CROATIA EARTHQUAKE RECOVERY AND PUBLIC HEALTH PREPAREDNESS PROJECT (P173998)

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK FOR COMPONENT (1)

UPDATED VERSION, DECEMBER 2024

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MINISTRY OF PHYSICAL PLANNING, CONSTRUCTION AND STATE PROPERTY

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LIST OF ABBREVIATIONS & ACRONYMS

ADR	Agreement concerning the International Carriage of Dangerous Goods by Road
ABD	Adriatic River Basin District
As	Arsenic
BMP	Biodiversity Management Plan
C_6H_6	Benzene
CBS	Croatian Bureau of Statistics
Cd	Cadmium
CHMP	Cultural Heritage Management Plan
C-LMP	Contractor's Labor Management Plan
CNIPH	Croatian Institute for Public Health
CO	Carbon Monoxide
COVID-19	Coronavirus Disease 2019
Cr	Chromium
Cu	Copper
DBD	Danube River Basin District
D-RAS	Disaster Resilience Analytics and Solutions
DRG	Diagnosis-Related Group
EIA	Environmental Impact Assessment
ENAA	Ecological Network (Natura 2000 Network) Appropriate Assessment
EPEEF	Environmental Protection and Energy Efficiency Fund
EPR	Environmental Pollution Register
ESCP	Environmental and Social Commitment Plan
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	World Bank Environmental and Social Standards
ESSPROS	European System of integrated Social PROtection Statistics
ESSQ	Environmental and Social Screening Questionnaire
Eurocode 8	EC 8
FGRM	Feedback and Grievance Redress Mechanism
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GM	Grievance Mechanism
GRADE	Global Rapid post-disaster Damage Estimation
GV	Daily Limit Values
GVA	Gross Value Added
H_2S	Hydrogen Sulphide
HCB	Hexachlorobenzene
Hg	Mercury
HINA	Croatian National News Agency
IFC	International Finance Corporation
ILO	International Labor Organization
IPF	Investment Project Financing
MCS	Mercalli–Cancani–Sieberg
MoEPGT	Ministry of Environmental Protection and Green Transition
MoF	Ministry of Finance
MoH	Ministry of Health
MoI	Ministry of the Interior
MoLPSFSP	Ministry of Labour, Pension System, Family and Social Policy
MoPPCSA	Ministry of Physical Planning, Construction and State Assets

MSEY	Ministry of Science, Education and Youth
MSDS	Material Safety Data Sheets
Natura 2000	Ecological Network of the Republic of Croatia
NH_3	Ammonia
Ni	Nickel
NMVOC	Non-Methane Volatile Organic Compounds
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
NUTS 2	Nomenclature of Territorial Units for Statistics
OHS	Occupational Health and Safety
PAH	Polycyclic Aromatic Hydrocarbons
Pb	Lead
PCB	Polychlorinated Biphenyl
PCDD / PCDF	Dioxins and Furans
PDO	Project Development Objective
PIN	Personal Identification Number
PIU	Project Implementation Unit
PM	Particulate Matter
PPE	Personal Protective Equipment
PSC	Project Steering Committee
RDNA	Rapid Damage and Needs Assessment
Se	Selenium
SEP	Stakeholder Engagement Plan
SESA	Strategic Environmental and Social Assessment
SO_2	Sulphur Dioxide
TSP	Total Suspended Particles
UNICEF	United Nations Children's Fund is a United Nations
VHI	Voluntary Health Insurance
VLD	Voluntary Land Donation
VOCs	Volatile Organic Compounds
WB	World Bank
WHO	World Health Organization
Zn	Zinc

1 INTRODUCTION

The World Bank (WB) is providing support to the Government of Croatia (the Government) in implementing the "Croatia Earthquake Recovery and Public Health Preparedness Project".

The Croatia Earthquake Recovery and Public Health Preparedness Project (Project) is financed by the IBRD Loan (Loan no. IBRD 9127-HR) pursuant to the Loan Agreement of the Croatia: Earthquake Recovery and Public Health Preparedness (Loan no. IBRD 9127-HR) between the Republic of Croatia (the "Borrower") and the International Bank for Reconstruction and Development (the "Bank") dated July 2, 2020. As part of the second stage of Restructuring and the Extension of the Closing Date, processed in November 2024, the Loan has been extended until June 2027.

On March 22, 2020, the City of Zagreb was struck by the earthquake (magnitude ML5.5), which severely damaged public buildings, hindering the effective delivery of health and education services and directly affecting the economy of the cities, municipalities, counties and the country. The earthquake took place 11 days after the World Health Organization (WHO) declared COVID-19 to be a pandemic, a crisis that has stressed both the health system and public finances, which additional hinders much needed earthquake recovery.

The second devastating earthquake of a magnitude of 6.2 on the Richter scale hit the Sisak-Moslavina County on December 29, 2020. The earthquake was strongly felt in most of Croatia and again in Zagreb, where it caused new progressive damage. Numerous aftershocks were recorded, including a 5.0 magnitude earthquake on January 6, 2021.

The December earthquakes ended an extraordinary year for Croatia, due to compounding effects of a major earthquake in March 2020, COVID-19 pandemic, and revealed that further work is needed around strengthening the institutions required for resilience and response to future shocks.

Given the above, within project "Croatia Earthquake Recovery and Public Health Preparedness Project" World Bank assist The Republic of Croatia with reconstruction efforts in in earthquake affected counties (Sisak-Moslavina County and the City of Zagreb), improve institutional capacity for reconstruction, and strengthen national systems for public health preparedness.

The "Earthquake Recovery and Public Health Preparedness Project" consists of following project components:

Component 1: Earthquake Recovery and Reconstruction

- Subcomponent 1.1: Rehabilitation, Reconstruction and Construction of Health and Education Facilities
- Subcomponent 1.2: Support for Public Reconstruction

Component 2: Public Health Surveillance and Preparedness

- Subcomponent 2.1: Case management and Surveillance
- Subcomponent 2.2: Public Health Preparedness

Component 3: Project Management

As two distinctively separate project activities will be carried out under the first two components (while the third component is supportive of the entire Project), there will be two implementing bodies (Ministry of Physical Planning, Construction and State Assets) and Ministry of Health, with separate Project Implementation Units (PIUs). Consequently, two separate ESMFs are developed for the component 1 and 2.

This Environmental and Social Management Framework (ESMF) covers Component 1 - Earthquake Recovery and Reconstruction.

The Government has undertaken a multipronged approach to the earthquake, beginning with the prioritization of efforts to address urgent needs (debris removal and public safety measures) and assess the scope of damages. Immediately following the earthquake, the Government prioritized urgent life-safety measures and initiated a Rapid Damage and Needs Assessment (RDNA).

To complement the urgent efforts at assessing the damage, reducing imminent risk to human life, and prioritizing service continuity in the most critical sectors, Act on Reconstruction of Earthquake Damaged Buildings in the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County (OG 102/20, 10/21, 117/21) has been prepared and adopted in September 2020 and amended twice in 2021 and finally, new Act has been adopted in 2023: Act on Reconstruction of Earthquake Damaged Buildings in the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County (OG 21/23). This Act aims to improve institutional coordination and enhance financial and accountability measures. Furthermore, as anticipated by this new Act, in March 2023, Decision on the Adoption of the Program of Measures for the Reconstruction of Buildings Damaged by Earthquakes in the Area of the City of Zagreb, Krapina-Zagorje County and Zagreb County (OG 28/23) has been adopted. By this Program measures for renovation of public buildings, multi-dwelling buildings, office buildings, residential and commercial buildings and family houses in the City of Zagreb, Zagreb County, Krapina-Zagorje County, Sisak-Moslavina County and Karlovac County are defined.

Component 1 - Earthquake Recovery and Reconstruction finances rehabilitation, reconstruction and construction of health and education facilities and support for public reconstruction.

According to the WB Environmental and Social Framework (ESF), at earlier stage, there is a need for development of Environmental and Social Management Framework (ESMF) in order to provide general policies, guidelines, codes of practice and procedures to guide environmental due diligence of the sub-project activities and sustainable implementation of all sub-projects selected for financing.

Ministry of Physical Planning, Construction and State Assets (MoPPCSA) as the responsible national body, has prepared this ESMF for Component (1) - Earthquake Recovery and Reconstruction.

The ESMF for Component 1 is a live document that is being updated in order to comply with the Project and the fundamental framework of the World Bank (Environmental and Social Framework (ESF)) and the standards and requirements for the protection of the environment and society (Environmental and Social Standards (ESS)) prescribed, the environmental and social impacts assessment and measures and actions for their mitigation (Environmental and Social Commitment Plan (ESCP) and Environmental and Social Framework (ESMF)), as well as with updates of national legislation.

The ESMF for Component 1 will be periodically revised and updated as necessary during project implementation to ensure that the information presented herein is consistent and is the most recent, and environmental and social management remain appropriate and effective in relation to the project context and specific phases of the development.

