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Report No: PAD3896

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT LOAN
IN THE AMOUNT OF EUR 90.00 MILLION
(US$98.50 MILLION EQUIVALENT)

TO

REPUBLIC OF NORTH MACEDONIA

FOR

NORTH MACEDONIA EMERGENCY COVID-19 RESPONSE PROJECT

UNDER THE
COVID-19 STRATEGIC PREPAREDNESS AND RESPONSE PROGRAM (SPRP)

USING THE MULTIPHASE PROGRAMMATIC APPROACH (MPA)
WITH A FINANCING ENVELOPE OF
UP TO US$6 BILLION

APPROVED BY THE BOARD ON APRIL 2, 2020

Health, Nutrition & Population Global Practice
Europe And Central Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective March 31, 2020)

Currency Unit =	Macedonian Denar (MKD)
US$ 0.0177 =	MKD 1
US$ 1.09 =	EUR 1
EUR 0.9133 =	US$ 1

FISCAL YEAR

January 1 - December 31

Regional Vice President:	Cyril E Muller
Country Director:	Linda Van Gelder
Regional Director:	Fadia M. Saadah
Practice Manager:	Tania Dmytraczenko, Cem Mete
Task Team Leader(s):	Dominic S. Haazen, Marina Petrovic, Federica Secci

ABBREVIATIONS AND ACRONYMS

BFP	Bank-facilitated procurement
CBMIS	Cash Benefits Management Information System
COVID-19	Coronavirus disease 2019
CPF	Country Partnership Framework
CSW	Centers for Social Work
DA	Designated Account
ECA	Europe and Central Asia
EMS	Emergency Medical Services
ESMF	Environmental and Social Management Framework
ESS	Environmental and Social Standards
EU	European Union
FTCF	Fast Track COVID-19 Facility
FM	Financial management
GDP	Gross domestic product
GMI	Guaranteed minimum income
HEIS	Hands-on expanded implementation support
HIF	Health Insurance Fund
ICU	Intensive care unit
IBRD IDA	International Bank for Reconstruction and Development International Development Association
IFR	Interim unaudited financial report
IHR	International Health Regulations
IMF	International Monetary Fund
M&E	Monitoring and evaluation
MoH	Ministry of Health
MLSP	Ministry of Labor and Social Policy
MPA	Multiphase Programmatic Approach
NCD	Noncommunicable disease
PAD	Project Appraisal Document
PDO	Project Development Objective
PMU	Project management unit
POM	Project Operational Manual
PPE	Personal protective equipment
PPP	Purchasing power parity
PPSD	Project Procurement Strategy for Development
SAO	State Audit Office
SEP	Stakeholder Engagement Plan
SIAP	Social Insurance Administration Project
SPRP	COVID-19 Strategic Preparedness and Response Program
SSIP	Social Services Improvement Project
STEP	Systematic Tracking of Exchanges in Procurement
UNDP	United Nations Development Programme

UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WB(G) WHO	World Bank (Group) World Health Organization

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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
North Macedonia	North Macedonia Emergency COVID-19 Response Project	
Project ID	**Financing Instrument**	**Environmental and Social Risk Classification**
P173916	Investment Project Financing	Substantial

Financing & Implementation Modalities

[✓] Multiphase Programmatic Approach (MPA)	[ ] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[ ] Fragile State(s)
[ ] Disbursement-linked Indicators (DLIs)	[ ] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[✓] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	

Expected Project Approval Date	Expected Project Closing Date	Expected Program Closing Date
12-May-2020	30-Jun-2022	31-Mar-2025

Bank/IFC Collaboration

No

MPA Program Development Objective

The Program Development Objective is to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness

MPA Financing Data (US$, Millions)

MPA Program Financing Envelope	4,630.75

Proposed Project Development Objective(s)

To prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness in North Macedonia.

Components

Component Name	Cost (US$, millions)
Emergency COVID-19 Response	37.26
Household Support to Enable Social Distancing	60.01
Project Implementation, Communications, Community Engagement, and Monitoring	0.99

Organizations

Borrower:	Republic of North Macedonia
Implementing Agency:	Ministry of Labor and Social Policy Ministry of Health

MPA FINANCING DETAILS (US$, Millions)

Board Approved MPA Financing Envelope:	4,630.75
MPA Program Financing Envelope:	4,630.75
of which Bank Financing (IBRD):	2,731.10
of which Bank Financing (IDA):	1,899.65
of which other financing sources:	0.00

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	98.50
Total Financing	98.50

of which IBRD/IDA	98.50
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	98.50

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2020	2021	2022
Annual	7.00	75.00	16.50
Cumulative	7.00	82.00	98.50

INSTITUTIONAL DATA

Practice Area (Lead)
Health, Nutrition & Population

Contributing Practice Areas
Social Protection & Jobs

Climate Change and Disaster Screening

This operation has not been screened for short and long-term climate change and disaster risks

Explanation
Climate change and disaster risk screening waived for projects prepared under the COVID-19 Response Global MPA.

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Substantial
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Moderate

6. Fiduciary	Substantial
7. Environment and Social	Substantial
8. Stakeholders	Low
9. Other	
10. Overall	Substantial
Overall MPA Program Risk	High

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[✓] Yes [ ] No

Have these been approved by Bank management?

[✓] Yes [ ] No

Is approval for any policy waiver sought from the Board?

[ ] Yes [✓] No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not Currently Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Not Currently Relevant
Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Sections and Description

Project Management Unit, Schedule 2, Section I.A.1 (b): unless otherwise agreed with the Bank, not later than one month after the effective date, the Borrower will hire a health specialist to be part of the PMU, with terms of reference and qualifications acceptable to the Bank.

Schedule 2, Section 1.A (b): Project Management. Unless otherwise agreed with the Bank, not later than two months after the Effective Date, upgrade the PMU's financial management software in a manner acceptable to the Bank.

Schedule 2, Section B.1: Project Operations Manual. The Borrower, through MLSP, shall not later than one month after the Effective Date, adopt a manual in a manner and with contents acceptable to the Bank (the Project Operational Manual) and thereafter carry out the Project in accordance with the Project Operational Manual.

Conditions

I. PROGRAM CONTEXT

This Project Appraisal Document (PAD) describes the emergency response to North Macedonia for the coronavirus disease (COVID-19). The COVID-19 Strategic Preparedness and Response Program (SPRP) using the Multiphase Programmatic Approach (MPA) was approved by the World Bank's Board of Executive Directors on April 2, 2020 (PCBASIC0219761), with an overall Program financing envelope of up to US$6.0 billion.

A. MPA Program Context

1. **An outbreak of the coronavirus disease (COVID-19) caused by the 2019 novel coronavirus (SARS-CoV-2) has been spreading rapidly across the world since December 2019, when the initial cases were diagnosed in Wuhan, Hubei Province, China**. Since the beginning of March 2020, the number of cases outside China has increased thirteenfold and the number of affected countries has tripled. On March 11, 2020, the World Health Organization (WHO) declared a global pandemic as the coronavirus rapidly spread across the world. As of April 19, 2020, the outbreak had resulted in an estimated 2,335,000 cases, 162,000 deaths, and 605,000 recovered cases in 185 countries.

2. **COVID-19 is one of several emerging infectious diseases that in recent decades have begun with animals in contact with humans, resulting in major outbreaks with significant public health and economic impacts.** The last moderately severe influenza pandemics were in 1957 and 1968; each killed more than a million people around the world. Although countries are now far more prepared than in the past, the world is also far more interconnected, and many more people today have behavior risk factors such as tobacco use[1] and pre-existing chronic health problems that make viral respiratory infections particularly dangerous.[2] With COVID-19, scientists are still trying to understand the full picture of the disease symptoms and severity. Reported symptoms in patients have varied from mild to severe, and can include fever, cough, and shortness of breath. In general, studies of hospitalized patients have found that about 83-98 percent of patients develop a fever, 76-82 percent develop a dry cough, and 11-44 percent develop fatigue or muscle aches.[3] Other symptoms, including headache, sore throat, abdominal pain, and diarrhea, have been reported, but are less common. While 6.9 percent of the people worldwide confirmed as having been infected have died, WHO has been careful not to describe that as a mortality rate or death rate, because in an unfolding pandemic it can be misleading to look simply at the estimate of deaths divided by cases so far. Hence, given that the actual prevalence of COVID-19 infection remains unknown in most countries, it poses unparalleled challenges with respect to global containment and mitigation. These issues reinforce the need to strengthen the response to COVID-19 across all IDA/IBRD countries to minimize the global risk and impact of this disease.

3. **This project is prepared under the global framework of the World Bank COVID-19 Response financed under the Fast Track COVID-19 Facility (FTCF), with additional financing from North Macedonia's IBRD allocation**.

[1] Marquez, PV. 2020. "Does Tobacco Smoking Increase the Risk of Coronavirus Disease (Covid-19) Severity? The Case of China." http://www.pvmarquez.com/Covid-19.
[2] Fauci, AS, Lane, C, and Redfield, RR. 2020. "Covid-19 — Navigating the Uncharted." *New Eng J of Medicine*, DOI: 10.1056/NEJMe2002387.
[3] Del Rio, C., and Malani, PN. 2020. "COVID-19—New Insights on a Rapidly Changing Epidemic." *JAMA*, doi:10.1001/jama.2020.3072.

B. Updated MPA Program Framework

4. Table 1 provides an updated overall MPA Program framework, including the proposed project for North Macedonia. All projects under the SPRP are assessed for an Environmental and Social Framework risk classification following the Bank's procedures and using the flexibility provided for COVID-19 operations.

Table 1. MPA Program Framework

Phase #	Project ID	Sequential or Simultaneous	Phase's Proposed DO*	IPF, DPF or PforR	Estimated IBRD Amount ($ million)	Estimated IDA Amount ($ million)	Estimated Other Amount ($ million)	Estimated Approval Date	Estimated Environmental & Social Risk Rating
1	P173916; North Macedonia	Simultaneous	Please see relevant section of the PAD	IPF	98.50	N/A	N/A	05/01/20	Substantial

C. Learning Agenda

5. **The Republic of North Macedonia project under the MPA Program will support adaptive learning throughout implementation** and will also draw lessons from international organizations: WHO, IMF, Centers for Disease Control, United Nations Children's Fund (UNICEF), and others. The areas for learning during project implementation are described in the technical, social, and economic areas as applicable. Specific aspects of the global MPA learning agenda applicable to this project include forecasting and modeling of the progression of the pandemic and its economic impact, research and assessments of prevention and preparedness activities, and social behaviors and assessment of compliance and impact of social distancing measures.

6. **In the specific context of North Macedonia, the learning agenda will also focus on the following:**

- **Protocol development:** learning from WHO, other international organizations, and other countries included in the MPA about improving protocols for effective detection, contact tracing, treatment, and social distancing.
- **Effective care and treatment**: determining the most effective mix of technology and interventions to achieve the best clinical outcomes, drawing on both in-country experience and that of other countries.
- **Effectiveness of social protection measures to enable social distancing:** contributing to the body of knowledge about the impact of social protection measures in enabling social distancing.
- **Information technology and data analytics**: demonstrating the potential contribution of national digital health systems (both general and pandemic-specific modules) to understanding and monitoring infectious disease outbreaks.
- **Linkages with the ongoing program of assistance in North Macedonia:** making efforts to both include lessons learned from the present analytical work and operations and inform ongoing and future analyses and operations with regard to the effective combination of emergency response, health systems strengthening, and social assistance.

II. CONTEXT AND RELEVANCE

A. Country Context

7. **The Republic of North Macedonia is a small upper-middle-income country in the Balkan peninsula that aspires to achieve the living standards of the European Union (EU).** North Macedonia's population, about 2 million, is aging and shrinking.[4] Nearly 25 percent of the population live in the capital, Skopje, and close to 40 percent live in rural areas. In 2019, North Macedonia's gross domestic product (GDP) per capita was US$6,100, about one-sixth of the average for EU member states. Its purchasing power parity (PPP) GDP per capita stood at US$15,715, still only one-third of the EU average.

8. **North Macedonia's economy has been growing; its average annual GDP per capita growth of 2.9 percent in 2000–2019 exceeded the 1.8 percent average for Europe and Central Asia (ECA) in the same period.** The country managed to avoid imbalances that could have deepened the negative impact of external shocks, and it maintained adequate fiscal space to adopt countercyclical policies during the global financial crisis. In the period following the global financial crisis (2009–2016), the annual average GDP per capita growth slowed to 2.3 percent, but it was still above the regional average. After a slowdown in 2017 to 1.1 percent, by 2019 GDP growth increased to 3.6 percent, opening fiscal space for economic and social sector reforms. The COVID-19 crisis is expected to lead the economy into a recession, the duration of which will depend on the length and rigidity of containment measures and the speed of the recovery of North Macedonia's main trading partners.

9. **Between 2009 and 2018, poverty and extreme poverty declined to 17.6 percent and 5 percent, respectively.[5]** Poverty reduction in the post-crisis period was matched by an overall positive record in shared prosperity. The income growth of the bottom 40 percent was three times faster than the income growth for the total population between 2009 and 2018 (6.3% versus 2.1%). Inequality indicators also show reductions after the global financial crisis, with the Gini coefficient decreasing from 0.42 to 0.36 from 2009 to 2018. The employment rate increased by 13 percentage points to around 48 percent in 2019. Job creation was supported mainly by public spending for large-scale public projects, new active labor market policies, and Government support for employment in Special Economic Zones. Growth has also been pro-poor. It is estimated that since the global financial crisis, 287,000 people were lifted out of poverty. However, poverty remains high in rural areas, and the reduction in poverty since 2009 has not been sufficient to close rural-urban gaps in living conditions. While the urban poverty headcount is 17 percent, the rural poverty headcount remains at nearly 30 percent. Recent poverty reduction gains will likely be lost because of the COVID-19 crisis as firms resort to labor shedding in the most affected sectors (wholesale and retail trade, construction, accommodation and food service activities, and transportation). The combined effect of lower labor incomes and the reduction of private household transfers will likely increase poverty to pre-2017 levels.

10. **North Macedonia's labor market has been improving, but unemployment is still high and labor force participation low.** The labor market continued to improve in 2019. However, unemployment is still high at 17.3 percent in 2019, and labor force participation is low, especially for those younger than 25 years and older than 55, and for women. While the employment rate increased by 2.2 percentage point to 47.13 percent in 2019, the

[4] By 2040, more than 20 percent will be over the age of 65. The fertility rate has declined to only 1.5, lower than the regional average.
[5] Poverty is measured as absolute poverty using the poverty line for upper-middle-income countries, estimated at US$5.5 per day in 2011 PPP. Extreme poverty is calculated using the international poverty line, estimated at US$1.90 per day in 2011 PPP. This line is used to track the World Bank goal of ending global poverty by 2030.

activity rate increased only slightly to 57.2 percent. The employment expansion was broad-based, with significant gains for young people and women in their prime working years. Most of the new jobs were created in manufacturing and activities closely related to tourism. Low levels of employment, together with the aging and shrinking population, pose a serious challenge to the sustainability of the current pension and social transfer systems, as well as to the budgets for health, education, and other social services.

