrangements will be discussed through the project Steering Committee having advisory functions and composed of EUD, the relevant national authorities and all relevant implementing partners.

As part of its prerogative of budget implementation and to safeguard the financial interests of the Union, the Commission may participate in any governance structures set up for governing the sector reforms and for the implementation of the EU assistance.

4.7 Pre-conditions

Preconditions for the Actions (legal, strategic, operational) have all been in place.

5. PERFORMANCE MEASUREMENT

5.1. Monitoring and Reporting

The day-to-day technical and financial monitoring of the implementation of this action will be a continuous process, and part of the implementing partner's responsibilities. To this aim, the implementing partner shall establish a permanent internal, technical and financial monitoring system for the action and elaborate regular progress reports (not less than annual) and final reports. Every report shall provide an accurate account of implementation of the action, difficulties encountered, changes introduced, as well as the degree of achievement of its Outputs and contribution to the achievement of its Outcomes, and if possible at the time of reporting, contribution to the achievement of its Impacts, as measured by corresponding indicators, using as reference the logframe matrix (for project modality) and the partner's strategy, policy or reform action plan list (for budget support). The Commission may undertake additional project monitoring visits both through its own staff and through independent consultants recruited directly by the Commission for independent monitoring reviews (or recruited by the responsible agent contracted by the Commission for implementing such reviews).

Arrangements for monitoring and reporting, including roles and responsibilities for data collection, analysis and monitoring: the implementation of the Action will be monitored at the sector level through the established 2020 Performance Assessment Framework (PAF), which includes outcome and impact indicators, targets and baseline data. PAF has been established as a web-based application (backed up by a government decision on responsibilities and deadlines), allowing regular electronic data input, processing, and analytics. The PAF data will be used in the Sector Working Group on Health, which is also the inclusive platform for all stakeholders to monitor the implementation of the sector priorities.

At the output level, data about each project and contract implementation will be collected in OPSYS. They will be based on official reports, acceptance certificates or equivalent documents. The competent actors are expected to produce timely and meaningful data to monitor the results and impact of the Action.

5.2. Evaluation

Having regard to the importance of the Action, a final evaluation will be carried out for this Action or its components via independent consultants. It will be carried out for accountability and learning purposes at various levels (including for policy revision).

The Commission shall form a Reference Group (RG) composed by representatives from the main stakeholders at both EU and national (representatives from the government, from civil society organisations (private sector, NGOs, etc.), etc.) levels. If deemed necessary, other donors will be invited to join. The Commission shall inform the implementing partner at least 2 months in advance of the dates envisaged for the evaluation exercise and missions. The implementing partner shall collaborate efficiently and effectively with the evaluation experts, and inter alia provide them with all necessary information and documentation, as well as access to the project premises and activities.

The evaluation reports shall be shared with the partner country and other key stakeholders following the best practice of evaluation dissemination²⁵. The implementing partner and the Commission shall analyse the conclusions and recommendations of the evaluations and, where appropriate, in agreement with the partner country, jointly decide on the follow-up actions to be taken and any adjustments necessary, including, if indicated, the reorientation of the project.

5.3. Audit and Verifications

Without prejudice to the obligations applicable to contracts concluded for the implementation of this action, the Commission may, on the basis of a risk assessment, contract independent audit or verification assignments for one or several contracts or agreements.

6. STRATEGIC COMMUNICATION AND PUBLIC DIPLOMACY

All entities implementing EU-funded external actions have the contractual obligation to inform the relevant audiences of the Union's support for their work by displaying the EU emblem and a short funding statement as appropriate on all communication materials related to the actions concerned. To that end they must comply with the instructions given in the 2022 guidance document [Communicating and raising EU visibility: Guidance for external actions](#) (or any successor document).

This obligation will apply equally, regardless of whether the actions concerned are implemented by the Commission, the partner country, service providers, grant beneficiaries or entrusted or delegated entities such as UN agencies, international financial institutions and agencies of EU Member States. In each case, a reference to the relevant contractual obligations must be included in the respective financing agreement, procurement and grant contracts, and contribution agreements.