It is important to emphasize that the changes that took place in this updated version of the ESMF for Component 1 in no way affected or changed the purpose of the document. The changes were made to improve ESMF, according to the above-mentioned key framework and guidelines for the protection of the environment and society, and ESMF is also updated regarding the approved Restructuring.

This ESMF has been updated as of December 2024 to align with the second stage of Restructuring and Extension of the Closing Date to June 2027, processed in November 2024. The first version of ESMF

was prepared by the World Bank in collaboration with PIU as early as possible, before project appraisal, and was disclosed on the Ministry of Physical Planning, Construction and State Assets and World Bank website on April 2021. The second (from January 2022) and third (from September 2024) versions followed, and finally this fourth version (from December 2024).

1.1 The Environmental and Social Management Framework objective

Environmental and Social Management Framework (ESMF) is an instrument that examines the risks and impacts when a project consists of a program and/or series of sub-projects, and the risks and impacts cannot be determined until the program or sub-project details have been identified.

The ESMF was considered to be the most appropriate environmental due diligence instrument during the project preparation since decisions on the sub-projects under Component 1 were made during the project implementation, followed by development of detailed designs for each sub-project.

The ESMF ensures that the identified sub-projects are correctly assessed and mitigated from environmental and social point of view to meet requirements of the WB ESF and its applicable Environmental and Social Standards (ESS), as well as national environmental and social legislation.

It sets out the principles, rules, guidelines, procedures and codes of practice for the management of environmental and social issues that might arise due to project interventions, and as such constitutes a set of measures for the development of sub-project level - Environmental and Social Management Plans (ESMPs[1]) and/or ESMP Checklists with Cultural Heritage Management Plans (CHMPs[2]). ESMF also contains guidelines for Voluntary Land Donation (VLD) mandatory process and template VLD Protocol.

ESMF includes but is not limited to: relevant information on the areas where the sub-projects are expected to be implemented; any potential environmental or social vulnerability of such areas; information on potential impacts and mitigation measures commensurate to the scale of the impacts. Also, ESMF gives an overview of the relevant environmental and social national legislation related to the project and the WB ESS, presents the assessment of the institutional capacity required to ensure proper environmental and social management and describes mandatory principles, objectives and approach to be followed while designing environmental mitigation measures for planned project activities.

Implementation of ESMF is mandatory through Environmental and Social Commitment Plan (ESCP) a legally binding document that defines material measures to be taken in the implementation towards meeting ESF. ESMF stipulates procedures and formats that are used also in the identification, management and monitoring of occupational health and safety (OHS) as well as community health and safety issues associated with the Project interventions.

Therefore, developing the ESMF is also important to identify other specific environmental and social instruments and management tools required by the ESF, including the Stakeholder Engagement Plan (SEP), Labor Management Procedures (LMP), etc.

The ESMF has been revised, inter alia, to incorporate additional management measures required under the ESS5 since the standard was considered relevant based on recent experiences under the

[1] ESMP is an instrument that details the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental and social impacts, or to reduce them to acceptable levels; and the actions needed to implement these measures.

[2] CHMP is prepared based on the nature and scale of environmental and social risks to, and impacts on, cultural heritage. It includes measures for identifying and managing the cultural heritage, together with monitoring arrangements.

project. Under the ESS5, the project will only allow voluntary land donation and voluntary transactions (willing buyer and willing seller) in case additional land is required for the purpose of project activities. Hence, the updated ESMF has incorporated a Voluntary Land Protocol (VLD) to guide the project in the handling of land acquisition as well as due-diligence in the event that land was previously acquired in anticipation of sub-project activities.

1.2 Public disclosure and consultation of ESMF

The first electronic version of the ESMF was disclosed, accompanied by a call for comments, on the Ministry of Physical Planning, Construction and State Assets (MoPPCSA) website on January 5, 2021.

In the same time a paper copy of ESMF was made available for public at MoPPCSA reception. Both remained accessible to public for until January 22, 2021. The ESMF disclosure was followed participation in organized virtual public consultations meeting. The Public Consultation meeting of the ESMF took place on January 21, 2021. In addition to the general public call, the government and relevant non-governmental organizations are invited through official invitations sent out by the MoPPCSA.

The objectives of the public consultations were:

1. To inform the public and stakeholders about the objectives and project developments and the expected of environmental and social effects.

2. To collect information and data from the public and/or the communities that will be affected by the project.

3. To amend the project and ESMF accordingly.

4. To ensure participation of the public and local communities in process and support for the project.

ESMF was found final when the relevant comments, submitted during the consultation period, were: (i) addressed in the ESMF and (ii) incorporated as minutes of the public consultations in a separate chapter or annex. Once finalized, ESMF was re-disclosed at MoPPCSA web site.

The minutes of public consultation in *ANNEX VII. MINUTES OF MEETING FOR THE ENVIRONMENTAL AND SOCIALMANAGEMENT FRAMEWORK* reflects the process and the outcome of public consultation and disclosure.

The revised version of this ESMF will be disclosed on the Project website.

2 PROJECT DESCRIPTION AND ELIGIBILITY

2.1 Baseline information on earthquake event and caused damage

On March 22, 2020, the City of Zagreb was struck by the strongest earthquake since 1880. It was earthquake of magnitude (ML) 5.5, focal depth of less than 10 km, occurred at 06:24 hours local time with an epicenter 7 km north of the city center of the capital, Zagreb. Several aftershocks occurred, the most significant of which measured Mw 5 and occurred on the same day at 07:01 hours, with an epicenter very close to that of the main shock. The maximum felt intensity from the main shock was reported as VII–VIII on the Mercalli–Cancani–Sieberg (MCS) Macroseismic Intensity Scale (strong shaking).[3] In addition to Zagreb, towns and municipalities in Zagreb County and Krapina-Zagorje County have been significantly affected. The strongest reported impact was in Kašina.[4]

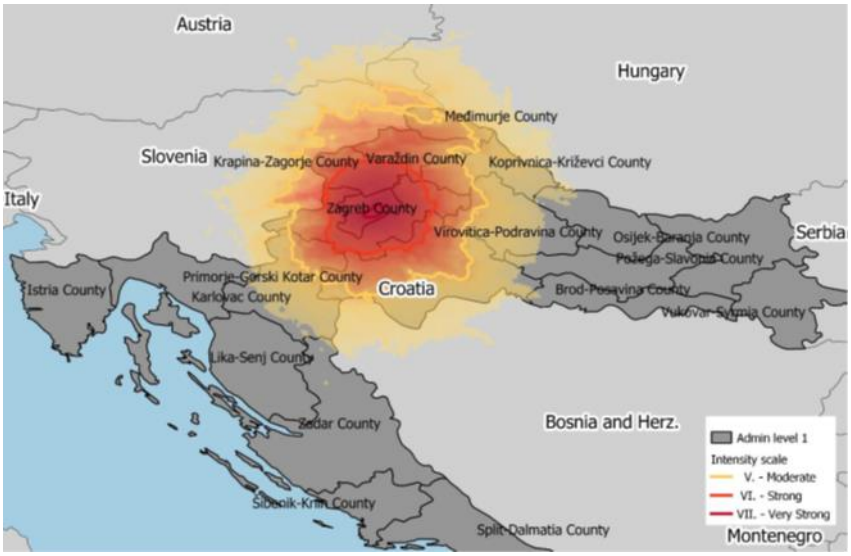


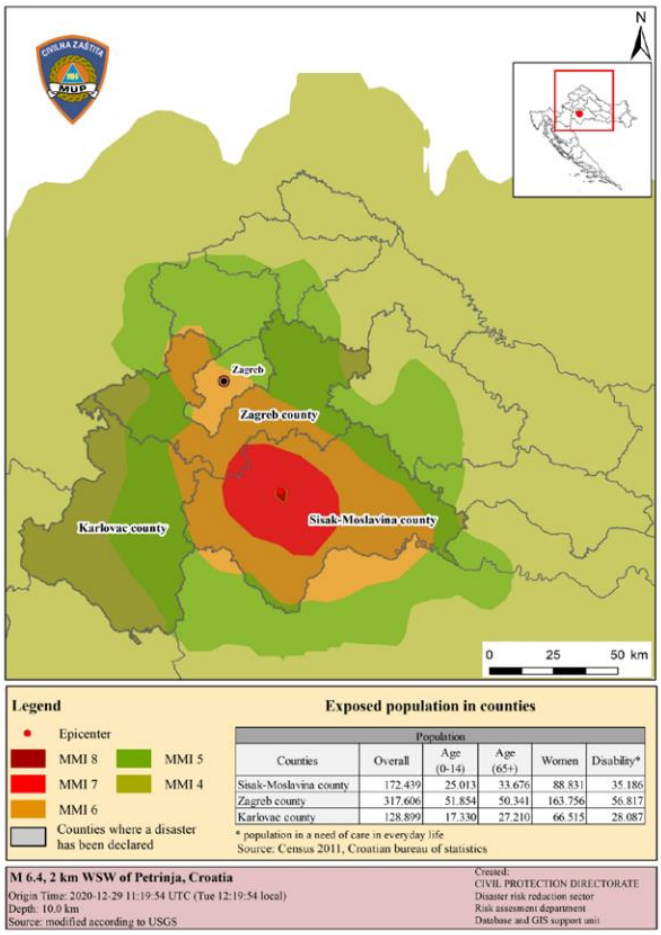
Figure 1. Ground Shaking Intensity Map for the Main Shock[5]

On 28 and 29 December 2020, the Republic of Croatia was hit by new strong earthquakes, the strongest of which was magnitude 6.2 on the Richter scale with the epicenter near the City of Petrinja. The quake was felt throughout Croatia and in the surrounding countries, and the highest intensity was estimated to be VIII - IX (eight to nine) degrees EMS scale. The material damage in the Sisak-Moslavina County, especially in the area of the City of Petrinja and its surroundings, is enormous and numerous buildings were destroyed, i.e. destroyed and damaged. Material damage was also reported in the area of Karlovac County, Zagreb County and Krapina-Zagorje County.