11. **The resolution of the decades-long dispute with Greece over the country's name marks a turning point in North Macedonia's history as an independent nation.** On June 12, 2018, the Governments of North Macedonia and Greece signed the Prespa Agreement[6] aimed at resolving the prolonged name issue.[7] The Parliament in Skopje endorsed the necessary constitutional changes introducing the new name "Republic of North Macedonia" on January 11, 2019. The use of the new name entered into force in February 2019, after ratification of the Prespa Agreement by the Greek Parliament. In parallel, North Macedonia signed the North Atlantic Treaty Organization accession protocol, a process that was stalled for years because of the dispute. On March 27, 2020, North Macedonia became the 30th member of NATO.[8] In April 2018, the European Commission recommended opening negotiations with North Macedonia, but on October 17, 2019, the Council of the EU failed to reach a decision on opening such negotiations. Following the European Council's decision, the Prime Minister announced early elections, which all political parties had agreed to hold on April 12, 2020. However, because of the COVID-19 pandemic, the political environment has changed; the country is being governed by a caretaker Government that is in place until the elections, which have been postponed until further notice because of the COVID-19 state of emergency.[9] On March 30, 2020, the EU decided to open accession talks with North Macedonia.[10]

B. Sectoral and Institutional Context

12. **Health outcomes in North Macedonia continue to be challenging, and noncommunicable diseases (NCDs) are an important risk factor**. Maternal mortality remains a challenge, and since 2011, gains achieved in infant mortality have been reversed, with infant deaths rising from 9.0 to 10.7 per 1,000 births between 2011 and 2016 but decreasing to 8.7 in 2018. A large drop in vaccination rates has also been observed in North Macedonia in recent years. These trends are generally thought to be due to the fragmented primary health care system and a shortage of patronage nurses who do immunizations and outreach such as postnatal care. Life expectancy[11] in North Macedonia is 4.2 years higher for women (77.6 years) than for men (73.6 years), mainly as a result of the growing incidence of NCDs, particularly cardiovascular diseases, which are due to poor diet, smoking, alcohol consumption, and sedentary lifestyles. These life expectancy figures are more than 3 years lower than the WHO EURO average for women and 0.7 years lower for men.

[6] The text of the agreement can be found at https://vlada.mk/sites/default/files/dokumenti/spogodba-en.pdf.
[7] The country became a member of the United Nations in 1993, but because of a dispute with Greece over the use of the name Macedonia, it was admitted under the provisional description of "the former Yugoslav Republic of Macedonia."
[8] https://www.nato.int/cps/en/natohq/news_174648.htm?selectedLocale=en.
[9] https://pretsedatel.mk/en/decree-for-state-of-emergency-addressing-remarks-by-president-pendarovski/.
[10] https://eeas.europa.eu/headquarters/headquarters-homepage/76696/accession-talks-albania-and -north-macedonia-and-eu%E2%80%99s-commitment-western-balkans_en.
[11] https://databank.worldbank.org/source/world-development-indicators#.

13. **The aging of North Macedonia's population has implications for health system organization and costs.** The projected population growth is nearly zero, and estimates based on census data from destination countries (mostly Western European countries and North America) suggest that more than 500,000 citizens reside abroad, one of the largest diasporas in the world as a percentage of the total population. Considering the small size of the workforce and the low birth rates, the loss of even a small number of workers affects the overall pool of skills in the economy. The United Nations Development Programme (UNDP) estimates that by 2050 more than 1 in 3 Macedonians will be over 60 years old. Consequently, the NCDs burden is increasing: NCDs account for 95.3 percent of all deaths in the country, and cerebrovascular diseases were the first cause of disability-adjusted life years in the country in 2016 (Institute for Health Metrics and Evaluation). Premature mortality from NCDs also tends to be higher in North Macedonia than among comparators. Overall, above-average rates of amenable and preventable sickness and death may translate into large losses of productive life years. Moreover, many NCD co-morbidities exacerbate the severity of COVID-19 infections, leading to poorer health outcomes.

14. **Health care delivery is skewed toward hospital care, and the primary care system is underdeveloped.** North Macedonia lacks a strong primary care system, but it has an extensive network of hospitals (3.2 per 100,000 people on average), with 4.5 hospital beds per 1,000 population.[12] There are discrepancies in the internal efficiency of hospitals, with significant variation in the average length of stay and unit costs for similar treatments across the country.

15. **Critical care and emergency services capacities have limitations**. The number of ventilators in the country is estimated to be around 120, 70 of them located in private facilities that can be accessed by the general population under the national health insurance scheme. Most ventilators are in facilities in Skopje; fewer than 10 are located in facilities in three other cities. The ventilators from the University Clinic for Anesthesiology, Resuscitation and Intensive Care[13] are borrowed by other facilities to meet the needs for COVID-19 treatment. A recent World Bank assessment of the Emergency Medical Services (EMS) system[14] found that, compared to other countries with established EMS systems (e.g., in Europe and North America), North Macedonia has more ambulances, and fewer calls per capita. Actual calls represent about 60 percent of the number of calls that would be expected in the country as a whole, reflecting either a lack of trust in or knowledge of the EMS system. There are also issues regarding the overall control of the EMS system, the lack of communication and dispatch systems, and the age of vehicles and equipment, although the quantity of staff and their level of training of staff appear to be good.

16. **In general, North Macedonia is not sufficiently prepared to prevent, detect, and respond to epidemics on the scale of COVID-19.** North Macedonia's score on the Global Health Security Index is 39.1, ranking 90th out of 195 countries.[15] The country's capacity for detection and reporting (which encompasses laboratory systems, real-time surveillance and reporting, the epidemiological workforce, and data integration across the human/animal/environmental health sectors) is considered moderate, with North Macedonia scoring just below average (41.7 vs. an average of 41.9). This is a substantial vulnerability and raises questions as to the reliability of information on the current extent of the COVID-19 outbreak. Unfortunately, the country's capacity

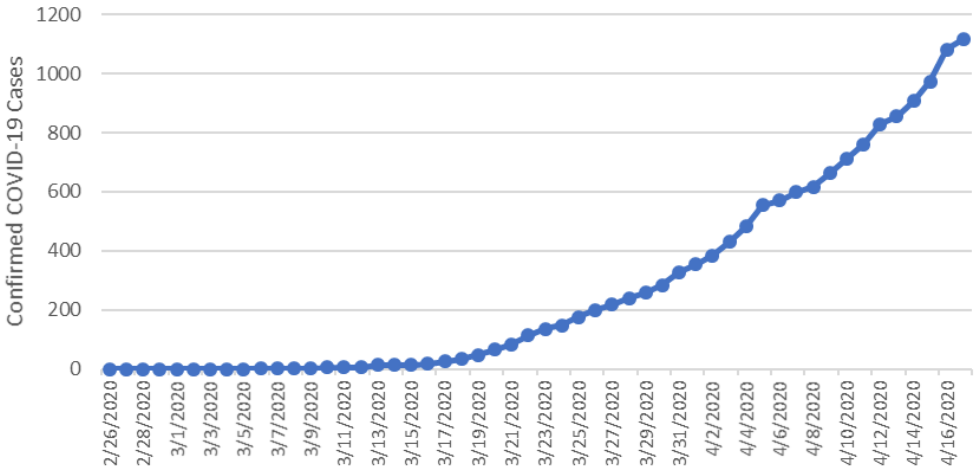
[12] Analysis of Secondary and Tertiary Health Care System Effectiveness, European Union, April 2019, pp. 16, 22.
[13] This is one of 28 university clinics that have been the first pillar of tertiary care in the country since their establishment in the late 1940s. Initially established as part of the University Clinical Centre, the clinics have been transformed into separate legal entities, and cooperation between them is regulated by an inter-clinic referral system. They are affiliated with the Faculty of Medicine in Skopje and serve as training institutions for students and health professionals at the postgraduate level.
[14] North Macedonia Emergency Medical Services Rapid Assessment Report, World Bank, April 30, 2019.
[15] https://www.ghsindex.org/wp-content/uploads/2019/10/2019-Global-Health-Security-Index.pdf

for rapid response is considered quite weak; North Macedonia scores 33.1 against an average of 38.4, with a ranking of 112. In March 2019 North Macedonia completed a Joint External Evaluation of the implementation of International Health Regulations (2005),[16] which found a number of areas that required attention: biosafety and biosecurity, information systems, health workforce, multisectoral collaboration, and national coordination.

17. **However, there has been significant progress in improving information systems over the past year, with enhancements to the national digital health and electronic health record system (MojTermin).** To facilitate protective measures against COVID-19 by physicians and patients in need of health care, as well as easy recording and analysis of data on patients with COVID-19, the MojTermin team in the Ministry of Health (MoH) has developed a new module, consisting of a COVID-19 screening submodule and submodule for monitoring home-treatment patients with COVID-19. These submodules were developed according to the guidelines and measures adopted by the MoH and the Government. In addition, data are entered in MojTermin for COVID-19 patients as for patients with any other condition (all checkups, results from diagnostic examinations, medication, etc.), creating a unique resource for monitoring and analyzing data on COVID-19 patients once the system is rolled out countrywide.

18. **As the COVID-19 pandemic in North Macedonia finishes its eighth week, confirmed cases are increasing rapidly.** The first confirmed COVID-19 case in North Macedonia was identified on February 26, 2020. On April 15, 2020, the number of confirmed cases reached 1,086, an increase of 117 (11%) over the previous day, and there was a further increase of 36 cases to 1,117 on April 17, 2020. Of the total cases, 49 people have died and 139 have recovered. Out of all confirmed cases, 194 (17.4%) were health workers, suggesting severe shortages of personal protective equipment (PPE) and supplies. Figure 1 shows the evolution of cases, and Table 2 shows a simulation of the potential impact of the pandemic for three scenarios of population exposure (25%, 50%, and 80%). The potential impact without any mitigation measures is shown first, and the next column estimates the impact if a full range of mitigation measures are taken, including case isolation in the home, voluntary home quarantine, and four months of social distancing for the population over 70 years old.

Figure 1. COVID-19 confirmed cases



Source: Ministry of Health, North Macedonia

[16] https://www.who.int/ihr/procedures/joint-external-evaluations/en/.

Table 2. Simulations based on percentage of population infected

INPUTS		OUTPUTS		
% of population infected		Disease Impact	*No mitigation*	*Maximum Mitigation*
		Scenario 1		
		People infected	***520,750***	
Scenario 1	***25.0%***	Severe cases (% of symptomatic cases requiring hospitalization)	36,369	
		Critical cases (hospitalized cases requiring critical care)	10,067	5,134
		Peak ICU beds	*1,817*	*600*
		Deaths	4,870	2,484
		Scenario 2		
		People infected	***1,041,500***	
Scenario 2	***50.0%***	Severe cases (% of symptomatic cases requiring hospitalization)	72,738	
		Critical cases (hospitalized cases requiring critical care)	20,134	10,268
		Peak ICU beds	*3,634*	*1,199*
		Deaths	9,740	4,967
		Scenario 3		
		People infected	***1,666,400***	
Scenario 3	***80.0%***	Severe cases (% of symptomatic cases requiring hospitalization)	116,381	
		Critical cases (hospitalized cases requiring critical care)	32,214	16,429
		Peak ICU beds	*5,815*	*1,919*
		Deaths	15,583	7,948

Source: COVID-19 Calculator (see Annex 4).

19. **The Government of North Macedonia has been very proactive in efforts to control the pandemic, issuing a formal declaration of emergency on March 18, 2020, to combat the spread of COVID-19.** The Government has not hesitated to take strong action when it felt it was needed. On March 18, 2020, when there were just 35 cases, a nationwide state of emergency was declared. All borders and the airport are closed. An all-of-government action has been mobilized to fight the coronavirus, including scaling up emergency response mechanisms in all sectors. There has been a positive response among the population, and compliance with and trust in the Government's protective measures and instructions for social distancing. The MoH has started a vigorous risk communication campaign in social media and on TV and other media, benefiting from strong support from other international agencies, including WHO. On the health front, the country is working hard now to ensure that its hospitalization surge capacity, including the necessary personnel, is in place in case of larger community-based transmission. Recent emergency actions by the Government have included the temporary suspension of personal and corporate income tax payments, temporary changes to the Budget Law to allow the distribution of budget allocations, a reduced interest rate on tax arrears, and changes to repayments of loan obligations. In addition, the Government has taken actions to strengthen the public health sector's preparedness and social safety net response to the crisis. The country is still under an imposed curfew: the movement of all citizens across the country is restricted from 4 pm to 5 am. In addition, people over 67 are allowed to leave their homes only between 10 am and noon, and people under 18 years of age are allowed to leave their homes between 1 pm and 3 pm. The curfew for all citizens on weekends extends from 4 pm on Friday until 5 am on Monday.

20. **The MoH has taken a number of actions with respect to COVID-19 prevention, case detection, and care.** A national COVID-19 response plan has been developed that focuses on eight pillars: (a) strengthen coordination by activating multisectoral, multi-agency coordination mechanisms to support preparedness and response actions; (b) improve risk communication and community engagement activities through a robust and comprehensive risk communication plan; (c) enhance existing surveillance systems, contact tracing, and monitoring of COVID-19 transmission; (d) monitor readiness and response measures at points of entry; (e) strengthen the capacity of the national COVID-19 reference laboratory; (f) improve infection prevention and

control capacity at all levels of the health care system, including public, private, and traditional practices, and pharmacies; (g) improve designated hospitals' capacity in case management for COVID 19; and (h) map available resources in all sectors and establish a centralized procurement and supply mechanism.

21. **Different development partners have been involved in different parts of this response plan.** For example, UNICEF and UNDP have taken the lead in risk communication and community engagement, while WHO is the lead agency on issues related to the health components of emergency response, and the United Nations Population Fund/UN Women are focusing on women and gender issues related to the response. However, many of the gaps are related to the supply of essential equipment and materials needed for the response, including in the areas of testing and case detection, PPE availability, and care and treatment. To date over a million pieces of PPE have been donated by donors such as the EU, the U.S. Government, the Czech Republic, and private donors, but the current "consolidated list of need" is costed at almost US$55 million equivalent, and it is less than 10 percent subscribed (this includes 30 of the 150 ventilators the MoH feels it needs). It is unlikely that other major donors are going to fill this need in the short to medium term, which is why this was a major focus of the Government's request to the Bank.

22. **In addition to strengthening surge capacity, mitigation measures such as social distancing are key in the response to the pandemic.** North Macedonia's health system needs to be strengthened for an increased demand for hospitalization and critical care of COVID-19 patients while remaining able to provide at least basic services for the non-COVID-19 patients. Evidence suggest that for countries to "flatten the curve" and not overwhelm the health system all at once, implementation of mitigation measures, including social distancing, is essential to reduce community transmission and the number of people infected. An assessment of social distancing measures from China revealed that nonpharmaceutical interventions such as community social distancing and lockdowns reduced the transmission of COVID-19, and the first wave of COVID-19 outside Hubei province was abated because of the aggressive implementation of these measures. As a result, the case fatality rate outside Hubei was nearly five times lower than that in Hubei and was correlated with the reduction in mobility.[17] Modeling revealed that relaxing the social distancing when the epidemic size was still small would have pushed COVID-19 prevalence back to baseline.

23. **Enforcing social distancing measures in North Macedonia requires clear two-way communication and feedback with the public and financial mechanisms to support the disadvantaged groups to ensure compliance.** Poor, vulnerable, and marginalized groups are bearing disproportionate costs of lockdowns because their members are more likely to have lost their (formal or informal) jobs. They may not have a stable home or shelter, nor access to food, health care, and other basic services. The disadvantaged are also less likely to be able to observe basic public health measures, including handwashing, because of the lack of proper water and sanitation facilities, so they are more exposed to the risk of infection. The North Macedonia's government is currently putting in place measures to ensure that such groups are not further pushed into poverty and marginalization due to the lockdown and social distancing policies. Cash transfers through social protection interventions could partially compensate the vulnerable population for their loss of income and, as a result, allow them to be able to stay at home and observe the social distancing measures and support the overall health response.

[17] Leung, K., Wu, J. T., Liu, D., and Leung, G. M. (2020). First-wave COVID-19 transmissibility and severity in China outside Hubei after control measures, and second-wave scenario planning: a modelling impact assessment. *The Lancet*.

24. **The impact of COVID-19 on the population of North Macedonia extends well beyond the direct health effects, and the crisis may cause substantial economic hardship.** Despite the significant reduction in poverty over the past years, a large share of the non-poor population remains vulnerable and at risk of falling into poverty if negatively affected by a shock. Moreover, as previously noted, unemployment is stubbornly high in North Macedonia, particularly among young people. A large share of the unemployed have looked for a job for more than a year. Low labor force participation, high unemployment, and informal work have resulted in a significant waste of working years. It is estimated that the average Macedonian worker loses about 25 years of productive employment during his/her work lifecycle. The economic impacts of COVID-19 are expected to create further vulnerability and may push many more people into poverty. The following are the most affected groups of the population: informal workers; the self-employed; working poor; those with modest incomes working in sectors such as manufacturing, construction, tourism and services; and other particularly vulnerable groups (the Roma population, the elderly, the young, and women). The Ministry of Labor and Social Policy (MLSP) has estimated that more than 15,000 new households will seek social assistance and an additional 45,000 individuals will apply to the unemployment insurance scheme in the immediate aftermath of the COVID-19 outbreak.