For the purpose of enhancing the visibility of the EU and its contribution to this action, the Commission may sign or enter into joint declarations or statements, as part of its prerogative of budget implementation and to safeguard the financial interests of the Union. Visibility and communication measures should also promote transparency and accountability on the use of funds. Effectiveness of communication activities on awareness about the action and its objectives as well as on EU funding of the action should be measured. Implementing partners shall keep the Commission and the EU Delegation fully informed of the planning and implementation of specific visibility and communication activities before the implementation. Implementing partners will ensure adequate visibility of EU financing and will report on visibility and communication actions as well as the results of the overall action to the relevant monitoring committees.

7. SUSTAINABILITY

The sustainability potential of the Action is high at institutional, regulatory, financial and cultural levels. It is defined by the cross-pollination of capacity building, upgrade of procedures, investments in technological infrastructures and emergency vehicles, data management, and raising awareness measures.

The body of knowledge will be improved along with the regulative environment. The new regulations and practices are expected to become an integral part of the everyday activities of institutions, health care practitioners and health system managers, and this will support sustaining of the achieved results in medium-term perspective. The Action is also expected to trigger changes in the behaviour of individuals and support healthier life style patterns among young people.

Radiology and early diagnosis of cancer along with the modernised emergency services and the more efficient mobile health teams will have an immediate impact on the patient's health, quality of life and longevity, while also strengthening the link between patients and health system and creating a new dynamic in the health reforms. Thus, the action will continue to generate benefits also at policy level. The intended

²⁵ See best [practice of evaluation dissemination](#)

upgrade of the e-Health system is not only extending the services to the population, but will substantially improve the efficiency and effectiveness of the health system management, providing richer disaggregated data for policy-making purposes.

In terms of equipment sustainability, the Ministry of Health has an annual budget for maintenance of software systems, which is intended to be utilised for maintenance of the purchased components ensuring sustainability. There are multiple examples of this already successfully implemented where an CAPEX budget is used for purchase upon which the maintenance and OPEX costs are later executed using the annual maintenance budget.

Adopting the cloud-based infrastructure for storing and processing health care data will allow not only enhancement of data accessibility and security, but also will reduce the need for extensive physical data center and space. Implementing telemedicine system will optimize allocation of medical resources. Another vector of sustainability is provided by the inclusive policy dialogue, which is expected (1) to support the implementation of the coherent sector policies underlying this Action by keeping a strong focus on the sector priorities, and (2) to translate the political commitment into sufficient funding and modern human resource management to ensure that the policy gains are sustained.

Appendix 1: IDENTIFICATION OF THE PRIMARY INTERVENTION LEVEL FOR REPORTING IN OPSYS

A Primary intervention²⁶ (project/programme) is a coherent set of results structured in a logical framework aiming at delivering development change or progress. Identifying the level of the primary intervention will allow for:

- ✓ Differentiating these Actions or Contracts from those that do not produce direct reportable development results, defined as support entities (i.e. audits, evaluations);
- ✓ Articulating Actions and/or Contracts according to an expected common chain of results and therefore allowing them to ensure a more efficient and aggregated monitoring and reporting of performance;
- ✓ Having a complete and exhaustive mapping of all results-bearing Actions and Contracts.

The present Action identifies as

Action level (i.e. Budget support, Blending)		
<input checked="" type="checkbox"/>	Single action	Present action: all contracts in the present action
Group of actions level (i.e: i) top-up cases, ii) second, third, etc. phases of a programme)		
<input type="checkbox"/>	Group of actions	Actions reference (CRIS#/OPSYS#):
Contract level (i.e. Grants, Contribution Agreements, any case in which foreseen individual legal commitments identified in the budget will have different log frames, even if part of the same Action Document)		
<input type="checkbox"/>	Single Contract 1	N/A

²⁶ For the purpose of consistency between terms in OPSYS, DG INTPA, DG NEAR and FPI have harmonised 5 key terms, including 'Action' and 'Intervention' where an 'Action' is the content (or part of the content) of a Commission financing Decision and 'Intervention' is a coherent set of activities and results which constitutes an effective level for the operational follow-up by the EC of its operations on the ground. See more on the [concept of intervention \[to access the link an EU Login is needed\]](#).

Group of contracts level (i.e: i) series of programme estimates, ii) cases in which an Action Document foresees many foreseen individual legal commitments (for instance four contracts and one of them being a Technical Assistance) and two of them, a technical assistance contract and a contribution agreement, aim at the same objectives and complement each other, iii) follow up contracts that share the same log frame of the original contract)

<input type="checkbox"/>	Group of contracts	N/A
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