[3] Global Rapid post-disaster Damage Estimation (GRADE) Briefing Note, Zagreb-Croatia Earthquake of 22 March 2020. World Bank/Global Facility for Disaster Reduction and Recovery Disaster Resilience Analytics and Solutions (D-RAS) Team, (March 27, 2020).

[4] GRADE Briefing Note, Zagreb-Croatia Earthquake of 22 March 2020. World Bank/Global Facility for Disaster Reduction and Recovery Disaster Resilience Analytics and Solutions (D-RAS) Team, (March 27, 2020).

[5] D-RAS, World Bank/Global Facility for Disaster Reduction and Recovery



Source: *Civil Protection Directorate, MoI.*

Figure 2. Counties where a state of disaster was declared after the earthquake near Petrinja[6]. These earthquakes and aftershocks severely damaged public buildings, hindering the effective delivery of health and education services and directly affecting the economy of the cities/municipalities and country.

Approximately 45,000 people could be living in potentially damaged buildings, and about 827 buildings are considered severely damaged and deemed unusable. Due to the prevalence of relatively obsolete heating systems, approximately 30,000 people and businesses were left without hot water and heating. In addition, damage to exterior elements of a number of buildings, especially chimneys, has created a high risk of falling debris, endangering both lives and the resumption of economic activities.

Also, the earthquake has had a significant impact on the delivery of education services. According to an assessment by the University of Zagreb, 232 education facilities were damaged. The event rendered many buildings unsafe for future use. Approximately 10,000 students (7 percent of all students in Zagreb and the affected surrounding areas) will not be able to return to school due to damage to education facilities from the earthquake.

According to an assessment by the University of Zagreb, 137 health facilities were damaged by the earthquake. Several hospitals that previously had high occupancy rates suffered substantial structural damage, forcing the evacuation of patients.

Since the earthquake took place 11 days after the World Health Organization declared COVID-19 to be a pandemic, and four days after the Government put in place increasingly comprehensive measures

[6] Croatia December 2020 Earthquake Rapid Damage and Needs Assessment

culminating in a nationwide lockdown on March 18, 2020, it has affected the delivery of critical health services by causing significant damage to public health capabilities and hospitals critical to both managing the current coronavirus disease) crisis and the health system overall.

2.2 Project development objective

The project development objective (PDO) is to assist Croatia with earthquake reconstruction efforts in City of Zagreb and Sisak-Moslavina County to improve institutional capacity for reconstruction and strengthen national systems for public health preparedness.

2.3 Project components

The Project has three (3) components shown in Table 1.

Table 1. Overview of project components

Component 1: Earthquake Recovery and Reconstruction
• Subcomponent 1.1: Rehabilitation, Reconstruction and Construction of Health and Education Facilities
• Subcomponent 1.2: Support for Public Reconstruction
Component 2: Public Health Surveillance and Preparedness
• Subcomponent 2.1: Case management and Surveillance
• Subcomponent 2.2: Public Health Preparedness
Component 3: Project Management

This ESMF covers Component (1) - Earthquake Recovery and Reconstruction and further in document this project component will be analysed.

Component 1 activities are limited to the City of Zagreb and Sisak-Moslavina County which were directly affected by the March 22, 2020 and December 28-29, 2020 earthquakes that damaged hundreds of buildings.

The Component 1 finances five sub-investments, and preparation of designs and associated studies for a sixth investment (Reconstruction of building A of the Faculty of the Electrical Engineering and Computing) – for which construction works would be financed from other sources.

Table 2. Sub-Projects under the Component 1

	Sub-Project	**City**	**County / Regional level**
1.	University Hospital Centre Zagreb – Rebro III Project	Zagreb	City of Zagreb
2.	University Hospital Centre Zagreb – Rebro / New Division of Pediatric Hematology and Oncology	Zagreb	City of Zagreb
3.	Croatian Institute of Public Health, Occupational Medicine Facility, Nazorova Street 53	Zagreb	City of Zagreb
4.	Reconstruction of building A of the Faculty of the Electrical Engineering and Computing	Zagreb	City of Zagreb
5.	Secondary Vocational School	Petrinja	Sisak-Moslavina County
6.	Construction of the Student Dormitory Building in Petrinja	Petrinja	Sisak-Moslavina County

Figure 3. Sub-Project sites 1-4 in Zagreb

Figure 4. Sub-Project sites 5-6 in Petrinja

For each stage of each of the sub-project included under Component 1, a sub-project level Environmental and Social Management Plan (ESMP) has been prepared, disclosed and publicly consulted, to guide the management of environmental and social aspects at the site-level in line with the ESMF.

Summary of the sub-components for Component 1:

Subcomponent 1.1: Rehabilitation, Reconstruction and Construction of Health and Education Facilities

This subcomponent finances a detailed engineering assessment of selected damaged health and education buildings, followed by **the rehabilitation, reconstruction and construction of priority buildings to restore the country's ability to provide critical public health and education services. Includes rehabilitation of structures, demolition of unsafe buildings, and the in-situ reconstruction of new buildings to replace damaged buildings.** The interventions will be in accordance with requirements of Act on Reconstruction of Earthquake Damaged Buildings in the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County (OG 21/23) (further in document Reconstruction Act) and sub-laws and standards to which this Act refers. **The works will be complemented by functional upgrades and climate-resilient designs, including improved insulation to cope with extreme temperature and energy efficiency to address also climate-related risks. Functional upgrades will be gender informed, including adequate considerations for personal safety and hygiene, and support those with disabilities to ensure universal accessibility, considering feedback from public consultations.** Energy efficiency measures, such as proper insulation, energy efficient windows, LED lights, white roofs, and solar panels, will help reduce the climate footprint of health and education facilities and reduce operating costs for the Government. Project interventions will also include equipment replacement and upgrades when necessary.

The selection of health and education facilities covered by this project are based on eligibility and prioritization criteria aimed to ensure that the most critical infrastructure is supported under the project and that facilities financed by the project are consistent with the health and education sectoral priorities and any future investment plans to improve seismic performance. Key eligibility and prioritization criteria include (a) damage levels, to ensure that structures made most vulnerable by the earthquake are prioritized to ensure life safety; (b) sectoral relevance, to focus investments on sector outcome objectives and service delivery needs; (c) technical and financial eligibility, to ensure that repair and rehabilitation of partially damaged buildings, as opposed to new construction, are duly considered; and (d) environmental and social risks, to ensure that investments do not cause significant unforeseen environmental or social impacts.

Regarding health sector investments, the proposed project supports investments to respond to critical preparedness needs while considering the importance of improving the efficiency and quality of health care services. The Project will not seek to create excess secondary and tertiary capacity, such as by increasing the number of permanent acute beds. Rather, it will seek to support the restoration of critical services through the financing of the reconstruction of investments that benefit health outcomes and improve service delivery, in accordance with sector priorities.

Regarding education sector investments, the project supports investments to ensure continuity of education services provided at primary and secondary levels through the reconstruction of earthquake-damaged buildings. Additionally, the project considers supporting the rehabilitation of some pre-primary and higher education institutions that are of strategic importance to the education sector as well as the country and the health sector.

The project promotes the building-back-better approach, which comprises improvements in design standards, construction quality, and functionality. The integration of seismic and climate change consideration into the infrastructure designs of investments further enhances the resilience of infrastructure to future disaster and climate risks and helps protect people's lives, livelihoods, and assets, contributing to climate change adaptation and mitigation efforts.

Activities under the Project do not require involuntary land acquisition, restrictions on land use and involuntary resettlement.

Subcomponent 1.2: Support for Public Reconstruction

This subcomponent will finance development of designs and studies related to rehabilitation and reconstruction of public buildings, and institutional capacity building related to recovery and reconstruction efforts.

2.4 Project beneficiaries

Direct beneficiaries include the earthquake-affected population in the City of Zagreb and Sisak-Moslavina County. This includes teachers, students, parents, community groups and networks, administrators, health care staff, laboratory staff, and patients that have regained access to health and education facilities that have been rehabilitated, reconstructed or constructed under the project. Direct beneficiaries also include the engaged Government stakeholders, including the MoPPCSA, Ministry of Health (MoH), and Ministry of Science, Education and Youth (MoSEY).