25. **The social protection system in North Macedonia has the potential to adapt to and mitigate the adverse impacts of shocks and build resilience among the population.** North Macedonia has very effective social protection programs and institutions that could address the most immediate needs of the population. The Government and MLSP, in particular, have defined rapid response measures, such as increasing social assistance coverage and providing emergency packages of food and hygienic products. North Macedonia also has in place a well-regulated unemployment insurance policy that will be adapted to provide a significant source of income support during the crisis. The provision of this emergency support will rely on the existing social assistance and unemployment insurance schemes and their delivery mechanisms (Annex 3 provides a short overview of the social protection system).

26. **The World Bank has a history of engagement in the health and social sectors in North Macedonia.** The Bank has made substantial investments in North Macedonia's social protection systems, with current projects related to social insurance administration and social services improvement and previous projects that have played a leading role in the development of a mature social protection system. While the Bank has not financed a health project in North Macedonia for some time, it began reengaging in this sector several years ago with analytical work and technical assistance, including a Public Finance Review (2018); assessments of the primary health care, emergency medical services, and digital health systems (2019); and engagement related to the Primary Health Care Performance Initiative (2019-2020). In early 2020, the MoH agreed to explore the development of a new Bank-financed health project that would focus on improving the primary health care system.[18] Capacity built through this emergency response project should help strengthen the health system overall and facilitate the eventual preparation and implementation of a primary health care project.

C. Relevance to Higher-Level Objectives

27. **The project is relevant to the strategic directions of the World Bank Group and to global health commitments.** The project is aligned with World Bank Group strategic priorities, particularly the WBG's mission to end extreme poverty and boost shared prosperity. It is also aligned with the health-related targets of the Sustainable Development Goals, especially targets 3.8 ("Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and

[18] This complements EU-financed activities aimed at improving the secondary and tertiary care systems.

affordable essential medicines and vaccines for all") and 3.d ("Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks"). Country progress on pandemic preparedness and response capacity ("health security") is monitored by the World Bank and WHO as part of the Universal Health Coverage index.[19] The project is also aligned with the World Bank's commitment to support national plans and honor global commitments to strengthen pandemic preparedness through three key actions: improving national preparedness plans, including through the organizational structure of the government; promoting adherence to the International Health Regulations (IHR); and using international frameworks for monitoring and evaluating IHR. Further, it contributes to the implementation of the IHR of 2005, Integrated Disease Surveillance and Response, the World Organization for Animal Health international standards, the Global Health Security Agenda, the Paris Climate Agreement, and the promotion of a One Health approach. The project complements both the World Bank Group (WBG) and development partner investments in health systems strengthening, disease control and surveillance, individual and institutional behavior change, and citizen engagement.

28. **The WBG is committed to providing a fast and flexible response to the COVID-19 pandemic, making use of all WBG operational and policy instruments and working in close partnership with governments and other agencies.** Grounded in One Health, which provides for an integrated approach across sectors and disciplines, the WBG's response to COVID-19 includes emergency financing, policy advice, and technical assistance, building on existing instruments to support IDA-/IBRD-eligible countries in addressing the health sector and broader development impacts of COVID-19. The WBG's COVID-19 response is, in turn, anchored in WHO's COVID-19 global SPRP, which outlines the public health measures by which all countries can prepare for and respond to COVID-19 and sustain their efforts to prevent future outbreaks of emerging infectious diseases.

29. **The project is aligned with the broader engagement of the World Bank in North Macedonia, which in turn takes into consideration the priorities of the Government of North Macedonia**. This project was not envisaged in the Country Partnership Framework (CPF); however, given the global pandemic and the state of pandemic preparedness in the Republic of North Macedonia, the proposed project is aligned to the CPF's focus on strengthening human capital. The World Bank's 2019 CPF for North Macedonia[20] stated that "opportunities for citizens of North Macedonia to build human capital are limited and may even be deteriorating, which reduces the capacity of workers to meet the evolving demands of a modern economy and contribute to greater productivity. In North Macedonia, gaps in human capital start early and expand over time" (page 11). Focus Area II (Inclusive Growth) emphasizes maintaining and improving human capital and shielding the poor and vulnerable households from shocks. The proposed operation clearly supports this objective.

III. PROJECT DESCRIPTION

A. Development Objectives

30. **The project objectives are aligned to the results chain of the COVID-19 SPRP.**

31. **Project DO statement**: The project development objective (PDO) is to prevent, detect, and respond to the threat posed by, COVID-19, and strengthen national systems for public health preparedness in North Macedonia.

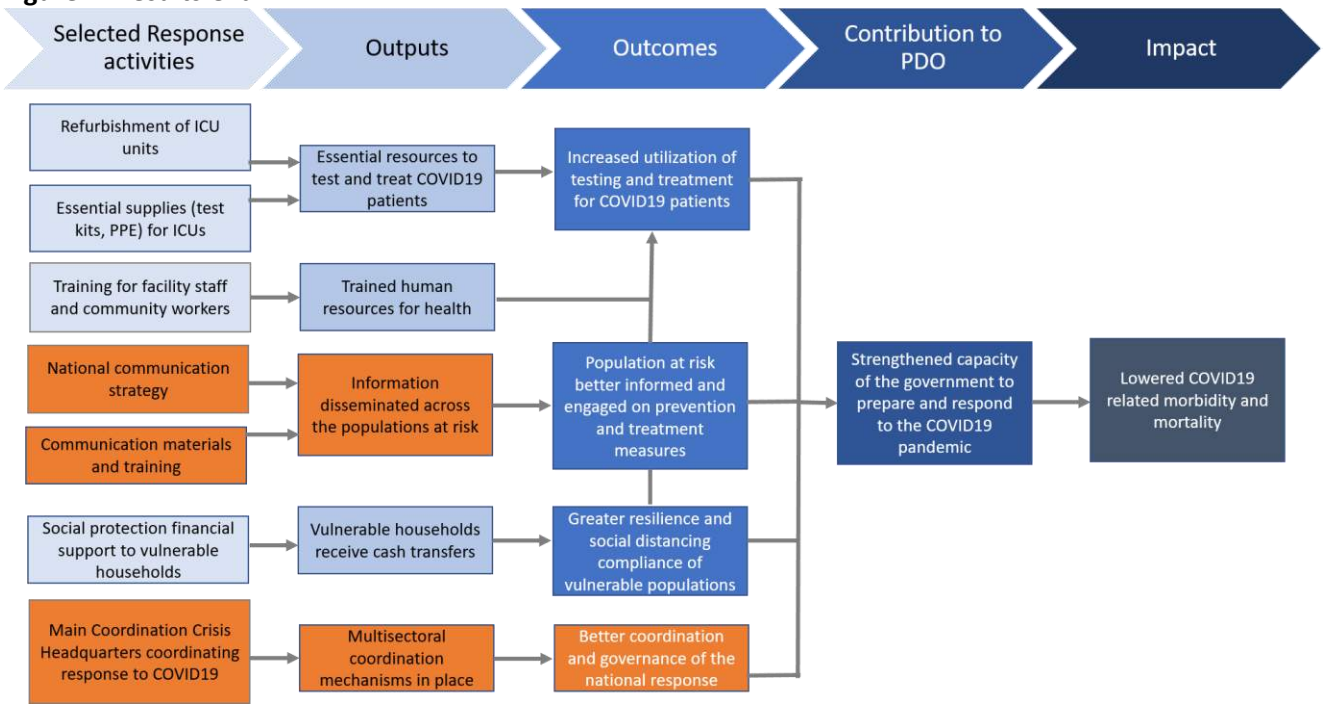
[19] https://www.who.int/healthinfo/universal_health_coverage/en/.
[20] World Bank. 2019. Country Partnership Framework for the Republic of North Macedonia. Washington, D.C.: World Bank.

32. **PDO-level indicators**: The PDO will be monitored through the following PDO-level outcome indicators:

- Number of people tested for COVID-19 identification per MoH approved protocol.
- Recovery rate from COVID-19.
- Number of beneficiaries receiving financial support to enable social distancing.

33. **The project envisions the following theory of change.** The theory of change (Figure 2) includes selected response activities promoted by the Government and supported by development partners, including the World Bank, and is intended to illustrate how the activities being financed by the World Bank contribute to the response and complement the actions of other organizations. The primary activities being financed by the World Bank project will focus on strengthening testing and treatment for COVID-19 and providing support to vulnerable populations, as reflected in the PDO indicators. These activities are highlighted in blue in Figure 2. Other development partners are taking a leading role in activities highlighted in orange in Figure 2, and the World Bank will complement their actions through activities supported by the project to avoid duplications and maximize impact in terms of lower mortality and morbidity from COVID-19. For example, WHO has been involved in sero-epidemiological studies to investigate the incidence of COVID-19 in the general population since the beginning of the outbreak. WHO's program goes hand in hand with the World Bank's focus on testing, as it is important to identify who needs to be tested. With WHO and USAID support, the health emergency operations room at the MoH is now better equipped. This has helped to facilitate coordination at the level of the central Government. In terms of communications, UNICEF has established a new partnership with the Voices against Violence Civil Society Organization Network to operate a helpline for positive parenting. UNICEF has also developed risk communication materials in multiple languages and is distributing them to vulnerable families along with hygiene kits. However, the World Bank is the only partner supporting vulnerable households through cash transfer programs under the project.

Figure 2. Results Chain



B. Project Components

34. **The project will support the Government in curbing the spread of COVID-19, strengthening the health system to detect and treat cases, and mitigating some of the social consequences of the pandemic.** The project will provide support to increase capacity for case detection, contact tracing, reporting, and monitoring; strengthen the capacity of the health system to handle a surge in severe cases by bolstering the human and technical capacity of hospitals and intensive care units (ICUs); improve the critical care capacity and infrastructure of the Clinic for Infectious Diseases; support the costs of health services; and support social assistance efforts to mitigate the effect of containment measures on the poor.

35. **This project was selected for COVID-19 financing at the request of the Government of North Macedonia, on the basis of the country's financing gap and technical capacity constraints**. The objectives, scope, and components of this project are aligned with the FTCFC. Activities have been carefully selected in discussion with the MoH, based on the Ministry's own needs assessment and informed by advice of WHO (as well as other development partners, drawing on the list of eligible activities outlined in the COVID-19 Board Paper and the designs of other COVID-19 projects in the ECA region and beyond). The project cost by component is provided in Annex 1.

Component 1: Emergency COVID-19 Response (EUR 34.05 million, US$37.26 million equivalent)

36. This component will provide immediate support to help the Republic of North Macedonia limit the local transmission of COVID-19 through containment strategies. It will support enhancing case detection capacities through the provision of technical expertise, laboratory equipment, and systems to ensure prompt case finding

and contact tracing, consistent with WHO guidelines in the Strategic Response Plan. It will enable North Macedonia to mobilize surge response capacity by financing the salaries of trained and well-equipped front-line health workers who were not envisioned in the state budget. Support will also be provided for limited renovations, if needed to operationalize additional ICU beds, and for medical waste management and disposal systems. It is important to note that the operational and financial landscape of the response is subject to rapid change; therefore, the planned interventions will be continually assessed against ongoing and emerging needs and adjustments will be made as required to support the country in achieving the best outcomes.

37. **Subcomponent 1.1: Enhancing case detection, confirmation, contact tracing, reporting, and monitoring (EUR 5.40 million, US$5.91 million equivalent).** This subcomponent will help to strengthen disease surveillance systems and public health laboratories through the procurement of diagnostic kits, reagents, consumables, PPE, and training on relevant protocols. It will facilitate combining the detection of new cases with active contact tracing, by enhancing the surveillance and contact tracing modules of the health system's current information system (MojTermin) and linking primary care providers to it. It will also support epidemiological investigation and monitoring by training public health workers to undertake contact tracing and monitoring of home-isolated and home-treated cases. Finally, it will help provide on-time and real-time data and information to guide decision-making and response and mitigation activities, by enhancing systems and protocols and building capacity for data reporting, data analysis, and information dissemination. The focus on training and systems and on immediate needs for equipment and supplies should help build long-term surveillance and response capacity, while effectively dealing with the current situation.

38. **Subcomponent 1.2: Strengthening the borrower's health system (EUR 18.01 million, US$19.71 million equivalent).** This subcomponent will focus on a number of areas that are critical for strengthening the health system so that it can effectively respond to the health needs of COVID-19 patients and health workers can provide high-quality and safe care. It will include the procurement of medical supplies, devices, and equipment necessary for evaluation, treatment, and monitoring, including ventilators and other equipment necessary for oxygen therapy (oxygen concentrators, pulse oximeters, etc.), infusion pumps, defibrilators, monitors, suction equipment, etc.; and the procurement and distribution of PPE according to WHO guidelines.

39. This subcomponent will also support efforts to repurpose existing health care facilities to meet the expected surge in demand for hospital beds, especially isolation and intensive care beds; to establish specialized units in a limited number of selected hospitals (focusing primarily on Infectious Diseases Clinic, the Clinic for Children's Diseases, the Clinic for Neurosurgery, and the Center for Anesthesiology, Resuscitation and Intensive Care), bearing in mind the longer-term needs of the country. It will also facilitate the development of health care, and potentially isolation, facilities in nontraditional sites to help address temporary surge needs. Since the Infectious Diseases Clinic is the premier facility for the treatment of infectious diseases in North Macedonia, special attention will be focused on developing its clinical care and infrastructure capacity, including by reconditioning space and providing the installations and utilities needed to accommodate new ICU beds. On the basis of evaluated needs, it will also provide equipment and supplies to set up new ICU beds, including mechanical ventilators, cardiac defibrillators, mobile x-rays, and other equipment. At the same time, it will build long-term capacity in the Infectious Diseases Clinic for providing critical care by introducing protocols, criteria, and information systems, and will support clinical care capacity building by providing technical assistance, guidelines development, and training of health care workers on identifying and treating COVID-19, on the appropriate use of PPE, and on preventing the spread of respiratory infections within health care facilities. It will also strengthen medical waste management and disposal systems in health care facilities where COVID-19

patients are treated. To ensure that adequate human resources are available to treat COVID-19 patients, this subcomponent will also finance surge staffing (additional staff who will be hired on a short-term basis to deal with expected high numbers of COVID-19 patients).

40. **Subcomponent 1.3: Financing of Health Insurance Premia for Vulnerable Beneficiaries (EUR 10.64 million, US$11.64 million equivalent).** Under the Law on Health Insurance, various government agencies are required to pay premiums on behalf of those in vulnerable groups. For example, the Employment Service Agency must pay for those covered by unemployment insurance, while the MoH must pay for those in other vulnerable groups, including those on social assistance (Guaranteed Minimum Income or GMI) who do not otherwise qualify for health insurance coverage. The expansion of support to these groups to facilitate social distancing planned under Component 2 would represent an increased cost which has not been previously budgeted. This subcomponent would help to cover these costs. This could potentially affect the access to health services for some 85,000 households, comprising up to 300,000 individuals. In order to ensure continuity of coverage, this subcomponent will finance the health insurance contributions for the unemployed and vulnerable groups normally covered by the MoH for a period of nine months.

Component 2. Household Support to Enable Social Distancing (EUR 54.83 million, US$60.01 million equivalent)

41. This component will finance temporary income support to eligible individuals and households to enable them to comply with the social distancing measures the Government has introduced to contain the COVID-19 pandemic. It will finance the provision of temporary social assistance support through (a) the financing of cash transfers to vulnerable households adversely affected by the economic consequences of COVID-19; and (b) the provision of food and basic supplies to quarantined populations and COVID-19-affected households. Additionally, it will finance temporary unemployment insurance support through the provision of a cash benefit for the individuals who lost their jobs as a consequence of COVID-19.