Indirect beneficiaries include the entire population of City of Zagreb and Sisak-Moslavina County .

2.5 World Bank Group (IFC) Exclusion List

As a part of the general WB Group Exclusion List, the following activities cannot be financed under the Project:

- Activities that may cause long term, permanent and/or irreversible (e.g. loss of major natural habitat) adverse impacts;
- Activities that have a high probability of causing serious adverse effects to human health and/or the environment not related to treatment of COVID-19 cases;
- Activities that may have significant adverse social impacts and may give rise to significant social conflict;
- Activities that may affect lands or rights of vulnerable minorities;
- Activities that may involve permanent resettlement or involuntary land acquisition;
- Any buildings that require immediate repairs but that are additionally determined to be at risk of partial or total collapse due to structural damage will be excluded from this subcomponent;
- Activities that may involve adverse impacts on cultural heritage;
- Reconstruction of private housing.

2.6 Risk Rating

The Project supports activities with low to substantial risk while high risk is excluded.

High risk activities – nature and magnitude of potential impact

- wide range of significant adverse risks and impacts
- long term, permanent and/or irreversible, impossible to avoid entirely
- some cannot be mitigated or require complex, unproven mitigation, sophisticated social analysis
- high in magnitude and/or in spatial extent (large to very large area or population);
- significant adverse cumulative or transboundary impacts;
- high probability of serious adverse effects to human health and/or the environment
- high value and sensitivity (eg. protected and internationally recognized areas)
- high value, sensitive lands or rights of Indigenous Peoples and other vulnerable minorities
- intensive or complex involuntary resettlement or involuntary land acquisition
- impacts on cultural heritage or densely populated urban areas
- may give rise to significant social conflict, harm or human security risks
- a history of unrest in area or sector, concerns about use of security forces

Substantial risk activities – – nature and magnitude of potential impact

- some significant risks and impacts
- mostly temporary, predictable and/or reversible
- possibility of avoiding or reversing but with substantial investment and time
- may give rise to limited degree of social conflict, harm, human security risk;
- medium in magnitude and/or in spatial extent (medium to large area and population)
- less severe, more readily avoided/mitigated cumulative and/or transboundary impacts
- medium to low probability of serious adverse effects to human health and/or the environment (with known and reliable mechanisms to prevent or minimize)
- lower effects on areas of high value or sensitivity
- more readily available and reliable mitigatory and/or compensatory measures

Moderate risk activities – – nature and magnitude of potential impact

- risks and impacts not likely to be significant
- not complex and/or large
- predictable and expected to be temporary and/or reversible;
- low in magnitude;
- site-specific, without likelihood of impacts beyond the project footprint;
- low probability of serious adverse effects to human health and/or the environment
- routine safety precautions are expected to be sufficient to prevent accidents
- easily mitigated in a predictable manner

Low risk activities – – nature and magnitude of potential impact

- minimal or negligible risks to and impacts on human populations and/or the environment
- few or no adverse risks and impacts and issues
- no further assessment after screening

In addition to the nature and magnitude of impact, the risk is also set against:

1 Project type (size, location, physical considerations, infrastructure complexity (e.g. roads, airports, dams, etc.);
2 Borrowers capacity, including the institutional and regulatory framework;
3 Context risks relevant to E&S impact and management.

3 ENVIRONMENTAL AND SOCIAL BASELINE INFORMATION

3.1 Environmental baseline and relevant potential issues

3.1.1 Air emissions and air quality

Emissions of almost all pollutants show a general declining trend between 1990 and 2018 NOx emissions decreased by 53,3%, SO_2 by 93,9%, NH_3 by 33,7%, NMVOC by 57,8%, CO by 57,6%, $PM_{2,5}$ by 25,8%, PM_{10} by 37,8 %%, TSP by 13,7 %, BC by 28,2%, heavy metals: Pb by 98,4%, Cd by 24,9%, Hg by 64,4%, As by 93,6%, Cr by 61,8%, Ni by 79,6%, Se by 17,8% and Zn by 13,2% while Cu emissions increased by 25,9%. PCDD / PCDF emissions decreased by 42,7%, PCBs by 14,7%, HCBs by 92% and PAHs by 35,8%.[7]

The reason for this declining trend is stricter regulation on air pollutant concentrations and emission limit values, as well as the use of better-quality fuel with lower sulphur content, gasification and connection to the heating network, the use of low-sulphur coal, and to a lesser extent the development of public transport and bicycle paths. Furthermore, due to the reduction of sulphur emissions, sulphur deposition, i.e. acidification, was significantly reduced.

Emissions of the three main pollutants SO_2, NOx, NMVOC in 2018 are below, and NH3 emissions are above the prescribed emission quotas set for 2010 and for years after, in accordance with the Gothenburg Protocol.

Table 3. Trend of total emissions of the Republic of Croatia by pollutant

Pollutant	Unit	1990	1995	2000	2005	2010	2015	2016	2017	2018	Share of change in period 1990 - 2018	Share of change in period 2017 - 2018	Emission quota in period 2010 - 2020
NOx	kt	108,2	80,2	87,0	85,7	69,3	55,5	54,6	54,7	50,5	-53,3%	-7,6%	87
NMHOS	kt	170,8	120,1	101,2	114,3	92,5	71,8	73,5	70,8	72,2	-57,8%	2,0%	90
SO_2	kt	168,5	77,4	60,5	58,6	35,2	15,8	14,8	12,7	10,3	-93,9%	-18,7%	70
NH_3	kt	53,8	40,4	41,1	42,9	38,7	33,9	32,0	35,2	35,7	-33,7%	1,4%	30
$PM_{2,5}$	kt	38,7	36,2	33,9	41,8	37,3	32,1	30,7	29,6	28,7	-25,8%	-3,0%	-
PM_{10}	kt	50,8	45,3	41,9	52,9	46,8	41,0	39,5	38,6	37,8	-25,6%	-2,2%	-
TSP	kt	59,8	53,5	52,1	72,3	62,3	54,3	52,3	52,1	51,6	-13,7%	-1,1%	-
BC	kt	5,4	5,0	4,8	5,8	5,2	4,3	4,2	4,1	3,9	-28,2%	-4,1%	-
CO	kt	554,1	444,3	453,5	416,5	328,0	267,5	258,3	252,5	234,8	-57,6%	-7,0%	-
Pb	t	523,4	263,6	145,3	13,7	8,1	7,9	8,0	8,1	8,4	-98,4%	4,3%	-
Cd	t	1,1	0,8	0,9	1,0	0,9	0,9	0,8	0,8	0,8	-24,9%	4,1%	-
Hg	t	1,1	0,3	0,5	0,6	0,5	0,5	0,5	0,4	0,4	-64,4%	-3,7%	-
As	t	8,6	1,2	1,1	1,1	0,8	0,5	0,4	0,5	0,6	-93,6%	6,9%	-
Cr	t	5,3	3,7	3,2	3,7	2,6	2,2	2,0	2,1	2,0	-61,8%	-5,2%	-
Cu	t	7,5	6,3	7,7	9,7	8,4	8,6	8,8	9,6	9,5	25,9%	-1,3%	-
Ni	t	17,0	13,8	12,6	13,7	7,7	4,5	4,2	4,3	3,5	-79,6%	-18,7%	-
Se	t	0,4	0,3	0,3	0,4	0,4	0,3	0,4	0,4	0,4	-17,8%	-0,4%	-

[7] Emissions of air pollutants in the Republic of Croatia for 2018 (http://www.haop.hr/sites/default/files/uploads/dokumenti/011_zrak/Izvjesca/Emisije%20one%C4%8Di%C5%A1%C4%87uju%C4%87ih%20tvari%20u%20zrak%20na%20podru%C4%8Dju%20Republike%20Hrvatske%20za%202018.%20godinu.pdf)

Pollutant	Unit	1990	1995	2000	2005	2010	2015	2016	2017	2018	Share of change in period 1990 - 2018	Share of change in period 2017 - 2018	Emission quota in period 2010 - 2020
Zn	t	36,7	30,4	28,6	34,9	33,8	32,3	31,2	31,2	31,9	-13,2%	2,3%	-
PCDD/ PCDF	g I-Teq	48,5	43,1	41,6	49,4	40,0	34,1	32,3	28,7	27,8	-42,7%	-3,0%	-
PAU	t	21,8	16,6	14,9	18,4	17,4	15,7	15,0	14,5	14,0	-35,8%	-3,2%	-
HCB	kg	7,09	6,4	2,0	0,5	0,9	0,4	0,5	0,5	0,6	-92,0%	21,5%	-
PCB	kg	482,8	468,2	441,4	435,7	433,7	424,9	422,1	415,3	411,8	-14,7%	-0,8%	-

Source: MoEPGT[8]

The main source of air pollution in the Republic of Croatia is the energy sector (fuel combustion and fugitive emissions).

Of the total SO_2 emissions in 2018, 98,7% come from the energy sector; 25,9% from electricity and heat production, 21,2% from fuel combustion in industry and construction, 42,7% from fugitive emissions - activities in the Refining / storage sector and 8,5% from small combustion plants (fixed and mobile sources). NOx emissions from the energy sector in 2018 amounted to 84,7% of total national NOx emissions. The Energy sector contributes with 99,6% to the total CO emissions in 2018, of which 73% comes from the combustion of fuel in small combustion plants (dominated by households), 12,9% from transport (dominated by road transport), 9,5% from refining / storage, and 3,7% from fuel combustion in industry and construction.

The sectors: production processes and product use, small combustion plants and work vehicles, agriculture, transport and refineries, are dominant regarding NMVOC emissions, and in 2018 these sectors contribute to the total NMVOC emissions with the following: 41,5%, 28,6 %, 12,5%, 8,4% and 5,1%.[9]

A total of 81,5% of NH_3 emissions in Croatia in 2018 come from the Agriculture sector, in which the category Manure management contributes with 28,7%, and emissions from the category Production of crops and agricultural soils with 52,8%.

In Croatia, air quality is constantly monitored through monitoring stations, state (25) and local (49). The state network is under the jurisdiction of the Ministry of Economy and Sustainable Development (MoEPGT), and it is managed by the State Hydrometeorological Institute, while the local network is under the jurisdiction of cities and counties. According to the Decision on the acceptability of the project or the Decision on integrated environmental protection conditions or environmental permit, polluters are required to ensure monitoring of air quality in the vicinity of air pollution sources and these special purpose measurements are an integral part of local air quality monitoring networks. The results of measurements from all measuring stations are published in the Annual Reports on Air Quality Monitoring in Croatia[10], which are prepared every year by the MoEPGT.

[8] Emissions of air pollutants in the Republic of Croatia for 2018 (http://www.haop.hr/sites/default/files/uploads/dokumenti/011_zrak/Izvjesca/Emisije%20one%C4%8Di%C5%A1%C4%87uju%C4%87ih%20tvari%20u%20zrak%20na%20podru%C4%8Dju%20Republike%20Hrvatske%20za%202018.%20godinu.pdf)

[9] http://www.haop.hr/sites/default/files/uploads/dokumenti/011_zrak/Izvjesca/Emisije%20one%C4%8Di%C5%A1%C4%87uju%C4%87ih%20tvari%20u%20zrak%20na%20podru%C4%8Dju%20Republike%20Hrvatske%20za%202018.%20godinu.pdf

[10] http://www.haop.hr/hr/godisnja-izvjesca-o-pracenju-kvalitete-zraka-na-podrucju-republike-hrvatske/godisnja-izvjesca-o

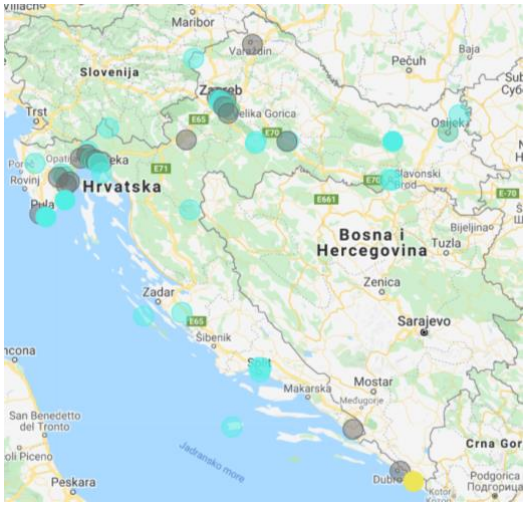


Figure 5. Locations of monitoring stations in the territory of the Republic of Croatia[11]

Concentrations of the following pollutants in the air are monitored by monitoring stations: sulphur dioxide (SO_2), nitrogen dioxide and nitrogen oxides (NO_2 and NO_x), suspended particles (PM_{10} and $PM_{2.5}$), lead (Pb), benzene (C_6H_6), carbon monoxide (CO), ground-level ozone (O_3) and ground-level ozone precursors (volatile organic compounds - VOCs), arsenic (As), cadmium (Cd), mercury (Hg), nickel (Ni), benzo (a) pyrene (BaP) and other polycyclic aromatic hydrocarbons (PAHs), the average exposure indicator for $PM_{2.5}$ (PPI) and the chemical composition of $PM_{2.5}$[12]

The problem of air pollution by suspended particles (PM_{10}) in populated areas in the continental part of Croatia is still the most widespread problem of air pollution. In the agglomerations of Zagreb and Osijek, as well as in larger cities of the industrial zone: Sisak, Kutina and Slavonski Brod, daily limit values (GV) have been continuously exceeded. The largest number of days in which concentrations of suspended particles (PM_{10}) are elevated, is distributed in the colder part of the year in stable meteorological conditions, when the dominant source of pollution is domestic fireplaces. Other sources of pollution are traffic and large point sources. In the mentioned period, the daily limit value of suspended particles was not exceeded at the monitoring stations in the coastal agglomerations. Increased levels of concentrations of suspended particles at monitoring stations in the continental part of Croatia compared to lower recorded levels at measuring stations in the coastal area are caused by climatological differences.

Ground (tropospheric) ozone (O_3) is one of the global problems of today, because its relatively long residence time in the atmosphere allows its transmission over long distances. The cycle of formation and decomposition of ozone and its precursors also depends on the intensity of solar radiation. Thus, elevated ground-level ozone values are most often recorded at coastal monitoring stations on hot and dry days.

Dominant sources of nitrogen dioxide (NO_2) pollution are fossil fuel combustion processes in motor vehicles and stationary sources (e.g., home fireplaces and power plants), and exposure to high levels of nitrogen dioxide can have adverse effects on human health. In the period from 2015 to 2017, annual values of nitrogen dioxide concentrations exceeded the limit value in Zagreb at the monitoring station

[11] MoEPGT, http://iszz.azo.hr/iskzl/, 16.7.2020.

[12] Report on air quality monitoring in the Republic of Croatia for 2018 (http://www.haop.hr/sites/default/files/uploads/dokumenti/011_zrak/Izvjesca/Godi%C5%A1nje%20izvje%C5%A1%C4%87e%20o%20pra%C4%87enju%20kvalitete%20zraka%20na%20podru%C4%8Dju%20RH%20u%202018.%20godini.pdf)

Zagreb - 1, where is the dominant influence of traffic. In 2018 no overrun was recorded through monitoring stations.

Hydrogen sulphide (H_2S) is a gas whose concentrations in the air are measured primarily for the appearance of unpleasant odours at monitoring stations located near emission sources (eg refineries, landfills, mineral fertilizer factories). The concentrations measured at the monitoring stations in Croatia are not dangerous to human health, but due to the unpleasant odour they affect the quality of life. Levels of hydrogen sulphide pollution exceeds allowed values at the measuring stations of several cities with refineries and larger landfills (Zagreb (Jakuševac), Slavonski Brod, Sisak, Kostrena (Urinj), CCE Marišćina).

In populated areas where exceedances of limit and/or target values of air pollutants have been recorded, the competent authorities, i.e. cities and local self-government units, have the obligation to develop action plans to improve air quality and ensure the implementation of measures from these plans.

Table 4. List of monitoring stations in the Project area

County	Number and location of monitoring stations
City of Zagreb	**4 State monitoring stations** (Zagreb-1, Zagreb-2, Zagreb-3, Zagreb PPI), **6 local monitoring stations** (Đorđićeva ulica, Ksaverska cesta, Pešćenica, Prilaz baruna Filipovića, Siget, Susedgrad) **3 polluters monitoring stations** (Zagrebački holding d.o.o. - Jakuševac, National public health institute Andrija štampar - Mirogojska cesta, HEP - Vrhovec)
Sisak-Moslavina County	**3 State monitoring station** (Sisak-1, Kutina-1, Kutina-2) **1 local monitoring station** (Vatrogasni dom (K2) - Kutina)

Source: MoEPGT[13]

Data on air quality in real time by each monitor stations are available on the MoEPGT web page: http://iszz.azo.hr/iskzl/.

3.1.2 Water quality

The territory of the Republic of Croatia hydrographically belongs to the Adriatic Sea basin and the Black Sea basin and according to the Water Act[14] is divided into two water areas: the Danube River Basin District (DBD) and the Adriatic River Basin District (ABD).

The border between water areas in the territory of the Republic of Croatia follows the natural hydrographic-hydrogeological watershed between the Adriatic and Black Sea basins, which is related to the occurrence of waterproof clasts and poorly water permeable dolomites in the mountainous area of Gorski kotar and Lika. Other boundaries of water areas are defined by the state border on land, e.g. the demarcation line of the coastal and open sea at sea. [15]

The surface of the DBD is 35.117 km^2, which represents 62% of the Croatian land territory. The runoff backbones from the water area are the rivers Sava and Drava, whose watershed is relief defined and passes through the mountain range Ivanščica - Kalnik - Bilogora - Papuk. The area of the Sava sub-basin occupies 25.764 km^2 or 73% of the water area, and the area of the Drava and Danube sub-basins 9.353 km^2 or 27% of the water area. The DBD in the Republic of Croatia is part of the wider

[13] MoEPGT, http://iszz.azo.hr/iskzl/, 23.11.2021.
[14] OG 66/19
[15] This is an approximate demarcation, because the watershed between the Black Sea and the Adriatic basin is predominantly zonal (it changes over time depending on changes in hydrological conditions).

international Danube River Basin District. A large number of waters of a river basin district are border or transboundary waters and have interstate significance.