42. **Subcomponent 2.1: Temporary social assistance support (EUR 27.83 million, US$30.46 million equivalent).** This subcomponent will provide financing to the GMI program to reduce the financial burden on the less well-off caused by the COVID-19 pandemic and enable them to observe social distancing and support the overall health response. The financing will ensure the maintenance and expansion of GMI benefits for existing and new beneficiaries for 6-9 months. The coverage will be expanded to those who did not receive social transfers before the pandemic, but who have become eligible for GMI support since the crisis hit—primarily persons whose employment was terminated but who are not eligible for unemployment benefits; individuals and households who previously engaged in the informal economy; and other vulnerable groups at risk of falling into poverty. The GMI program expansion will include the elimination or adjustment of the eligibility criteria that apply in normal circumstances but are not relevant in an emergency for all new applicants (e.g., a 12-month ban for applying and awarding of GMI, vehicle possession, and real estate property; relaxation of the 3-month rule for income assessment). The program's income eligibility thresholds will remain the same.

43. In-kind support (e.g., packages of basic food and hygenic products) will be provided to beneficiaries of means-tested programs[21] shortly after the loan becomes effective. The MLSP will validate the capacity of possible delivery mechanisms before launching this activity (see Annex 3 for the description of a donor-

[21] Social assistance means-tested programs are the GMI program, Child Allowances, Educational Allowances, and the non-contributory elderly benefit/assistance.

supported Community Works Program). Delivery of basic packages is expected to further reinforce social distancing measures so that beneficiaries will not need to leave the house to seek necessities. Using the beneficiary information from the Cash Benefits Management Information System (CBMIS), the project will conduct several rounds of phone surveys of social assistance beneficiaries to assess the impact of the COVID-19 pandemic on vulnerable households and on their needs. This will help to tailor future policy interventions on building household resilience and to monitor the project's overall impact. Additionally, the project may facilitate citizen engagement activities using the same tool.

44. The GMI cash transfers will be implemented using the Treasury system and existing CBMIS platform under the MLSP to ensure efficient response and fast disbursments. Registration requirements for new beneficiaries of the temporary cash assistance will be simplified to accelerate beneficiary intake to the program. To comply with the social distancing measures that are in effect, online applications will be made possible. Payments will be made directly to beneficiaries' bank accounts (as in the case of regular transfers). Annex 3 provides a summary of the current GMI program and its delivery method.

45. **Subcomponent 2.2: Temporary unemployment insurance support (EUR 27.00 million, US$29.55 million equivalent).** This subcomponent will finance additional income support to workers by easing conditions to receive benefits, increasing the duration of benefits, and simplifying benefit processes. The new beneficiaries will be workers who have been deregistered by their employers in the records held by the Employment Agency and who access unemployment insurance benefits. The Government measure is to provide a cash benefit to those who have lost their jobs because of the crisis, in an amount equal to 50 percent of their average salary in the last 12 months for a period of up to 6 months, proportional to the number of years in employment. The project will cover these costs for 4 of the 6 months. The number of applications or changes in the unemployment insurance financing needs may change the timeline of support.

46. The capacity of the Employment Agency of the Republic of North Macedonia to manage the unemployment insurance scheme will be strengthened to enable it to respond to surge demand for its services, including the notification of unemployment status and processing of payments. Any waiting periods will be lifted, the deregistration process will be facilitated by remote channels to enable social distancing, and procedures will be streamlined to reduce waiting times.

Component 3. Project Implementation, Communications, Community Engagement, and Monitoring (EUR 0.90 million, US$0.99 million equivalent)

47. This component will support the administrative and human resources needed to implement the project and monitor and evaluate progress. It will finance staff, consultant costs, and operating costs associated with project implementation, coordination, and management, including support for procurement, financial management (FM), environmental and social safeguards, outreach activities, communication campaigns, monitoring and evaluation (M&E), reporting, and stakeholder engagement; information system maintenance; operating and administrative costs; technical assistance to strengthen the project's emergency response (e.g., development of testing, treatment, referral and discharge protocols, streamlining of Employment Agency procedures); and longer-term capacity building for pandemic response and preparedness. This component will also finance performance audits focusing on key project activities, which will be carried out by an external auditor under terms of reference acceptable to the Bank.

48. This component will support the development of communication, outreach, and awareness-building campaigns to ensure that culturally relevant information is disseminated to properly sensitize citizens to the risks related to COVID-19 and to inform them about the cash and in-kind benefits financed under the project. Information will be disseminated through various accessible channels (e.g., radio, television, internet, printed media), and will be designed to reach even vulnerable and remote populations. The communication around both types of activities (cash transfers and in-kind support) will provide an opportunity to promote appropriate hygiene and preventive health measures, as well messaging about preventing COVID-19 infection. The information-sharing activities will initially be supported by the ongoing Social Services Improvement Project (SSIP) (P162246) through outreach mechanisms that are already in place.

49. In addition, the project will implement a feedback mechanism on the COVID-19 response (temporary cash and in-kind benefits and health activities), to ensure communities can provide just-in-time-feedback to government to ensure that investments respond to local needs and reach vulnerable groups. This will also include a community-based monitoring mechanism and a grievance redress mechanism. These mechanisms will be detailed in the Project Operational Manual. To ensure that communities are engaged while social distancing policies are being implemented, the component will support the development of an online platform for all stages of community feedback.

C. Project Beneficiaries

50. The expected project beneficiaries will be a subset of the population at large who will be affected by the COVID-19 response supported by the project. Given the nature of the disease, they would include infected people; at-risk populations, particularly the elderly and people with chronic conditions; medical and emergency personnel; medical and testing facilities; and public health agencies engaged in the response in the Republic of North Macedonia. Direct beneficiaries will also include those reached by the social mitigation and HIF premium coverage measures, estimated to be around 85,000 households representing some 300,000 individuals. Depending on the spread of the pandemic, the number of indirect beneficiaries would potentially be 2.1 million people, 20.6 percent of whom are older than 60 years (age bracket in which case fatalities are concentrated).

IV. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

51. **The project will be implemented over a period of up to two years, with the MoH and MLSP as the key implementing agencies.** The MoH and MLSP will be accountable for the execution of project activities, and implementation will rely on their existing structures, with the additional support of an existing Project Management Unit (PMU) established under the MLSP. The PMU successfully implemented the World Bank-financed Conditional Cash Transfer Project, which closed in 2018, and is currently managing the SSIP and the Social Insurance Administration Project (SIAP). The PMU's lines of reporting to MoH and MLSP will be established upon the project's launch and will be detailed in the Project Operational Manual (POM) to be adopted by the Government within one month from effectiveness. For Component 1 activities, decisions will be made by the MoH in coordination with the Institute and Centers of Public Health and other institutions involved in COVID-related activities. For Component 2 activities, decisions will be made by the MLSP and the Employment Agency in coordination with their local offices (Centers for Social Work and Employment Agency offices). Detailed roles and responsibilities of the agencies involved in project implementation will be described in the POM.

52. **Project management.** The PMU will report to the MoH and MLSP and will be responsible for day-to-day project implementation, overall project coordination, monitoring activities, safeguards and fiduciary functions, and reporting. The PMU will be housed in the MLSP and headed by a project manager. Additional key PMU staff include two coordinators (one each for Component 1 and Component 2 of the project), safeguards experts (environmental and social safeguards issues), fiduciary staff (procurement specialist, procurement assistant, FM specialist, and FM assistant), two IT officers, and an M&E specialist. Some of the existing SSIP PMU staff will assume these functions. An additional health specialist will be hired or appointed within 30 days after loan effectiveness.

53. **Project timeline.** Given the emergency nature of the COVID-19 situation, the planned response, and the activities to be undertaken, most activities—including the social protection measures—are planned to be completed in the first 12 months of project implementation. However, some of the health measures may take longer to implement, particularly those pertaining to strengthening the health system to respond to future pandemics, including readiness to deal with a likely second wave of COVID-19 cases. Therefore, a two-year timeline has been established for the project.

B. Results Monitoring and Evaluation Arrangements

54. **The PMU will be responsible for M&E activities, overseeing progress related to project activities, outcomes, and results**. Through the PMU, the MoH will be responsible for (a) collecting and consolidating all data related to the suite of indicators; (b) evaluating results; (c) providing the relevant performance information to the appropriate Deputy Ministers; and (d) reporting results to the World Bank immediately before each semiannual implementation support visit. Each MoH department engaged in project activities and the PMU will perform their project-related functions in accordance with the POM. Each such MoH department will also appoint a focal point to ensure timely provision of project monitoring data. Through the PMU, the MLSP will be responsible for data collection and for monitoring the social protection data and activities supported by the project.

55. Personal data, personally identifiable information and sensitive data are likely to be collected and used in connection with the management of the COVID-19 outbreak under circumstances where measures to ensure the legitimate, appropriate and proportionate use and processing of that data may not feature in national law or data governance regulations, or be routinely collected and managed in health information systems. In order to guard against abuse of that data, the Project will incorporate best international practices for dealing with such data in such circumstances. Such measures may include, by way of example, data minimization (collecting only data that is necessary for the purpose); data accuracy (correct or erase data that are not necessary or are inaccurate), use limitations (data are only used for legitimate and related purposes), data retention (retain data only for as long as they are necessary), informing data subjects of use and processing of data, and allowing data subjects the opportunity to correct information about them, etc. In practical terms, operations will ensure that these principles apply through assessments of existing or development of new data governance mechanisms and data standards for emergency and routine healthcare, data sharing protocols, rules or regulations, revision of relevant regulations, training, sharing of global experience, unique identifiers for health system clients, strengthening of health information systems, etc.

C. Sustainability

56. **The project includes the necessary implementation arrangements, technical assistance, and institutional capacity-building activities to achieve the project objectives and sustain the gains beyond the project period.** The project will strengthen the health system's capacity to effectively respond to any future pandemic, and to address current challenges in outbreaks of other infectious and vaccine-preventable diseases.

V. PROJECT APPRAISAL SUMMARY

A. Technical, Economic, and Financial Analysis

57. **Technical appraisal is hampered by the fact that knowledge of COVID-19 epidemiology and the impact of different interventions is still evolving.** Scientists are still trying to understand the full picture of the disease's symptoms and severity. Worldwide, 6.9 percent of the people that were confirmed as having been infected have died, but WHO has been careful not to describe that as a mortality rate or death rate because in an unfolding pandemic it can be misleading to simply look at deaths divided by cases so far. In general, though, it seems that COVID-19 is causing mild and self-limiting disease in most people who are infected, with severe disease more likely among older people or those with co-morbidities, such as pulmonary disease and other chronic health conditions.[22]

58. **The demographic characteristics and burden of disease in North Macedonia suggest that a given population infection rate would likely be associated with a large number of severe cases.** COVID-19 case fatality rates are much higher in older age groups,[23] and North Macedonia has an older population structure: 20.6 percent of the population is older than 60 years, and 2.4 percent is older than 80 years.[24] Lung cancer and chronic obstructive pulmonary disease, which are relevant co-morbidities, are among the top 10 causes of premature death in North Macedonia.[25] A large share of the population has cancer (five-year prevalent cases are 17,406), and lung cancer is the most common form of cancer among men.[26] Given that COVID-19 is a lung disease, smoking is an important risk factor and appears to have played a large part in the gender distribution and severity of COVID-19 in China.[27]

59. **Modeling by the World Bank shows that North Macedonia should expect the COVID-19 pandemic to cause thousands of hospitalizations and hundreds of deaths, even under the most optimistic scenarios.** Epidemiologists are warning that countries should expect to see population infection rates of 25-80 percent.[28]

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[22] Heyman, D, and Shindo, N, on behalf of the WHO Scientific and Technical Advisory Group for Infectious Hazards. 2020. *The Lancet*, https:/doi.org/10.1016/S0140-6736(20)30374-3.

[23] For example data from the Italy outbreak indicate that, while case fatality is rare in children and rates are 0.3-1 percent for adults aged 30-50 years, case fatality rates increase sharply in the older population groups: 1 percent for adults aged 50-59 years, 3.5 percent in the 60-69 bracket, 12.5 percent in the 70-79 bracket, 19.7 percent in 80-89 bracket, and 22.7 percent in the 90+ bracket.

[24] United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019, custom data acquired via website.

[25] http://www.healthdata.org/macedonia.

[26] https://gco.iarc.fr/today/data/factsheets/populations/807-the-former-yugoslav-republic-of-macedonia-fact-sheets.pdf.

[27] See 3 above, and Cai, W. 2020. "Sex difference and smoking predisposition in patients with COVID-19." *Lancet Respir Med*, Doi.org/10.1016/PII. At: https://www.thelancet.com/action/showPdf?pii=S2213-2600%2820%2930117-X.

[28] See, for example, Ferguson N. et al. https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-NPI-modelling-16-03-2020.pdf.

Using these assumptions, the disease may cause 36,400-116,400 severe infections, 10,000-32,200 critical infections requiring intensive care, and 4,900-15,600 deaths (see Table 3). Even in the very optimistic scenario of a 10 percent infection rate, these numbers would be 14,500, 4,000, and 1,900, respectively. These numbers could be reduced through appropriate nonpharmaceutical interventions[29] to limit the spread of the disease in the population, some of which are already in place in North Macedonia. Managing severely and critically ill patients will require rapidly ramping up testing and hospital capacity and practicing appropriate protocols, thus justifying the investments in equipment, supplies, and training proposed by the project.

Table 3. Estimated number of severe and critical cases of COVID-19 infection, and COVID-19-related deaths under different assumptions of the percentage of the population infected.

% of population infected with COVID-19	*Number of severe cases*	*Number of critical cases*	*Number of deaths*
10	14,500	4,000	1,900
25	36,400	10,000	4,900
50	72,700	20,100	9,700
80	116,400	32,200	15,600

60. **The interventions and investments supported by this project reflect the outcome of a rapid technical assessment.** They are the best assessment of the MoH and WHO (in North Macedonia), in collaboration with the World Bank, of the most appropriate interventions to combat the outbreak, taking into consideration what is known about the disease epidemiology and its likely evolution, and of the state of the North Macedonian health system. In particular, it is informed by WHO recommendations regarding best practice for limiting the human and economic impacts of the COVID-19 pandemic; previous assessments and surveys of the health system's capacity undertaken by the MoH, WHO, and World Bank; limited modeling; and careful review of the proposed equipment lists by WHO North Macedonia. Still, the combination of the limits to our epidemiological knowledge and the fact that the current and future prevalence of COVID-19 infection remains unknown in most countries means that designing a technically appropriate project remains challenging. The design of the project is flexible to accommodate changing needs in the face of the rapidly changing pandemic and evolving knowledge. Since the health and social protection activities in response to the COVID-19 pandemic are assigned to separate components, activities can more easily be adjusted to a changing epidemiological situation without necessarily requiring project restructuring.

Economic Analysis

61. **There is a strong economic rationale for the project's investment to strengthen the Government's response to the COVID-19 pandemic.** Although there are significant gaps in knowledge of the scope and features of the COVID-19 pandemic, it is apparent that one main set of economic effects will derive from increased sickness and death among humans and the impact this will have on the potential output of the domestic and global economy. Another significant set of economic impacts will result from the uncoordinated efforts of private individuals to avoid becoming infected or to survive the results of infection. The SARS outbreak

[29] Nonpharmaceutical interventions include (a) isolating cases of COVID-19 at home, (b) voluntary home quarantine, (c) social distancing for the entire population, (d) social distancing for the most vulnerable population – people over the age of 70, and (e) closure of schools and universities.

of 2003 provides a good example. The number of deaths due to SARS was estimated at "only" 800 deaths, and it resulted in economic losses of about 0.5 percent of annual GDP for the entire East Asia region, concentrated in the second quarter. The measures that people took resulted in a severe demand shock for services sectors such as tourism, mass transportation, retail sales, and increased business costs because of workplace absenteeism, disruption of production processes, and shifts to more costly procedures. Prompt and transparent public information policy can reduce these economic losses. A third set of economic impacts are those associated with governments' policy efforts to prevent the epidemic, contain it, and mitigate its harmful effects on the population. These policy actions can be oriented to the short, medium, or long-term or to the national, regional, or global levels. The economic impact of this project will be mainly through the first pathway: by its investments in prevention through case detection and the provision of care to the ill, the project can reduce morbidity and mortality from the levels they might have reached, thus also limiting the impact of the COVID-19 outbreak on labor productivity and the economy.