The ABD consists of several basins or parts of basins of Adriatic rivers with associated groundwaters, transitional and coastal waters. The area of the ABD is 35.303 km^2, which is about 40% of the total territory of the Republic of Croatia. The mainland accounts for 18.183 km^2, the islands 3.262 km^2, and the transitional and coastal waters of the sea 13.858 km^2. Outside the boundaries of the water area is 17.722 km^2 of state territory, 17.718 km^2 of territorial sea and about 4 km^2 of uninhabited offshore islands and cliffs. The ABD in the Republic of Croatia belongs to the wider international basin of the Adriatic Sea. Part of the waters of the ABD are border or transboundary waters of interstate importance. [16]

Figure 6. Water districts and sub-basin areas with significant watercourses [17]

The total water exploitation in Croatia is significantly below the level that could jeopardize the water availability. In the coastal area and on the islands, increased pressure on water resources is evident in the summer months. Although the gradual reduction of losses in public water supply to an acceptable level of 15 to 20% is a strategic goal of water management, according to data from 2017 the losses on the national level are still present with a share of about 50%. [18]

In the Republic of Croatia there is a difference between public, local and individual water supply. Public water supply is performed by legal entities registered to provide public water supply activities (public water service providers). Local water supply means local water supply systems that were built in the seventies and eighties of the last century from the local community funds and at the time of construction had all the valid and necessary permits. In 2018, there were 133 public water service providers, and 220 local water service providers were also registered.

The share of population connected to public sewerage systems is growing. In 2018, approximately 91,5% of the population was connected to public water supply, and approximately 1,47% to local water supply. [19]

Water for human consumption must meet the parameters for checking the compliance of water for human consumption stipulated by the Ordinance on compliance parameters, methods of analysis,

[16] https://www.voda.hr/sites/default/files/plan_upravljanja_vodnim_podrucjima_2016._-_2021.pdf
[17] https://www.voda.hr/sites/default/files/plan_upravljanja_vodnim_podrucjima_2016._-_2021.pdf
[18] https://www.voda.hr/sites/default/files/pdf_clanka/hv_99_2017_17-26_vouk-et-al.pdf
[19] https://www.hzjz.hr/wp-content/uploads/2019/07/IZVJE%C5%A0TAJ-O-ZDRAVSTVENOJ-ISPRAVNOSTI-VODE-ZA-LJUDSKU-POTRO%C5%A0NJU-U-REPUBLICI-HRVATSKOJ-ZA-2018_v1.pdf

monitoring and safety plans for water for human consumption and the ways of keeping the register of legal entities performing public water supply (OG 125/17,39/20). At the level of the Republic of Croatia, monitoring of the health safety of water for human consumption is carried out according to the Monitoring Plan adopted by the Minister responsible for health at the proposal of the Croatian Institute for Public Health (CIPH). The implementation of the Monitoring Plan is coordinated by the CIPH and is carried out by the public health county institutes or the institute of City of Zagreb in the area of their local jurisdiction. A legal entity providing public water supply is obliged to ensure that water for human consumption delivered to users/consumers meets all prescribed parameters for conformity testing, i.e., meets the maximum permitted concentrations prescribed by the above-mentioned Ordinance.

According to publicly available information[20], surface water quality is significantly more favourable in the ADB than in the DBD, which mainly refers to smaller continental rivers. Groundwater quality is generally assessed as good, but as groundwater is extremely important for the needs of public water supply (almost 90% of affected water quantities), it is necessary to preserve not only their good quantitative but also chemical state.

Progress has been made in the area of municipal wastewater treatment, but not at a satisfactory pace. In 2016, about 150[21] wastewater treatment plants[22] were active. In accordance with the Implementation Plan (revised) for Water Utility Directives, by 2023 the functionality of the treatment plant for 294 agglomerations is planned.

The Monitoring program for the quality of the sea and inland surface bathing waters[23] is regularly implemented in the area of seven coastal counties and individual local self-government units. According to that Program, the bathing season is the period from June 1 to September 15, and the monitoring of sea quality is performed from May 15 to September 30. Before each bathing season, the county defines sampling points. Water and sea quality monitoring is performed by authorized entities, i.e. county Public Health Institutes and authorized laboratories, and before the start of each bathing season the authorized entity prepares a testing calendar with the consent of the competent administrative body in the county. The assessment of the quality of sea and bathing water is determined on the basis of microbiological indicators: Escherichia coli and Intestinal enterococci, for which limit values are prescribed by the Bathing Sea Quality Regulation and the Bathing Water Quality Regulation.

The results of the bathing water and sea quality testing at each of the testing points included in the Monitoring program are available to the public in real time on the website of the MoEPGT.

Regarding quality of bathing water and sea among European Countries, Croatia is in a high fifth place with 95,6% of excellently rated test points, just behind Cyprus, Austria, Malta and Greece. [24]

[20] National report on the state of the environment in Croatia 2013-2016 (http://www.haop.hr/sites/default/files/uploads/dokumenti/06_integrirane/dokumenti/niso/IZVJ_OKOLIS_2013-2016.pdf)
[21] National report on the state of the environment in Croatia 2013-2016 (http://www.haop.hr/sites/default/files/uploads/dokumenti/06_integrirane/dokumenti/niso/IZVJ_OKOLIS_2013-2016.pdf)
[22] Preglednik Registra onečišćavanja okoliša, 17.7.2020.
[23] Provodi se prema Uredbi o kakvoći mora za kupanje (NN 73/08), kojom je transponirana Direktiva EU o upravljanju kvalitetom vode za kupanje (Directive of the European Parlament and of the Council concerning the management of bathing water quality 2006/7/EC)
[24] https://www.eea.europa.eu/themes/water/europes-seas-and-coasts/assessments/state-of-bathing-water/european-bathing-water-quality-in-2019

Sustainable management of the Adriatic Sea, coast and islands is implemented through the implementation of documents within the Strategy for the Management of the Marine Environment and Coastal Area.

3.1.3 Waste management

The total amount of waste (production and municipal) in the Republic of Croatia is estimated at 5,5 million tons[25]. The amount of hazardous waste is around 175.000 tons, which is about 3% of the total waste generation.

From 2016 onwards, there has been a significant increase in the amount of production waste. Also was a slight increase in the amount of municipal waste in the observed period recorded.

The largest generators of waste in the Republic of Croatia are construction sector (23%) and households (23%).

The total amount of construction waste generated in 2019 is estimated at 1,37 million tons. The largest share in construction waste makes soil, stones and dredging waste (45,5%), followed by mixed construction waste and demolition waste (19,1%). Waste concrete, bricks, tiles and ceramics makes 16,1% of total construction waste, while metals and their alloys represent 13% and other types of waste by less than 7%.

The total amount of treated construction waste in 2019 was 1,06 million tons. The remaining unrecorded, about 300.000 tons, could refer to unreported data in the case of export, temporary storage, implementation of a procedure for which no permit has been obtained, eg for backfilling, or to waste dumped in the environment to illegal dumps.

Thus, the construction waste recovery rate for 2019 accounts to 67%. According to the Waste Framework Directive (2008/98/EU) target recycling rate for construction waste for 2020 is 70%.

The amounts of construction waste generated in the City of Zagreb is 23,7% and in Sisak-Moslavina County 2,7%.

Hazardous waste in construction waste accounts for 1.9% (26.007 t). Certain quantities refer to construction waste containing asbestos. In 2019 2.525 tons those waste was disposed in 6 cassettes built at certain landfills. On the remaining 11 cassettes disposal of asbestos construction waste wasn't recorded.

[25] http://www.haop.hr/hr/tematska-podrucja/otpad-registri-oneciscavanja-i-ostali-sektorski-pritisci/gospodarenje-otpadom-10

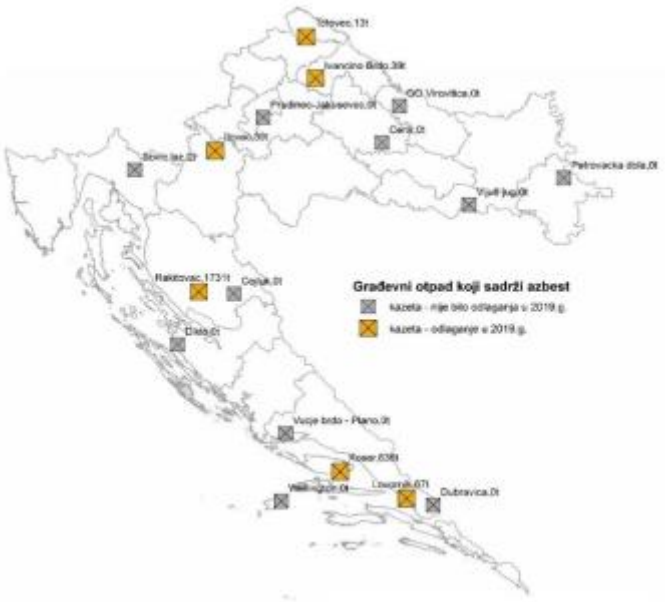


Figure 7. Locations of cassettes for asbestos waste disposal in Croatia[26]

Disposal of construction waste containing asbestos is possible in the City of Zagreb while Sisak-Moslavina County does not have cassettes for asbestos waste.

In 2020, each citizen of RC generated 418 kg municipal waste (1.692.966 t)[27], which ranks Croatia among the countries with the lowest waste generation in the EU (the EU average is 492 kg per capita in 2018[28]).

The public service of collecting mixed municipal waste is performed by 196 companies. The coverage of the population by organized collection of municipal waste is 99%, and all municipalities and cities have organized collection and disposal of municipal waste.

In 2020, mixed municipal waste still accounts for the largest share in municipal waste (59%), thus the rate of separate collection in 2020 was 41%, which is 4% lower than in the previous year.

The amounts of municipal waste generated in 2020 in the City of Zagreb is 21% and in Sisak-Moslavina County 2,5%[29].

Not all separately collected municipal waste is sent for recovery. Part of the separately collected waste ends up in landfills, where a certain amount may be prepared for recovery purposes.

In 2020, the municipal waste recovery rate increased by 4% compared to 2019, and it amounted to 25%. According to the Waste Framework Directive (2008/98/EU) target recycling rate for municipal

[26] Source: MoEPGT, National report on construction waste management for 2019 (http://www.haop.hr/sites/default/files/uploads/dokumenti/021_otpad/Izvjesca/ostalo/OTP_Gradjevni_izvjesce_2019.pd)

[27] National Report on Municipal Waste 2020 http://www.haop.hr/sites/default/files/uploads/inline-files/OTP_Izvje%C5%A1%C4%87e%20o%20komunalnom%20otpadu%20za%202020.%20godinu_7_10_2021.pdf

[28] Eurostat

[29] National Report on Municipal Waste 2020 http://www.haop.hr/sites/default/files/uploads/inline-files/OTP_Izvje%C5%A1%C4%87e%20o%20komunalnom%20otpadu%20za%202020.%20godinu_7_10_2021.pdf

waste for 2020 is 50%. In 2020, in City of Zagreb 36% of the generated municipal waste was sent for recovery, and in Sisak-Moslavina County 14%.

Table 5. Municipal waste management in Croatia in 2020

Generated	Separately collected	Recycled	Composted /anaerobic digestion	Energy recovery (R1)	Incineration (D10)	Landfilling	Other
1.692.966 t	694.160 t	580.552 t	93.422 t	2.819 t	5,3 t	941.285 t	168.310t
	41%	34%	6%	0,17%	0,000,3%	56%	10%

Source: MoEPGT[30]

In 2020, municipal waste disposal was recorded for 85 landfills. In the City of Zagreb, there was one active landfill that received municipal waste, and in Sisak-Moslavina County 5 landfills [31].

3.1.4 Noise

Environmental noise is one of the environmental pressures with a potentially harmful effect on human health.

The body responsible for the implementation of noise protection measures in the Republic of Croatia is the Ministry of Health. Measures taken to avoid, prevent or reduce adverse effects on human health caused by environmental noise, including noise interference, are: determination of noise exposure by making noise maps based on methods for assessing environmental noise; ensuring the availability of public information on environmental noise; and development and adoption of action plans. In that way, the provisions of Directive 2002/49/ C on the assessment and management of environmental noise, the Noise Protection Act[32] and the Ordinance on the preparation and content of noise maps and action plans and on the calculation of permissible noise indicators[33] are implemented.

Strategic noise maps and action plans in accordance with the Noise Protection Act are an integral part of the Environmental Information System of the Republic of Croatia at the MoEPGT.

The development of strategic noise maps and noise management action plans has a key role in protection of the population from excessive noise exposure, especially in parts of settlements with high-density road transport, rail transport, airports and industrial plants and facilities.

In accordance with the Noise Protection Act, strategic noise maps and action plans are prepared for populated areas with more than 100.000 inhabitants, for main roads with more than 3.000.000 vehicle passages per year, for main railways with more than 30.000 train passages per year, and major airports with more than 50.000 operations (take-offs and landings) per year.

According to publicly available data on population exposure to environmental noise [34], one of the main sources of noise is road traffic. The share of exposed population to noise greater than 55 dB (A) varies

[30] National Report on Municipal Waste 2020
http://www.haop.hr/sites/default/files/uploads/inline-files/OTP_Izvje%C5%A1%C4%87e%20o%20komunalnom%20otpadu%20za%202020.%20godinu_7_10_2021.pdf
[31] National report on landfilling and landfills 2020
http://www.haop.hr/sites/default/files/uploads/inline-files/OTP_Izvje%C5%A1%C4%87e%20o%20komunalnom%20otpadu%20za%202020.%20godinu_7_10_2021.pdf
[32] OG 30/09, 55/13, 153/13, 41/16 i 114/18
[33] OG 75/09, 60/16, 117/18
[34] National report on the state of the environment in Croatia 2013-2016
(http://www.haop.hr/sites/default/files/uploads/dokumenti/06_integrirane/dokumenti/niso/IZVJ_OKOLIS_2013-2016.pdf)

from 33% to 21% in the 4 largest cities (Zagreb, Osijek, Rijeka, Split), while significantly less inhabitants are exposed to noise greater than 65 dB (A).

3.1.5 Nature protection

In Croatia, a legislative and institutional framework for nature protection has been established, as a basis for the implementation of activities for the conservation of all components of biodiversity. The state of nature is determined to a certain extent (inventory and mapping), monitored and assessed (red lists), and nature conservation is ensured by the implementation of appropriate mechanisms and measures for nature protection. Biodiversity data are evaluated, organized and made publicly available through the Nature Protection Information System at the MoEPGT. The starting point for targeted species protection is their legal protection, which also enables the regulation of international trade in endangered species. The oldest mechanism for biodiversity conservation is the protection of the area and includes the declaration of certain parts of nature as protected, as well as appropriate management. The Ecological Network of the Republic of Croatia (Natura 2000) was proclaimed in 2013, and it covers 36,7% of the land territory and 1,.4% of the territorial sea and inland waters. It consists of 781 areas; that is, 743 species conservation areas and habitat types and 38 bird conservation areas.

The conservation of the target species and habitat types of the ecological network is primarily ensured by the implementation of the procedure for assessing the acceptability of plans, programs and interventions that may have a significant impact on them. Biodiversity conservation is also ensured by integrating nature protection measures into natural resource management plans and spatial plans. But a significant number of species are still endangered.

Croatia is characterized by a great diversity of species and habitats.

Through the development of a new map of terrestrial non-forest habitats, 155 habitat types were mapped in 58% of the territory of Croatia. Cultivated non-forest areas and habitats with weed and ruderal vegetation are non-forest habitat type covering the largest area of 24%. Habitats are still largely preserved, and the main threats are human impacts and disturbances and changes in agricultural practices that have resulted in the succession and reduction of the area of certain habitat types.

In Croatia, 40.000 species have been recorded, most of them (about 25.000) invertebrates, but it is estimated that 50.000 to 100.000 are present. Every year, scientists record, discover and describe new species and subspecies. Such findings are rarer when it comes to fish, amphibians and reptiles, birds and mammals, as well as vascular flora as these groups are relatively well known. On the other hand, groups such as algae, mosses, fungi, and invertebrates are very poorly researched. This is supported by the fact that every year several dozen new species of invertebrates are identified for the fauna of Croatia, of which a significant number are described as new species for science. The wild species richness of Croatia lies not only in their diversity but also in their endemicity.

The Nature Protection Act[35] defines 9 national categories of protection. According to the Register of Protected Areas in the Republic of Croatia, a total of 409 protected areas in various categories are protected. Data from the Register of Protected Areas are public and available on the web portal of the Nature Protection Information System at MoEPGT[36].

[35] OG 80/13, 15/18, 14/19, 127/19
[36] http://www.bioportal.hr/gis/

Today, protected areas cover 8.61% of the total area of the Republic of Croatia, i.e. 12,32% of the land territory and 1,95% of the territorial sea. The largest part of the protected area are nature parks (4,90% of the total state territory).

Some areas in City of Zagreb and Sisak-Moslavina County fall within the Ecological Network of the Republic of Croatia (Natura 2000) and nature protected areas.

None of the planned sub-projects is located in a protected nature area or in the area of the Ecological Network, nor are these areas in the immediate vicinity of the sub-projects.

3.1.6 Climate change

Climate change in Croatia could significantly increase the frequency and severity of weather-related disasters, which occur more often than any other type of disaster in the country. Looking forward, all across Croatia, decreasing precipitation and rising average temperature are predicted.