62. **The impacts of COVID-19 on household incomes and broader welfare status are likely to be substantial, and for specific poor and vulnerable groups disproportionate.**[30] In addition to the direct health impact, the COVID-19 crisis will likely affect household welfare through higher prices, increased health expenses, and reduced labor incomes. It is anticipated that a significant number of individuals will lose their jobs, especially persons with fixed-term contracts, seasonal workers, and those who have been engaged in the informal economy. Incomes of many vulnerable people above the administrative threshold established for the GMI program, people who are normally not beneficiaries of social assistance programs, will be hit hard. Simulations performed by the World Bank show that more than 60,000 individuals in North Macedonia are expected to fall into poverty in 2020. In addition, the number of individuals who are vulnerable will potentially increase slightly (about 30,000), while the middle class is expected to significantly decrease from about 52 percent to 48 percent (almost 95,000 people).[31] The expansion of cash transfers could mitigate the financial damage caused by the virus outbreak on the less well-off. The planned beneficiary surveys for project monitoring purposes and better understanding of the impact of the COVID-19 pandemic on household welfare should provide useful inputs for planning the medium-term health and social protection measures.[32]

B. Fiduciary

63. **The fiduciary risk is rated Substantial (FM is Moderate, and procurement is High).** The procurement risk associated with the implementation of the proposed project is High because of the nature of the project and the global extent of the COVID-19 outbreak, which creates shortages of supplies and necessary services. Moreover, the fact that various industries are feeling the impact of COVID-19 affects the procurement process and implementation of contracts.

[30] It is expected that in a period with strong fiscal constraints, there will be a need to further ring-fence safety net spending for the poor.
[31] The simulation results and the underlying assumptions are preliminary and may change as the COVID-19 situation evolves and more knowledge and data become available.
[32] The survey results could also inform policy dialogues in other countries in the region.

Financial Management

64. **The FM arrangements for the project, as detailed in the financial section of the POM of the ongoing SSIP, are acceptable to the Bank.** The FM assessment was conducted taking into consideration (a) the Financial Management Manual for World Bank Investment Project Financing Operations, date March 1, 2010, and revised on February 10, 2017; (b) the Bank's Operational Policy 8.00, *Rapid Response to Crises and Emergencies*; and (c) Guidance Note on FM in Rapid Response to Crises and Emergencies. FM arrangements meet the minimum FM requirements in accordance with OP/BP 10.00.

65. **Staffing**. The PMU of the MLSP is adequately staffed to carry out all core functions, including FM. The staff have relevant experience in implementing World Bank-financed projects. The Finance Manager in the PMU has relevant previous experience in accounting and is well familiarized with World Bank procedures.

66. **Planning and budgeting**. The PMU has adequate capacity for planning and budgeting in terms of human resources, availability of quality information, and an appropriate IT system. The staff have experience in budget preparation. Variances between actual versus budgeted figures are monitored regularly and appropriately analyzed and followed up. The PMU will prepare a single budget for all project activities for all sources of funding.

67. **Financial reporting and monitoring**. Locally developed software that is used for project accounting and reporting for the ongoing SSIP will be upgraded and customized to fit the requirements of the new project not later than two months from effectiveness. The software has a solid performance history of financial transparency and reliability, and it fulfills all reporting requirements under the project, including generating interim unaudited financial reports (IFRs) and project financial reports. Throughout project implementation a full set of IFRs will be submitted to the World Bank each quarter within 45 days after the end of the quarter. The reports will include consolidated financial information on all project funds: detailed information on amounts transferred to the transit Treasury account, amounts paid to beneficiaries through the account, and any unused funds that were transferred from the Designated Account (DA). The IFRs' format and content will be agreed upon during negotiations. Accounting for the project will be on a cash basis, with additional information provided for commitments on signed contracts.

68. **The project will use the internal controls and flow of funds arrangements that were designed and instituted for the SSIP.** An adequate system of internal controls and procedures was instituted as part of the SSIP. This system is assessed as reliable and will continue to be applied to this new project. The current management control framework is already described in the FM section of the POM for the SSIP. Key internal controls to be applied for the project include (a) appropriate authorizations and approvals; (b) segregation of duties (with no single person having the responsibility for all phases of transaction); (c) regular reconciliations between records and actual balances, as well as with third parties; and (d) complete original documentation to support project transactions. These measures are essential in ensuring proper control and monitoring of the flow of funds to beneficiaries or intermediaries and final beneficiaries and for the project's intended purposes. Appropriate verifications and documented evidence will be required to provide reasonable assurance in this respect. The controls and procedures—including ex-ante and ex-post controls, physical inspection, and so on—will be detailed in the POM for the project.

69. **The MLSP uses the Treasury system for its accounting and reporting.** The WB assessed the Treasury system and found it to be sound, with reliable reporting and ex-ante controls. The locally developed software that is used for project accounting and reporting of the SSIP will be upgraded, tailored, and used for the proposed project. The system upgrade requirements were agreed upon during negotiations, and the PMU will be requested to finalize the upgrade not later than two months from effectiveness to ensure a smooth implementation. In addition, the cash transfers component will be implemented using the existing CBMIS platform under the MLSP, which was designed and tested as part of previously implemented a Conditional Cash Transfers Project; it has been proven to be reliable.

70. **External audit**. The PMU will apply the same audit requirements as for the existing World Bank-financed projects. The MLSP, like any other Government entity, is audited by the State Audit Office (SAO) of North Macedonia. However, as the SAO's capacity for conducting efficient financial audit is still quite limited, the project's financial statements will be audited by a private sector audit company, and in accordance with terms of reference, that are both acceptable to the Bank. The audit report will be submitted to the Bank no later than 6 months after the end of the period audited. The cost of the annual project audits will be covered by the project funds.

71. **Disbursements.** DAs for the project will be opened in the National Bank of the Republic of North Macedonia and will be managed by the PMU with the authorized signatories, which include a ministerial (MLSP) representative. The funds will flow from the DA, through the transit Treasury account opened for the project within the Treasury Single Account, to final beneficiaries and contractors. The FM risk is assessed as Moderate. The project will provide the PMU in MLSP with additional capacity for FM to maintain its current performance and address the inherent complexity and specificity of the project.

72. **Risk analysis**. Overall FM risk is assessed to be High because of the complexity and specificity of cash transfers, but with adequate mitigation measures in place the risk is Substantial. Details on the risk analysis are provided in Annex 2.

73. **Supervision plan**. At this time, the Bank team will follow the recommended flexibility in supervision, oversight, and reporting requirements set out in the memorandum of April 7, 2020, issued by the Operations Policy & Country Services Vice Presidency, "Flexibility in FY20 with supervision, oversight, and reporting requirements for ongoing Bank-financed operations affected by restrictions caused by COVID-19."

Procurement

74. Procurement for the project will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers for Goods, Works, Non-Consulting and Consulting Services, dated July 1, 2016 (revised in November 2017 and August 2018). The project will be subject to the World Bank's Anticorruption Guidelines, dated October 15, 2006, and revised in January 2011 and as of July 1, 2016.

75. **Use of Systematic Tracking of Exchanges in Procurement (STEP).** The project will use the STEP system to plan, record, and track all procurement transactions under the project. This ensures that comprehensive information on the procurement and implementation of all contracts for goods, works, non-consulting services, and consulting services awarded under the whole project are automatically available. This tool will be used to manage the exchange of information (such as bidding documents, bid evaluation reports, no objections, and so

on) between the implementing agencies and the Bank. The PMU of the MLSP has already used STEP for two ongoing World Bank-financed projects and is very familiar with the system.

76. **The major planned procurement includes the following** for the *health sector*: (a) laboratory equipment and systems for case finding and contact tracing, consistent with WHO guidelines in the Strategic Response Plan; (b) medical supplies, devices, and equipment necessary for evaluation, treatment, and monitoring; (c) PPE; (d) medications per COVID-19 protocols for treatment; (e) equipment and supplies to set up new ICU beds; (f) mechanical ventilators, cardiac defibrillators, mobile x-rays, etc.; (g) training to build long-term capacity for critical care provision (introduction of protocols, criteria, information systems, etc.); and (h) ICU beds and medical waste management and disposal systems. For the *social protection sector*, planned procurement includes basic packages of food and hygienic products. Finally, procurement for *both sectors* will include (a) staffing and consultant costs associated with project implementation, coordination, and management, including support for procurement, FM, environmental and social safeguards, outreach activities, communication campaigns, M&E, reporting, and stakeholder engagement; (b) technical assistance to strengthen the project's emergency response (e.g., development of testing, treatment, referral, and discharge protocols); (c) longer-term capacity building for pandemic response and preparedness; and (d) performance audits focusing on key project activities.

77. **A streamlined Project Procurement Strategy for Development (PPSD)** is being developed by the PMU at the MLSP, and its finalization has been deferred to the implementation stage. The initial procurement plan for the project will cover the first three months of project implementation and will be updated during implementation. All the selection methods defined in the applicable Procurement Regulations can be used; however, priority will be given to streamlined and simple procedures and to those that ensure expedited delivery, such as Direct Selection, Request for Quotations with no threshold limit as appropriate, Framework Agreements (including tapping into existing ones, provided the call-offs under the project incorporate the requirement for compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the World Bank Group's Sanctions Framework), Procurement from UN Agencies following Direct Selection using existing standard agreements, Engagement of UN Agencies to provide technical assistance or outputs (combination of technical assistance and inputs), and Consultant's Qualifications-based Selection. Procurement will follow either an international or national approach in accordance with the procurement thresholds indicated in the PPSD.

78. **The proposed procurement approach prioritizes fast-track emergency procurement for the emergency goods, works, and consulting and non-consulting services needed.** Key measures to fast-track procurement include using (a) simple and fast procurement and selection methods fit for an emergency situation, including direct contracting, as appropriate; (b) streamlined competitive procedures with shorter bidding time; (c) framework agreements, including existing ones; (d) procurement from UN Agencies enabled and expedited by Bank procedures and templates; (e) procurement agents; (f) force account, as needed; and (g) increased thresholds for Requests for Quotations and national procurement, among others, as well as minimal or no prior review for emergency procurement. If requested by the borrower, the Bank may consider providing hands-on expanded implementation support (HEIS) to help expedite all stages of procurement – from help with supplier identification, to support for bidding/selection and/or negotiations, to contract signing and monitoring of implementation. In addition, a bid-securing declaration may be asked in lieu of a bid security; performance security may not be required for small contracts; advance payment may be increased to 40 percent when secured with an advance payment guarantee; the time for submission of bids/proposals can be shortened

to 15 business days in competitive national and international procedures, and to 5 business days for the Request for Quotations, depending on the value and complexity of the requested scope of the bid and the capacity of firms (local and international) to prepare responsive bids in the proposed periods; and the standstill period will not apply in any procurement under the project.

79. **Retroactive financing and advance procurement may be considered under the project,** subject to the conditions set out in paragraphs 5.1 and 5.2 of the World Bank's Procurement Regulations for Borrowers. In accordance with the Procurement Regulations, the Bank requires the application of, and compliance with, the Bank's Anti-Corruption Guidelines, including without limitation the Bank's right to sanction and the Bank's inspection and audit rights. To ensure compliance with the above provisions in bidding processes that have already been conducted and for which the awarded/signed contracts did not include the relevant fraud and corruption (F&C) provisions, the MLSP and MOH have agreed to require such suppliers/consultants and contractors to sign the Letter of Acceptance of the World Bank's Anticorruption Guidelines and Sanctions Framework so that these contracts can be eligible for financing under this project; the Bank will not finance any contracts that do not include the Bank's F&C-related clauses. The MLSP and MOH will also provide to the Bank the list of contractors/suppliers and subcontractors/sub-suppliers under these contracts for the Bank to ensure that the firms chosen are not and were not at time of award or contract signing on the Bank's List of Debarred Firms. Contracts awarded to firms debarred or suspended by the Bank (or those that include debarred or suspended subcontractors/sub-suppliers) will not be eligible for the Bank's financing.

80. The borrower has requested retroactive financing for up to 30 percent of the total loan amount to support advanced procurement, and this was agreed during negotiations. The Bank will review and agree on the list of eligible expenditures for retroactive financing, ensuring that is focuses on critical short-term needs with quick disbursement.

81. **Procurement of secondhand goods may be considered under the project where justified and needed to respond to the emergency.** A procurement process for goods should not mix secondhand goods with new goods; the technical requirements/specifications should describe the minimum characteristics of the items that could be offered secondhand—that is, age and condition (e.g., refurbished, like new, or acceptable if showing normal wear and tear); and the warranty and defect liability provisions in the contract should be written or adapted to apply to secondhand goods. Any risk mitigation measures that may be necessary in relation to the procurement and use of secondhand goods will be reflected in the PPSD.

82. **HEIS may be considered in the procurement of the initial needs of medical equipment and supplies, if requested by the borrower.** As part of HEIS, at the borrower's request the Bank will provide Bank-facilitated procurement (BFP) to proactively assist in accessing existing supply chains. Once the suppliers are identified, the Bank could proactively support the borrower with negotiating prices and other contract conditions. The borrower will remain fully responsible for signing and entering into contracts and implementation, including assuring relevant logistics with suppliers such as arranging the necessary freight/shipment of the goods to their destination, receiving and inspecting the goods, and paying the suppliers, with the option of using the World Bank's system of making direct payment to the contractors or suppliers or consultants on behalf of the client from the proceeds of the financing, in accordance with the terms of the Loan Agreement. The BFP would constitute additional support to the borrower over and above the usual HEIS, which will remain available. If needed, the Bank could also provide hands-on support to the borrower in contracting to outsource logistics. However, procurement execution remains the responsibility of the borrower, and HEIS does not result in the

Bank's carrying out procurement on behalf of the borrower. BFP to access available supplies may include aggregating demand across participating countries, whenever possible, and extensive market engagement to identify suppliers from the private sector and UN Agencies. The Bank is coordinating closely with WHO and other UN Agencies (specifically WHO and UNICEF) that have established systems for procuring medical supplies and charge a fee that varies across agencies and type of service and can be negotiated (around 5 percent on average). In addition, the Bank may help the borrower access governments' available stock. In providing BFP the Bank remains within its operational boundaries and mandate, which already includes HEIS to help the borrower achieve the project's development objectives. Procurement for goods/works and services outside this list will follow the Bank's standard procurement arrangements, with the borrower responsible for all procurement steps (or with normal HEIS, as applicable).

83. **Staffing.** As noted above, the PMU has substantial experience in World Bank-financed projects and has shown satisfactory performance in procurement. It has a solid management structure and is staffed with one experienced procurement specialist managing procurement under the ongoing operations, assisted by a newly recruited procurement assistant. Diligence is also observed in record-keeping and quality of evaluation. The procurement processing and contract management in both implemented projects were rated Satisfactory. Given the additional workload and the emergency nature of the proposed project, strengthening of the workforce of the PMU is recommended by hiring one additional procurement specialist.

84. **The key fiduciary risk is failed procurement** due to lack of a sufficient global supply of the essential medical consumables and equipment needed to address the health emergency, as there is significant disruption in the supply chain, especially for PPE. To help mitigate this risk, the Bank will leverage its comparative advantage as convener and facilitate the borrower's access to available supplies at competitive prices with the BFP described above.

85. **The Bank's oversight of procurement will be done through implementation support, HEIS if requested, and increased procurement post-review**. The Bank will not carry out prior review in this project. The details of the implementation support and post-review arrangements will be elaborated in the PPSD.

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social Standards

86. **Overall, the risk rating is assessed as Substantial for both environmental and social risks.** The project will have long-term positive impacts, as it should improve COVID-19 surveillance, monitoring, and containment. It can also cause substantial environmental, health, and safety risks because of the dangerous nature of the pathogen (COVID-19) and reagents and other materials to be used in the project-supported ICUs and participating laboratories. The main environmental risks include the following: (a) environmental and community health-related risks from inadequate storage, transportation, and disposal of infected medical waste; (b) occupational health and safety issues related to the availability and supply of PPE for health care workers and the logistical challenges in

transporting PPE across the country in a timely manner; and (c) community health and safety risks, given close social contact and limited sanitary and hygiene services (clean water, soap, disinfectants) and isolation capabilities across the country. Infections due to inadequate adherence to occupational health and safety standards can cause the virus to spread to medical staff, laboratory staff, and the population at large during the detection, transportation of patients/tests/chemicals and reagents, and treatment stages. This can also lead to illness and death among health workers. Furthermore, the ICUs and laboratories involved in COVID-19 diagnostic testing and treatment will generate medical waste and other hazardous byproducts that, if inadequately managed during their collection, transportation, and disposal, also may cause health risks. While risks to the safety of workers and the community are relevant and significant, they are considered temporary, predictable, and readily managed through the project design features and mitigation measures. No major civil works are expected under this project. All small works under the health component are expected to be carried out in existing facilities, hospitals, and clinical centers, to establish, upgrade, or adapt ICUs within existing facilities/grounds, and no new land will be acquired or accessed. A key social risk is the potential for inequitable access to project-supported facilities and services, particularly for vulnerable and high-risk social groups (poor, disabled, elderly) and exclusion from the social protection measures. This risk is partly mitigated by the fact that the project will be implemented by an experienced PMU. All the environment and social risks are covered by the WB Environmental and Social Standards (ESS): ESS 1, ESS 2, ESS 3, ESS 4, and ESS 10.

87. **To manage the risks specified above, the MLSP and MoH will prepare an Environmental and Social Management Framework (ESMF), with an annex covering Labor Management Procedures, and a Stakeholder Engagement Plan (SEP).** The ESMF will include a template for the Infection Prevention and Control and Waste Management Plan to be adopted and implemented by all ICUs and laboratories supported by the project. The ESMF will also provide the detailed procedures, based on WHO guidance, for treating patients, and environmental health and safety guidelines for staff in ICUs and laboratories, including use of the necessary PPE, and it will provide requirements for adequate medical waste management, including proper disposal of sharp objects. All these provisions will then be used for preparing the Infection Prevention and Control and Waste Management Plan, which will provide best international practices in COVID-19 diagnostic, testing, and response and treatment activities, based on the relevant WB Environmental Health and Safety Guidelines, Good International Industry Practice, and COVID-19 Quarantine Guideline and WHO COVID-19 biosafety guidelines. The SEP will serve the following purposes: (a) stakeholder identification and analysis; (b) planning engagement modalities—in particular, it will serve as an effective communication tool for consultations and disclosure; (c) enabling platforms for influencing decisions; (d) defining the roles and responsibilities of different actors in implementing the SEP; and (e) establishing a grievance redress mechanism, building on existing social protection operations in North Macedonia. The ESMF and SEP will be prepared to a standard acceptable to the IBRD and disclosed both in-country on the MoH website and on the World Bank website within 30 days after the project effectiveness date.

VI. GRIEVANCE REDRESS SERVICES

88. **Communities and individuals that believe that they are adversely affected by a World Bank-supported project may submit complaints to existing project-level grievance redress mechanisms or the Bank's Grievance Redress Service,** which ensures that complaints received are promptly reviewed and project-related concerns addressed. Project-affected communities and individuals may submit a complaint to the Bank's independent Inspection Panel, which determines whether harm occurred, or could occur, as a result of the Bank's noncompliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention and Bank Management has been given an opportunity to

respond. For information on how to submit complaints to the Bank's corporate Grievance Redress Service, please visit http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit *www.inspectionpanel.org*.

VII. KEY RISKS

89. **The overall project risk is assessed as Substantial**. All individual project risks, except stakeholders risk (Low), technical design and implementation risk (Moderate), and institutional capacity for implementation and sustainability risk (Moderate), are rated as Substantial. A cross-cutting risk relates to the limits to World Bank supervision, especially in the short term, because of the infectious nature of the disease and the suspension of missions over the coming months. This would be mitigated by using an existing PMU with experienced staff, with which the World Bank already has a strong working relationship.

90. **Political and governance risks are Substantial**. Despite the country's remarkable progress in strengthening its international position, its path toward EU membership has been prolonged. Aiming to maintain strong support within the country for its economic and social reform program, the Government called for extraordinary parliamentary elections in April 2020, but they have been delayed because of the pandemic. From January 2020 until the new Government is appointed, a technical Government will be in charge of operative tasks only. Because the project approval and effectiveness process would span the political cycle and project implementation period, the political risk is Substantial. To mitigate this, communications have been and will be maintained at all levels during the preparation and implemenation period.

91. **The macroeconomic risk is Substantial**. Over the past three years the country has enjoyed broad-based, solid economic growth averaging 2.5 percent, and has also kept the public debt sustainable and roughly at the same level. However, the COVID-19 crisis has already led the country into a recession (beginning in March 2020) because of the aggressive containment and social distancing measures taken to prevent the spread of the virus. Government-supported programs for affected firms and people, coupled with declining revenues, will result in a higher deficit and debt at a time when the country is facing significant debt repayment amid tightened capital markets. The depth and the length of the economic slowdown will depend on the duration of the containment measures, as well as the recovery of external demand for export products of North Macedonia. Over the medium term, growth recovery is expected as the COVID-19 outbreak loses force. NATO membership and the launch of the EU accession negotiations (both announced in March) should boost reforms and investor confidence, so that once the crisis is over, growth should rebound faster.

92. **Sector strategies and policies risk is rated Substantial**. While sector strategies and policies in the area of social protection are well articulated, the development of a clear and generally acceptable health policy that has an appropriate focus on primary health care has so far been a challenge. However, with the involvement of WHO and other development partners, including the World Bank, progress is being made toward achieving a consensus.

93. **The fiduciary risk is rated Substantial (FM is Substantial, and procurement is High).** The procurement risk associated with the implementation of the proposed project is High because of the nature of the project and the global extent of the COVID-19 outbreak, which creates shortages of supplies and necessary services. Moreover, the fact that various industries are feeling the impact of COVID-19 presents a challenge for the procurement process and the implementation of contracts. The PMU established within the MLSP to manage the ongoing SSIP and SIAP

will be responsible for fiduciary management under this project, and fiduciary performance under the SSIP is currently rated Satisfactory. The initial risk assessment for this project is based on the performance of the PMU under the SSIP. While the current capacity in the PMU is based on the needs of the SSIP, additional capacity for procurement and FM might be needed for the proposed project to maintain its current performance and not escalate risk.

94. **The environmental and social risk is rated Substantial**. The four major areas of risk for the project are related to (a) rehabilitation of existing health care facilities; (b) medical waste management and disposal; (c) the virus among health care workers; and (d) the spread of COVID-19 among the population at large. These risks are covered by ESS 1, ESS 2, ESS 3, ESS 4, and ESS 10. To mitigate these risks the MLSP will prepare an ESMF, which will contain provisions for storing, transporting, and disposing of contaminated medical waste and will outline guidance (in line with international good practice and WHO standards on COVID-19 response) on limiting viral contagion in health care facilities. In addition to the ESMF, the client will implement the activities listed in the Environmental and Social Commitment Plan.

VIII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: North Macedonia

North Macedonia Emergency COVID-19 Response Project

Project Development Objective(s)

To prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness in North Macedonia.

Project Development Objective Indicators

Indicator Name	DLI	Baseline	End Target
To prevent, detect and respond to the COVID-19 pandemic in North Macedonia			
Number of people tested for COVID-19 identification per MoH approved protocol (Number)		11,556.00	50,000.00
Recovery rate from COVID-19 (Percentage)		77.00	90.00
Number of new beneficiaries receiving financial support to enable social distancing (Number)		0.00	100,000.00

Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline	End Target
Emergency COVID-19 Response			
Number of designated laboratories with COVID-19 diagnostic equipment, test kits, and reagents per MoH guidelines (Number)		2.00	10.00
Number of acute healthcare facilities with isolation capacity (Number)		0.00	11.00
Number of ventilators purchased (Number)		0.00	50.00
Number of personal protective equipment (PPE) purchased (Number (Thousand))		0.00	1,900.00
Number of additional fully equipped ICU beds for treatment of COVID-19 cases (Number)		0.00	50.00
Number of health care workers trained in infection prevention and control per MoH approved protocol. (Number)		0.00	11,400.00
Number of doctors and nurses trained to treat patients with COVID-19 per approved MoH protocol (Number)		126.00	600.00
Household Support to Enable Social Distancing			
Number of GMI beneficiaries (Number)		27,000.00	42,500.00
Number of unemployment insurance beneficiaries (Number)		4,700.00	45,000.00
Number of households (recipients of means-tested programs) provided with food and hygienic packages (Number)		0.00	40,000.00
Implementation of new application procedures for COVID-19 pandemic related social protection measures (Text)		not implemented	implemented and functioning

Monitoring & Evaluation Plan: PDO Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Number of people tested for COVID-19 identification per MoH approved protocol	Cumulative number of people tested for COVID-19. The technical specifications of the tests will be based on the international/national norms and standards for COVID-19 response.	Every 6 months	MoH and PMU	Administrative data records, field verification of availability of equipment.	MoH and PMU
Recovery rate from COVID-19	Numerator: Cumulative number of confirmed cases who recovered from COVID-19. Denominator: Cumulative number of closed COVID-19 cases.	Every 6 monhts	MoH and PMU	Administrative data	MoH and PMU
Number of new beneficiaries receiving financial support to enable social distancing	Refers to 100,000 new beneficiaries (individuals) of both GMI (15,500 households or approximately 55,000 individuals) and unemployment benefit (45,000 individuals) programs.	Every 6 months	PMU/MLSP/EA	Administrative data	PMU/MLSP/EA

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Number of designated laboratories with COVID-19 diagnostic equipment, test kits, and reagents per MoH guidelines	Number of designated laboratories supported under the project with COVID-19 diagnostic equipment, test kits, and reagents per MoH guidelines. The technical specifications of the tests will be based on the international/national norms and standards for COVID-19 response.	Every 6 months	MoH and PMU	Laboratory Audit	MoH and PMU
Number of acute healthcare facilities with isolation capacity	Number of existing acute healthcare facilities with isolation capacity for COVID-19 patients, that have been remodeled and equipped to become fully operational through the project.	Every 6 months	MoH and PMU	Administrative data and audit reports	MoH and PMU
Number of ventilators purchased	Cumulative number of medical ventilators financed by the project.	Every 6 months	MoH and PMU	Administrative data records, field verification of availability of equipment.	MoH and PMU
Number of personal protective equipment (PPE) purchased	Cumulative number of personal protective equipment purchased,	Every 6 months	MoH and PMU	Administrative data	MoH and PMU

	including gloves, protective goggles, chirurgical masks/ear loop, face mask FF2, face mask N95, gown AAMI level 3, shoe covers, protection caps, scafanders.				
Number of additional fully equipped ICU beds for treatment of COVID-19 cases	Number of additional ICU beds fully operational for treatment of COVID-19 patients, as defined based on international/national standards.	Every 6 months	MoH and PMU	Administrative data and audit reports	MoH and PMU
Number of health care workers trained in infection prevention and control per MoH approved protocol.	Total number of health workers who participated in training on infection prevention and control according to MoH protocol.	Every 6 months	PMU	Administrative Data and record from training institutions	PMU
Number of doctors and nurses trained to treat patients with COVID-19 per approved MoH protocol	The total number of doctors and nurses who participated in training on identification and/or treatment of COVID-19 patients according to MoH protocol.	Every 6 months	PMU	Administrative data and records from training institutions	PMU
Number of GMI beneficiaries	Refers to old (27,000) and new (15,500) GMI beneficiaries (households). The number of	Every 6 months	CBMIS	MLSP administrative data	PMU/MLSP

	beneficiaries may oscillate and eventually drop to its "regular" level once the old eligibility criteria are back in place and the project financing ceases.				
Number of unemployment insurance beneficiaries	Refers to an expected caseload of unemployment insurance beneficiaries (individuals) that are to be supported for a period of four months. The four-month time limit/duration of support may change depending on the number of applications or due to the changes in elegibility criteria. Sex-disaggregated data will be monitored.	Every 6 monoths	EA information system	EA administrative data	PMU/EA
Number of households (recipients of means-tested programs) provided with food and hygienic packages	Packages will be delivered to the existing GMI beneficiaries and beneficiaries of other means-tested social assistance programs (child allowances, education allowances, and the elderly assistance).	One time	CBMIS/MLSP	MLSP administrative data	PMU/MLSP
Implementation of new application procedures for COVID-19 pandemic related social protection measures	Refers to new application procedures (including an online and phone application) for social	One time	PMU/MLSP/EA	MLSP/EA administrative data	PMU/MLSP

	assistance and unemployment benefits.				

ANNEX 1. Project Costs

COUNTRY: North Macedonia
North Macedonia Emergency COVID-19 Response Project

COSTS AND FINANCING OF THE PROJECT

Program Components	Project Cost		IBRD Financing	
	EUR millions	*USD millions Equivalent*	*EUR millions*	*USD millions Equivalent*
Component 1: Emergency COVID-19 Response	**34.05**	**37.26**	**34.05**	**37.26**
1.1 Enhancing Case Detection, Confirmation, Contact Tracing, Reporting and Monitoring	5.40	5.91	5.40	5.91
1.2 Strengthening the Borrower's Health System	18.01	19.71	18.01	19.71
1.3 Financing of Health Insurance Premia for Vulnerable Beneficiaries	10.64	11.64	10.64	11.64
Component 2: Household Support to Enable Social Distancing	**54.83**	**60.01**	**54.83**	**60.01**
2.1 Temporary social assistance support	27.83	30.46	27.83	30.46
2.2 Temporary unemployment insurance support	27.00	29.55	27.00	29.55
Component 3: Project Implementation, Communications, Community Engagement, and Monitoring	**0.90**	**0.99**	**0.90**	**0.99**
3.1 Project Implementation	0.50	0.55	0.50	0.55
3.2 Communications, Community Engagement, and Monitoring	0.40	0.44	0.40	0.44
Total Costs	**89.78**	**98.25**	**89.78**	**98.25**
Front-end Fees	0.23	0.25	0.23	0.25
***Total Financing Required**	**90.00**	**98.50**	**90.00**	**98.50**

Note: Totals do not add up due to rounding*

ANNEX 2. Implementation Arrangements and Support Plan

COUNTRY: North Macedonia
North Macedonia Emergency COVID-19 Response Project

96. The World Bank's implementation support will focus on helping the MoH and the MLSP to unblock potential operational bottlenecks by providing advice and undertaking analytics to strengthen the technical quality of implementation and assure timely implementation. The extent of implementation support that can be provided will depend on recognized needs and opportunities.

97. In the technical domain, the focus of the World Bank's implementation support will be on the timely coordination of the pandemic response, in both health and social assistance. This will include technical support for, among other things, (a) coordination mechanisms and facilitating coordination between MoH and MSLP; (b) specification and procurement of essential equipment and supplies; (c) specification and procurement of required works; (d) development and ongoing monitoring of mechanisms to facilitate the timely transfer of funds for surge staffing, HIF premiums, and social assistance payments; and (f) curriculum and training approaches.

98. WHO, with its in-country expertise across a wide range of relevant topics (including the detection and management of noncommunicable and communicable diseases, information systems, and health systems) will continue to be an important technical partner. The support of other key UN Agencies, on both technical and operational fronts, will be sought as may be deemed necessary. The World Bank team will coordinate its implementation support with partners to get the most value for money, avoid duplication, and exploit synergies—for example, with respect to the delivery of basic packages of food and hygienic products under the Community Works Program, which is supported by the Swiss Agency for Cooperation and Development and MLSP, and implemented by UNDP.

99. To strengthen compliance, technical assistance will be needed as described in the relevant sections of the Appraisal Summary. With fiduciary risk rated as Substantial, technical assistance for procurement and FM will be prioritized. The PMU will be kept abreast of any new development related to STEP and the World Bank Procurement Framework. Implementation support for FM will be undertaken mainly during, and in response to the findings of, the semiannual FM supervision reviews. For environmental and social safeguards, the World Bank will monitor compliance through the reports submitted by the PMU and will take remedial and supportive action as needed

Financial Management (FM)

100. **FM performance.** As mentioned in the Appraisal Summary section of the PAD, the FM arrangements of the ongoing SSIP implemented by MLSP are satisfactory. There are no outstanding IFRs or audit reports under the current project.

101. **Risk analysis.** The overall FM risk for the project is High, but with adequate mitigation measures, the residual risk is assessed as Substantial. The table below summarizes the FM assessment and risk ratings for this project.

Risk	Risk rating	Risk mitigation measures	Risk rating after mitigation
Inherent risk			
Country level. Perceived corruption in the country is high. Capacity of the State Audit Office (SAO) is low. Nevertheless, the Government has well-functioning Treasury operations and exercises good control over spending of budget entities. The National Bank of the Republic of North Macedonia efficiently administers the Treasury Single Account on behalf of the Government.	H	The risk as described allows the utilization of the Treasury system and the opening of the DA in the National Bank of the Republic of North Macedonia. Corruption risk will be mitigated by instituting additional procedures and strengthening the system of internal controls. The internal controls to be applied in practice will be described in the financial manual (integral part of the POM). Quarterly IFRs will be submitted to the Bank, and the Bank's FM specialist will perform regular supervision. Risk imposed by the limited capacity of SAO will be mitigated by using private auditor acceptable to the Bank for the project audit.	S
Entity level. System of internal controls in the public sector is assessed as relatively weak. Because of the involvement of the MLSP in the fiduciary aspect of the project and the complexity of the project in general, appropriate internal controls are crucial for successful implementation.	S	The risk will be mitigated by instituting additional key controls to be applied during project implementation. Those controls are described in the financial manual (integral part of the POM) and are intended to safeguard financial resources and ensure proper use of project funds for the intended purposes.	M
Project level. The flow of cash transfers benefits funds is considered as high risk for adequate tracking and transparency of the use of these funds.	H	Appropriate mechanisms will be instituted to provide sufficient safeguards to ensure the adequate flow of funds and the use of funds for the intended purposes. Controls and procedures will be instituted and described in the financial part of the POM.	S
Overall Inherent Risk	**H**		**S**
Control Risk			
Budgeting and planning. Capacity for budgeting and planning is adequate, and there is substantial experience in this respect. However, care should be taken that variances of actual versus budgeted figures are monitored regularly and appropriately analyzed and followed up.	S	The PMU will document the follow-up and corrective actions taken for any variances between budgeted and actual figures. This will be verified by the Bank's FM specialist during supervision.	M
Accounting. Accounting information will present transfers not only from the DA, but all the way to the final beneficiaries. Obtaining proper and timely information to account for transactions in various stages of the process involves risk of coordination between the different entities involved.	H	Communication channels are clearly defined to ensure that up-to-date and accurate accounting information is readily available.	S
Internal controls. Appropriate system of internal controls needs to be clearly defined to ensure that the project funds	H	Internal controls and procedures to be applied during project implementation will be described in the financial manual (integral part of the POM). The application of controls in	S

Risk	Risk rating	Risk mitigation measures	Risk rating after mitigation
are used for the intended purposes, given the specifics of conditional cash transfers.		practice will be verified as part of the Bank's supervision.	
Funds flow. The flow of funds imposes high risk for adequate tracking and transparency of the use of funds.	H	Flow of funds, including related procedures and controls, such as authorizations and approvals of payments, will be clearly described in the financial part of the POM. Application of the procedures will be verified during the Bank's supervision.	S
Financial reporting. Financial reports will include details on the funds transferred to the MLSP, amounts paid to beneficiaries, and any unused funds that were transferred from the DA. There is high risk to the reliability of such reports.	H	Locally developed software used for project accounting and reporting on the ongoing project will be used also for this project. Quarterly IFRs will be supplemented by additional sheets, which will provide breakdown on all information described in the left column. Documentation flow and communication channels clearly defined to ensure that up-to-date and correct accounting information is included in the financial reports. The IFRs format will be agreed upon by the Bank and the PMU.	S
Auditing. Low capacity of the SAO.	S	the project audit will be performed by a private audit firm using terms of reference acceptable to the Bank.	M
Staffing. Timely and adequate documentation and information flow will depend on staff capacity of the PMU/MLSP.	S	All core functions of the PMU are adequately staffed as part of the ongoing SSIP. For the purpose of this project, additional FM staff will be hired, as needed. The MLSP is assessed to have sufficient capacity to ensure appropriate staffing.	S
Overall Control Risk	**H**		**D**
Overall FM Risk	**H**		**S**

102. **Staffing.** The PMU has all core functions appropriately staffed, and the capacity of the unit is assessed as sufficient. The MLSP is assessed to have sufficient capacity in appropriate staffing. The authorized signatory for contracts and payments is a representative of the MLSP. All core functions within the PMU, including FM, are adequately performed. The Finance Manager of the PMU has relevant experience in accounting and in World Bank procedures.

103. **Planning and budgeting.** The PMU has adequate capacity for planning and budgeting in terms of human resources, availability of quality information, and IT system. Staff have experience in budget preparation. The PMU will prepare a single budget for all project activities, including transfers. The MLSP is assessed as having sufficient capacity and experience to carry out these tasks.

104. **Information systems.** MLSP uses the Treasury system for its accounting and reporting. The WB team assessed the Treasury system as sound, with reliable reporting and ex-ante controls. Locally developed software, including reporting, used for the ongoing SSIP will be upgraded, tailored, and used for the proposed project. The PMU will be requested to finalize the upgrade within two weeks of project effectiveness to ensure a smooth implementation. The software provides financial transparency and reliability of the project data, which is particularly important given the need to consolidate all project information in one place.

105. **Social assistance component.** The cash transfers component will be implemented using the existing Cash Benefit Management Information System (CBMIS) platform managed by the MLSP. This is a reliable system that was designed and tested as part of the previously implemented Conditional Cash Transfers Project.

106. **Accounting policies and procedures.** Accounting records are kept and IFRs prepared using an acceptable locally developed accounting software, which is supplemented by Treasury reports. The software provides reliable accounting information. The functionality and user-friendliness of the software are adequate. It allows cross-checks and reconciliation of accounting information, reducing the risk of errors. The accounting books and records will be maintained on a cash basis with additional information on signed contracts. Project financial statements will be presented in Euro. The PMU will apply a set of acceptable accounting procedures and internal controls, including authorization and segregation of duties for the project. To improve the safeguard of assets, additional internal control procedures will be instituted (e.g., reconciliation between accounts and records, reconciliation of cash and bank balances) and described in the financial section of the POM of the ongoing SSIP, which will be updated to reflect the proposed project. The financial section of the POM will also set out FM and internal control policies and procedures to guide staff and minimize the risk of errors and omissions and of delays in recording and reporting. A clear description of roles and responsibilities, including level of authority and control over cash payments and bank accounts, will be included to ensure timely and accurate financial reporting.

107. **Financial reporting and monitoring.** Project management-oriented IFRs will be used for project monitoring and supervision. The reports will include consolidated financial information on all project funds; detailed information on amounts and grants transferred to the transit Treasury account; amounts paid to beneficiaries through the account; and any unused funds transferred from the DA. The format of the IFRs will be agreed upon during negotiations. The PMU will produce a full set of IFRs within 45 days after the end of each calendar quarter throughout the life of the project. The IFRs will comprise the following reports, presented in the agreed format (a) Project receipts and payments; (b) Uses of Funds by Activity; (c) Designated Account statement; (d) Detailed breakdown of transfers; and (e) Narratives to the reports. Accounting for the project is on a cash basis with additional information on commitments related to signed contract.

108. **Internal controls.** An adequate system of internal controls and procedures, instituted as part of the SSIP, is assessed as reliable and will also apply to the new project. The current management control framework is described in the FM section of the existing POM for SSIP. Key internal controls will include (a) appropriate authorizations and approvals; (b) segregation of duties (with no single person having the responsibility for all phases of transactions); (c) regular reconciliations between records and actual balances, as well as with third parties; and (d) complete original documentation to support project transactions.

109. Additional controls are required to ensure that funds flow directly to the beneficiaries and that the funds are used for the intended purposes as detailed in the financial section of the POM. These controls include the following:

- Proper eligibility criteria: (a) ex-ante – clear description of eligibility criteria for beneficiaries, projects, and activities to be financed by the project, and documentation needed to support eligibility; and (b) ex-post –control checks performed to verify the eligibility of the beneficiaries.
- Proper procedures for the selection of beneficiaries (staff who will evaluate; procedures and criteria for selection; summary reports).
- Procedures on determining the funds needed; methodology for calculating the need for funds.

- Transparency of the flow of funds: information on the funds transferred, together with supporting documentation, including statements of accounts (MLSP/project transit account within the Treasury Single Account, DA) to be submitted to the PMU from the Treasury. The PMU will include in the quarterly IFRs detailed information related to the flow of funds.
- Reporting back to the PMU: on the executed transfers from the MLSP/Project transit account, from the DA, and to beneficiaries (supporting documentation, accounts statements), as well as on unused funds.

110. **External audit.** The implementing entity follows the audit requirements of WB-financed projects. Like any other Government entity, MLSP is audited by the State Audit Office of North Macedonia. However, as the capacity of the SAO for conducting efficient financial audit is still limited, the project's financial statements will be audited by a private firm in accordance with terms of reference acceptable to the Bank. The audit report (financial, performance, and operational audit) will be submitted to the Bank within 6 months after the end of the audit period. The annual cost of the audits of the project will be covered by the project funds. The scope of the audit will include the review, at least on a sample basis, of the regularity of payments to the beneficiaries and their eligibility. In addition to the financial audit, operational/performance audit will be carried out as a separate task, subject to separate terms of reference and procurement process.

Disbursements

111. **A transaction-based disbursement method will be used under the project.** Upon project effectiveness, a DA will be opened in the National Bank of the Republic of North Macedonia, to which the funds will be transferred. A transit Treasury account in Macedonian Denar (MKD) will be opened within the Treasury Single Account to serve as an operating account for withdrawals from the foreign currency account. The DA will be managed and operated by the PMU with the authorized signatories, which include a ministerial (MLSP) representative. All transfers will take place through the account, with a corresponding transfer of the MKD-equivalent amount from the foreign exchange account.

112. **The procedures relating to the flow of funds, including paths for authorization and approval of payments, will be described in detail in the updated FM section of the POM.** The procedures should clearly describe all steps of the process and identify authorized signatories for administering the account funds. Bank statements showing turnover and balance on the transit Treasury MKD subaccount and the bank statements indicating balance on the DA will be submitted daily. The PMU will include balances on all project-related accounts in the quarterly IFRs.

113. **The ceiling for the DA is reflected in the Disbursement and Financial Investment Letter (DFIL) agreed during negotiations.** Applications for replenishment of the DA will be submitted at least quarterly, or when one-third of the amount has been withdrawn, whichever comes first. Documentation requirements for replenishment will follow standard Bank procedures as described in the Disbursement Handbook. Reconciled Bank statements of the DA will accompany all replenishment requests.

114. **Retroactive financing.** Withdrawals up to an aggregate amount not to exceed EUR 27,000,000 may be made for payments made prior to the signing of the Loan Agreement but on or after February 1, 2020 for eligible expenditures.

115. **Supervision plan.** During project implementation, the Bank will supervise the project's FM arrangements in two main ways: (a) reviewing the project's IFRs for each calendar quarter, as well as the project's annual audited financial statements and the auditor's management letter; and (b) performing on-site supervisions (once the restrictions due to COVID-19 are lifted), reviewing the project's FM and disbursement arrangements to ensure compliance with the Bank's minimum requirements. The supervision mission may include relevant staff of the PMU.

Technical, Fiduciary, and Safeguards Support

116. For technical, fiduciary, and safeguards oversight and support, the Bank will provide intense support at two points in time: during the first 12 months (from approval to effectiveness and through early implementation) and at midterm. On-site supervision will take place once the travel restrictions due to COVID-19 are lifted.

ANNEX 3. Summary of Possible Socioeconomic Impacts and Social Protection System Responses

The COVID-19 Outbreak Could Affect People's Welfare and Incomes[33]

117. North Macedonia has made considerable progress in reducing poverty and inequality since the 2008 global financial crisis—progress that has been driven mainly by improvements in job opportunities and increases in labor earnings. Government spending contributed to these improved labor market outcomes through subsidies to foreign direct investment, active labor market policies, and spending to improve infrastructure. Increases in pensions also contributed to poverty reduction, though to a lesser extent than labor market improvements.

118. Despite this substantial reduction in poverty, a large share of the non-poor population remains vulnerable and at risk of falling into poverty if negatively affected by a shock, such as the COVID-19 outbreak. Moreover, although unemployment has decreased significantly, it remains stubbornly high in North Macedonia, particularly among young people—among the highest rates in ECA. A large share of the unemployed are long-term unemployed who have looked for a job for more than year. Along with the high unemployment, low labor force participation and informal work result in a significant waste of working years. It is estimated that the average Macedonian worker loses about 25 years of productive employment during his/her worker lifecycle. Also, there is a significant gender gap, particularly in access to economic opportunities, that could potentially increase because of the COVID-19 outbreak.

119. The negative impact of the pandemic may vary across income groups (women, the elderly, youth, the Roma) because of differences in their demographic and socioeconomic characteristics. Women—particularly the less educated—have low labor market participation and low employment. Lack of access to affordable child and elder care prevents many women from taking jobs. Child care and school closing due to the outbreak could increase the burden on mothers who need to stay home or find new arrangements, negatively affecting female labor force participation. Furthermore, women tend to be employed in sectors and occupations that are more affected by the outbreak.

120. Elderly people are relatively more likely to develop health complications, so they are disproportionally affected by the virus outbreak. This issue is particularly relevant, as elderly people represent a significant share of the overall population of North Macedonia. At the same time, the fall in economic activity will likely affect youth employment, reversing past achievements. Youth unemployment dropped by approximately 20 percentage points between 2012 and 2019. However, about 35 percent of the labor force aged 15-24 who are available for and seeking employment did not have a job in 2019, among the highest youth unemployment in ECA. Moreover, about one in four young people in North Macedonia were not in education, employment, or training that year.

121. The Roma have relatively less access than others to basic services and economic opportunities. In North Macedonia, the Roma represent approximately 9.6 percent of the population, but employment of the Roma is about 30 percentage points lower than in the non-Roma population, the highest gap among all Western Balkan countries. The Roma population that is not in education, employment, or training is also significantly higher than the non-Roma. Finally, the Roma population presents a higher prevalence of unmet need for medical care than the non-Roma population. Communication between health mediators and the Roma can be disrupted by the

[33] Based on the *COVID-19 Response Policy Note* prepared by Marina Petrovic, Leonardo Lucchetti, and Gonzalo Javier Reyes Hartley, Poverty and Social Protection and Jobs, World Bank.

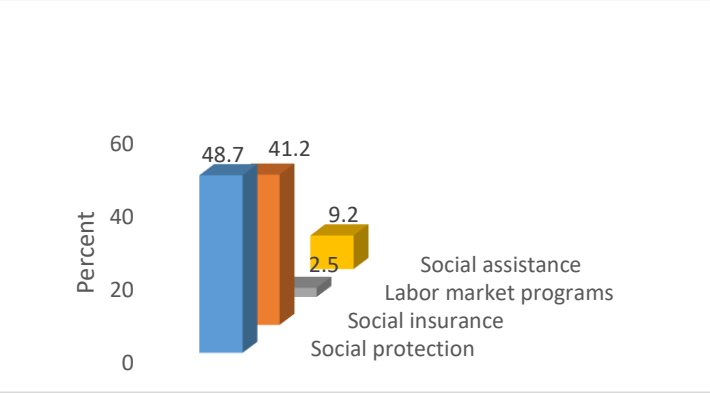
isolation measures taken during the COVID-19 outbreak, which potentially could translate into an increase in discriminatory behaviors by health personnel.

122. Poor and vulnerable people who work in the most affected sectors (such as manufacturing, construction, tourism, informal economy) will need to be compensated for the loss of labor and non-labor incomes that the COVID-19 pandemic causes. Social assistance programs played a limited role with respect to poverty reduction in the past because of their low coverage and fragmented nature. The expansion of cash transfers would reduce the financial damage caused by the virus outbreak on the less well-off. This could be done by strengthening the social safety net response, providing larger cash transfers to social assistance beneficiaries, and expanding coverage to those who became poor and were not receiving public social transfers before the pandemic.

Brief Overview of the Social Protection System

123. The Republic of North Macedonia has a developed and well-functioning system of social and child protection. The social protection system consists of social insurance, employment and labor market policies, social assistance benefits, and social welfare services, programs that cover almost half of the population (Figure 3-1).

Figure 3-1. Social protection coverage, by types of programs



Source: Social Protection Expenditure and Evaluation Database, World Bank.

124. While social protection spending (with social insurance, including pensions) in North Macedonia has been comparatively high over the past years, spending on social assistance programs has been low and fragmented across several programs. At 1.2 percent of GDP, spending on social assistance was among the lowest in the region until 2016. It has also been tilted toward non-means-tested programs in a context where poverty levels were relatively high and income-generation opportunities for the poor remained scarce—a fact that raised concerns about allocative efficiency.

125. Social assistance benefits cover about 10 percent of the population in North Macedonia (Figure 3-1), and they are an important source of household income. Additionally, there is a range of social care services that target specific vulnerable groups (persons with disability, orphans, the elderly, etc.). Although poverty rates in North Macedonia have been relatively high, the social assistance programs have consistently covered only one-third of the poorest quintile over the past decade. Targeting accuracy was respectable, with more than 70 percent of social financial assistance recipients in the poorest decile.

126. In May 2019, the Ministry of Labor and Social Policy (MLSP) introduced a comprehensive social safety net reform aimed at increasing the coverage of the poorest quintile by consolidating social assistance benefits and introducing a new Guaranteed Minimum Income (GMI) program. The new Law on Social Protection and the amendments to the Law on Child Protection streamlined social assistance benefits and transformed the untargeted Parental Allowance program into a means-tested program. With the amendments to the Child Protection Law, the Government redesigned the Child Allowance program and introduced a new means-tested Education Allowance for the primary and secondary education levels that replaced the Conditional Cash Transfer (which benefited students in secondary education only). Overall, social assistance and child protection outlays reached 1.38 percent of GDP in 2019.

127. The existing GMI program provides a comprehensive social safety net for the poor. Its level of support equals the difference between the household income and the established threshold, which is set at a maximum MKD 10,000 a month (US$177) for a five-member family, using an equivalence scale (Table 3-1).

Table 1. Income eligibility thresholds per household type

Number of household members	Income eligibility threshold in MKD (in US$)
1	4,000 (70)
2 (adults)	6,000 (106)
2 (one parent with one child)	6,400 (113)
3 (adults)	7,600 (135)
3 (parents with one child)	6,400 (113)
4 (parents and two children)	6,800 (120)
4 (parents, one child, one adult)	8,000 (142)
5 (parents and three children)	7,200 (128)
5 (adults and one child)	9,600 (170)
5 (adults)	10,000 (177)

Source: MLSP data, April 2019.

128. The GMI households are now also entitled to a housing supplement and additional financial assistance of MKD 1,000 per month to cover the cost of energy during the cold part of the year (October to March). The program benefits 27,000 households in North Macedonia. Together with the unemployment insurance policy (Table 3-2), the GMI has been recognized as a social protection program with important capacity to respond to the crisis caused by the COVID-19 pandemic.

Table 3-2. Main characteristics of unemployment insurance regulations in North Macedonia

Eligibility	Benefits	Duration
At least 9 months uninterrupted or 12 months intermittent in the last 18 months	50% of the average monthly net wage of the employee for the last 24 months	(a) One month, if recipient has at least 9 months of insurance experience of uninterrupted duration or 12 months with interruption in the last 18 months; (b) two months, if recipient has insurance experience of 18 months to 2.5 years;

Eligibility	Benefits	Duration
		(c) three months, if recipient has insurance experience of 2.5-5 years; (d) four months, if recipient has insurance experience of 5-7.5 years; (e) five months, if the insurance experience is 7.5-10 ten years; (f) six months, if insurance experience is 10-12.5 years; (g) seven months, if insurance experience is 12.5-15 years; (h) eight months, if insurance experience is 15-17.5 years; (i) nine months, if insurance experience is 17.5-20 years; (j) ten months, if insurance experience is 20-22.5 years; (k) eleven months, if insurance experience is 22.5-25 years; and (l) twelve months, if insurance experience is over 25 years.

129. The fully developed CBMIS is a unique registry of social assistance beneficiaries and a platform for delivery of all social assistance cash transfers. In addition, the infrastructure in the MLSP and 30 Centers for Social Works (CSWs), through which benefits and services are delivered, has been upgraded to allow more efficient workflow and program monitoring. The CBMIS is linked with the administrative databases of several key agencies (Pension Fund, Cadaster Office, Revenue Office, Employment Agency, etc.). Shared administrative tools (a single application form) for various programs and platforms facilitate efficient targeting, data collection, benefit payment, and monitoring.

Proposed Policy Response and Delivery Mechanisms

130. Several social protection policy measures will provide cash, food, and other benefits to support the income and consumption of the most vulnerable citizens and enable social distancing during the COVID-19 crisis. The income support consists of a two-pronged approach: a social assistance subcomponent to support the poor and vulnerable (including people in the informal sector), and a social insurance/unemployment subcomponent to support the need for expanded unemployment benefit payments. The in-kind support will involve the purchase and delivery of basic packages of food and hygienic products.

131. **The social assistance subcomponent 2.1** will support the financing of the GMI program to reduce the financial burden caused by the COVID-19 pandemic on the less well-off and thus enable them to comply with the social distancing measures that are in effect in North Macedonia. The measure is directed at supporting disease containment efforts through social protection interventions that would partially cover loss of income during the lockdown. The key activities will include:

- For at least 15,500 new GMI applicants (households), the eligibility criteria that apply in standard circumstances that are not relevant in an emergency will be eliminated or adjusted (e.g., the 12-month ban for applying and awarding of GMI, vehicle possession, real property); this also includes relaxing the 3-month rule for the income assessment for all new entrants, whose eligibility will be assessed on the basis of one month's income. Income eligibility thresholds will remain unaltered. The coverage will be expanded to 15,500 (or more) households that did not receive social transfers before the pandemic but have become eligible for the GMI support. These are primarily persons whose employment was

terminated, but who do not qualify for unemployment benefits, individuals and households who previously engaged in the informal economy, and other vulnerable groups at risk of falling into poverty.
- For the beneficiaries of means-tested social assistance programs (GMI, Child Allowances, Education Allowances, and the non-contributory elderly assistance), basic packages of food and hygiene products will be delivered as an immediate response to the crisis.

Related activities will be supported under the Project Implementation and Monitoring component:

- MLSP will commission several rounds of phone surveys with social assistance beneficiaries to assess the impact of the COVID-19 pandemic on vulnerable households and their needs. This would help tailor future policy interventions and monitor the project's overall impact.
- MLSP will also increase outreach and provide channels of additional and accessible information on access to temporary cash benefits and services.

132. **The insurance subcomponent 2.2** will provide income support by easing conditions to receive benefits, increasing the duration of benefits, and simplifying benefit processes. The project will finance the following:

- Unemployment benefits for up to 45,000 individuals—a cash benefit for those who have lost their jobs because of the crisis equal to 50 percent of their average salary in the last 12 months for a period of 4 months.
- Strengthening the Employment Agency's capacity to respond to a surge in demand for its services, including the development of applications, notifications, payments, and maintenance activities related to the new insurance benefit application procedures.

133. The legal basis for the implementation of the proposed social assistance measures will be the Decree that was adopted by the Government on April 24, 2020.

Intake and Social Assistance Benefit Delivery

134. Registration and intake for new beneficiaries of the temporary cash assistance will be conducted online, by phone, and in the 30 CSWs and 50 offices located primarily in rural areas (while applying social distancing procedures). All the necessary documents for benefit application are available electronically through the interoperable CBMIS platform. Beneficiary recertification and home visits will be suspended. For all beneficiaries, payments will be made directly to bank accounts. For new entrants, unique social numbers will be sent directly to the bank for benefit payment execution.

135. CBMIS has been assessed as capable to respond to surge demand for the MLSP-administered benefits and services, registration of new entrants, and processing of temporary benefit payments. The CBMIS IT unit will support the Employment Agency in the process of registration and in the administration of additional unemployment benefits. This would include information system adaptation and the deployment of a new application module in the Employment Agency. The system will use the e-platform for online services developed by the Ministry of Information Society and Administration.

136. Social distancing procedures and alternative (online, by phone, or mail) registration facilities will be put in place to minimize the risk of further community transmission. PPE will be provided, as necessary. For the delivery

of packages of food and hygienic products, the project may rely on services of 200 persons engaged in the Community Works Program, supported by the Swiss Agency for Cooperation and Development and MLSP, and implemented by the UNDP. As needed, the MLSP will request additional assistance from Red Cross volunteers and use its own resources—premises and staff of the CSWs—for this activity.

137. Outreach and communication on access to the supported social assistance programs will be conducted via media channels, including radio, television, and newspapers. Communication materials will provide accessible[34] information on eligibility, program duration, and on how to register and how to file complaints. The communication campaign will particularly stress the temporary nature of the benefits provided. The outreach through the network of social assistance institutions and its communication channels could also be used to promote appropriate hygiene, preventive health services, and COVID-19 infection prevention.

[34] Accessible to people with disability, different ethnic groups, etc.

ANNEX 4. Modeling of Potential COVID-19 Impact

Crude Estimates of the Number of Severe and Critical Cases of COVID-19 Infection and COVID-19-Related Deaths, and the Potential Impact of Nonpharmaceutical Interventions

138. Based on the data available today, depending on the prevalence of COVID-19 infection in North Macedonia, the disease may cause 36,400-116,400 severe infections, 10,000-32,200 critical infections requiring intensive care, and between 4,900-15,600 deaths (see Table 4-1).

Table 4-1. Estimated number of severe and critical cases of COVID-19 infection, and COVID-19-related deaths under different assumptions of the percentage of the population infected.

% of population infected with COVID-19	Number of severe cases	Number of critical cases	Number of deaths
10	14,500	4,000	1,900
25	36,400	10,000	4,900
50	72,700	20,100	9,700
80	116,400	32,200	15,600

139. Nonpharmaceutical interventions—(a) isolating cases of COVID-19 at home, (b) voluntary home quarantine, (c) social distancing for the entire population, (d) social distancing for the most vulnerable population – people over the age of 70, and (e) closure of schools and universities—can limit the spread of the disease in the population (the interventions are described below). The most effective combination of those interventions—home isolation of COVID-19 cases, voluntary home quarantine, and social distancing of persons over the age of 70—has the potential to limit the spread of COVID-19 infection and reduce the number of critical cases and number of deaths by 49 percent (Ferguson et al., 2020). When applied to the estimates of potential morbidity and mortality in North Macedonia, this combination of interventions could avert 900-7,700 deaths and 1,900-15,800 of critical cases of COVID-19 infection (see Table 4-2).

Table 4-2. Number of critical infections and deaths averted by a combination of nonpharmaceutical interventions under different assumptions of the percentage of the population infected.

% of population infected with COVID-19	Number of critical infections averted	Number of deaths averted
10	1,900	900
25	5,000	2,400
50	9,800	4,700
80	15,800	7,700

Methods and Data Sources

140. The impact of COVID-19 infection was calculated using age-specific estimates of case fatality and the prevalence of severe and critical cases from Ferguson et al. (2020). For each of the four scenarios, a different

percentage of the population infected with the COVID-19 virus was assumed: 10 percent (Scenario 1), 25 percent (Scenario 2), 50 percent (Scenario 3), and 80 percent (Scenario 4). The highest percentage is based on Ferguson et al. (2020) and assumptions made to model the impact of nonpharmaceutical interventions in the US and the UK. The most recent age-specific estimates of the resident population of the Republic of North Macedonia (provided by the National Bureau of Statistics of the Republic of North Macedonia) were multiplied by the percentage of the infected population to generate the number of age-specific infections in each scenario. Those, in turn, were multiplied by the age-specific estimates of the percentage of severe cases and critical cases, and by age-specific case-fatality ratios (all from Ferguson et al., 2020).

Nd = $\sum_{i=1}^{n} Pi * CFR$i*I
Nsc = $\sum_{i=1}^{n} Pi * SC$i*I
Ncc = $\sum_{1=1}^{n} Pi * SCi * CC$i*I

Where:

Nd – number of deaths
Nsc – number of severe cases
Ncc – number of critical cases
P_i – age-specific population for age band i
I - percentage of the population infected
CFR_i - case fatality rate for age band i
Sc_i – percentage of infections that are severe (require hospitalization) for age band i
CC_i – percentage of severe cases that are critical for age band i

141. The estimates of case-fatality ratio and percentages of severe and critical cases in Ferguson et al. were based on Verity et al. (2020) estimates derived from data from China and adjusted to fit the UK population (for detail see Ferguson et al., 2020, and Verity et al., 2020).

142. The impact of the nonpharmaceutical interventions on COVID-19-related mortality and morbidity is also estimated based on the modeling study by Ferguson et al. (2020). The authors created a dynamic model of COVID-19 transmission (adapted from an earlier influenza model) and modeled the impact of different interventions that affected the transmission dynamics. The interventions and the assumptions used in the modeling of their impact are listed in Table 4-3. The authors modeled the potential impact of five different nonpharmaceutical interventions implemented individually and in different combinations and applied nationally for 3 months.

143. The impact estimates presented above are for the intervention combination that had the highest impact on mortality reduction: home isolation of COVID-19 cases, voluntary home quarantine, and social distancing of persons over the age of 70 (49 percent reduction in the number of deaths compared to no intervention). Given the fact that the impact of the interventions on mortality was due to the reduction in the number of COVID-19 infections (not to treatment effectiveness), we used the same impact estimate to model the reduction in the number of critical cases.

Table 4-3. Description of nonpharmaceutical interventions considered

Intervention	Description and assumption
Case isolation in the home	Symptomatic cases stay at home for 7 days, reducing non-household contacts by 75% for this period. Household contacts remain unchanged. Assume 70% of household comply with the policy.
Voluntary home quarantine	Following identification of a symptomatic case in the household, all household members remain at home for 14 days. Household contact rates double during this quarantine period, contacts in the community reduce by 75%. Assume 50% of household comply with the policy.
Social distancing of those over 70 years of age	Reduce contacts by 50% in workplaces, increase household contacts by 25% and reduce other contacts by 75%. Assume 75% compliance with policy.
Social distancing of entire population	All households reduce contact outside household, school, or workplace by 75%. School contact rates unchanged, workplace contact rates reduced by 25%. Household contact rates assumed to increase by 25%.
Closure of schools and universities	Closure of all schools, 25% of universities remain open. Household contact rates for student families increase by 50% during closure. Contacts in the community increase by 25% during closure.

144. The estimates presented above are generated for illustrative purposes only and should not be considered as a valid projection of COVID-19-related mortality and morbidity in North Macedonia. As of the writing of this technical appendix, there are no reliable estimates of infection-fatality rate, and the percentage of severe and critical cases for COVID-19 and the case-fatality rates reported in various populations in various reports vary widely (see, e.g., Riou et al., 2020; Wilson et al., 2020; Mizumoto and Chowell, 2020; China CDC, 2020). Furthermore, the age-specific estimates for mortality and morbidity used were created by fitting data from China to the UK population and have not been adjusted to fit the Republic of North Macedonia population profile. Finally, the impact of the interventions is estimated by a mathematical model, and no reliable empirical data exist to validate the model's predictions.

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