The increase of mean annual air temperature in the 20th century varied between 0,02°C per 10 years (Gospić) and 0,07°C per 10 years (Zagreb). The frequency of dry spells—that is, the number of consecutive dry days - has also risen in the past years. Of the 10 warmest years since the beginning of the 20th century, 7 were recorded after the year 2000, with 2016 being the warmest year ever recorded. Dry spells contribute to the risk of wildfires, which in recent years have been particularly dangerous along the Adriatic coast; in 2007 alone, for example 2.700 wildfires were reported. Increasing temperatures and declining precipitation bring an increased risk of droughts, which adds to the risk of forest fires.[37]

The impact of climate change on plant and animal species is increasingly pronounced both in Croatia and globally. Extreme climatic conditions that cause more frequent fires, storms and icebreaks are the key causes of the growing trend of wood damage. High temperatures and long dry periods cause shortening of the vegetation period of ripening of certain economically important crops, which can result in reduced yields. In addition to this, climate change can be unquestionably associated with the occurrence of non-indigenous species, some of which are invasive as well as the occurrence of disease. Changes in climatic parameters will have different implications for individual tourist destinations, i.e. they can be both positive and negative. Their positive impact is present through the extension of the tourist season, while the negative impact, especially due to high temperatures and increased UV radiation, is associated with a decrease in tourist demand in the summer months. [38]

Average values of the share of greenhouse gases by individual sectors show that the Energy sector still has the largest contribution to total greenhouse gas emissions in the Republic of Croatia (around 70%). It is followed by Agriculture with about 11%, Industrial processes and product use with about 11% and Waste with about 8%. This structure, with minor changes, was maintained throughout the period 1990-2017.

The most common greenhouse gas is carbon dioxide (CO_2) with a share of about 75% of total emissions. It is followed by methane (CH_4) with a share of about 16%, nitrous oxide (N_2O) with a share of about 7% and fluorocarbons, perfluorocarbons and sulphur hexafluoride with about 2% share in greenhouse gas emissions[39].

[37] Project appraisal document

[38] National report on the state of the environment in Croatia 2013-2016 (http://www.haop.hr/sites/default/files/uploads/dokumenti/06_integrirane/dokumenti/niso/IZVJ_OKOLIS_2013-2016.pdf)

[39] National inventory report 2019 (http://www.haop.hr/sites/default/files/uploads/dokumenti/012_klima/dostava_podataka/Izvjesca/NIR_2019.pdf)

In 2013, Croatia joined the greenhouse gas emissions trading system, which is one of the mechanisms for reducing greenhouse gas emissions, in which economic operators are enabled to reduce greenhouse gas emissions by implementing cost-effective measures.

In the period from 2008 to 2012, Croatia met the individual target set by the Kyoto Protocol to reduce greenhouse gas emissions by 5% compared to 1990. The stated obligations that Croatia has undertaken with the Kyoto Protocol have been fulfilled, both due to the implementation of emission reduction measures and due to the decline in economic activities caused by the economic crisis.

In accordance with the amendments to the Kyoto Protocol from Doha, which at the European Union level stipulate the obligation to reduce emissions by 20% by 2020 compared to 1990, Croatia is implementing measures and activities, the results of which so far indicate that the obligation to reduce greenhouse gas emissions will be met.

3.1.7 Cultural heritage

Croatia is the country with the among largest number of protected cultural phenomena in Europe with 14 Intangible Cultural Heritages added to the UNESCO list. The six most important parts of Croatian cultural heritage are - the Old City of Dubrovnik, a historic complex in Split with Diocletian's Palace, the historic town of Trogir, Euphrasius' basilica in Poreč, the Cathedral of St. James in Šibenik and Starogradsko polje on the island of Hvar, all protected as World Heritage Sites by UNESCO. In addition to these, Croatia has 340 protected historic entities and a whole series of individual historic buildings, churches and chapels, fortresses and castles, manors and palaces and archaeological sites. Croatia, in its many museums, holds priceless and diverse cultural treasures, and there are many festivals and events, from music and film events to folklore events and carnivals.

Certain selected Sub-Projects are either located within the protected cultural heritage zone or a part of the protected cultural good:

- Sub-Project Retrofitting of Croatian Institute of Public Health Building in Nazorova 53 is located within the cultural protection zone: Historical Urban Entity of the City of Zagreb that is protected cultural heritage (Register of Cultural Property no. Z-1525)
- Sub-Project Reconstruction and upgrading of the building of the Faculty of Electrical Engineering in Zagreb is part of protected cultural good (complex of buildings A, B and C together with the plot) labelled as Z-5675 according to the Register of Cultural Goods of the Republic of Croatia, and according to the current spatial planning documentation (Article 93. of the General Urban Plan of City of Zagreb) classified under group 3.b Protected civil buildings in the area covered by the plan.

3.2 Social baseline and relevant potential issues

3.2.1 General Information on Administrative division

With a surface area of 56.594 km², Croatia is 18th among the European Union countries according to size. In terms of relief and climate, it is extremely diverse. The territory includes extensive plains in the continental region between the Rivers Drava and Sava (Slavonia), mountainous areas in the centre (Lika and Gorski Kotar), and in the west and south, a long, indented, sunny coastline with over a thousand islands (Istria, Kvarner and Dalmatia).[40]

[40] http://croatia.eu/index.php?view=article&lang=2&id=6

Figure 8. Geographic map of Croatia [41]

The present administrative territorial division of the country was introduced in 1997 by Act on Counties, Cities and Municipalities in Republic of Croatia[42], when the 1992 division, that beside counties and municipalities consisted also districts, was changed.

The administrative/territorial division of Croatia, the first level, are the 20 counties and one city-county. Territorial division into counties is one of the historical features of the Republic of Croatia. According to some sources, counties were for the first time mentioned in the 10th century. On the lower level there are 428 municipalities and 128 cities. The City of Zagreb has a special status of a city and county. Smaller administrative territorial units within municipalities/cities are settlements (Figure 9). [43]

Figure 9. County division of Croatia[44]

[41] http://croatia.eu/index.php?view=article&lang=2&id=6

[42] OG 10/97

[43] OG 86/06, 125/06 – correction, 16/07 – correction, 95/08 – Decision Constitutional Court of RC, 46/10 – correction, 145/10, 37/13, 44/13, 45/13 i 110/15)

[44] http://croatia.eu/index.php?view=article&lang=2&id=6

The capital and the largest city of the Republic of Croatia is City of Zagreb. It is located in the northwest of the country, along the Sava River, at the southern slopes of the Medvednica mountain. It lies at an elevation of approximately 122 m (400 ft) above sea level.

Table 6. Territorial constitution of Project area with situation as on 31 December 2017 45

County	Surface area, km2	Number of towns/cities	Number of municipalities	Number of settlements
City of Zagreb	641	1 (City of Zagreb)	0	70
Sisak-Moslavina County	4.468	7 (Glina, Hrvatska Kostajnica, Kutina, Novska, Petrinja, Popovača, Sisak)	12 (Donji Kukuruzari, Dvor, Gvozd, Hrvatska Dubica, Jasenovac, Lekenik, Lipovljani, Majur, Martinska Ves, Sunja, Topusko, Velika Ludina)	455

3.2.2 Population

With 4.087.843 million inhabitants in 2018[46], Croatia is 20th among the members of the European Union. Population density amounts to 72 per km² which makes it as one of the more sparsely populated European countries, along with Norway, Finland, Sweden, Estonia, Latvia, Lithuania, Ireland and Bulgaria.

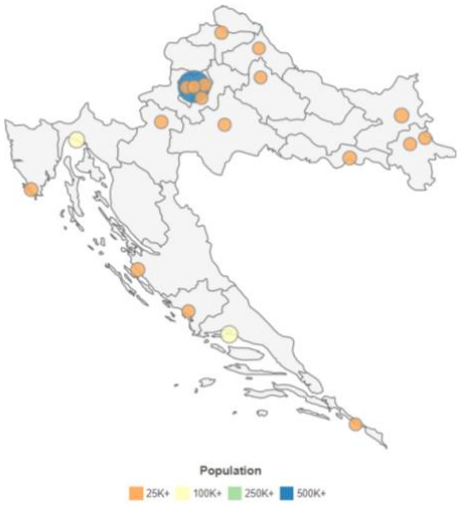


Figure 10. Croatia population density map[47]

For the past twenty years, the population has been decreasing. The decrease in the total number of inhabitants was realized by all counties, except the City of Zagreb and the County of Istria, in which, compared to the previous year's estimate, there was a relative increase of 0,22% and 0,26%. The largest relative decline in population was recorded in Vukovar-Srijem County (3,04%).

About 52% of the population lives in only five counties, mostly in the City of Zagreb (804.507 or 19,7%) and in the Split-Dalmatia County (448.071 or 11,0%), while Požega-Slavonia County had the least population. (67.862 or 1,7%) and Lika-Senj County (45.184 or 1,1%).

[45] https://www.dzs.hr/Hrv_Eng/ljetopis/2018/sljh2018.pdf
[46] https://www.dzs.hr/Hrv_Eng/publication/2019/07-01-03_01_2019.htm
[47] https://worldpopulationreview.com/countries/croatia-population

Table 7. Population in the Project area, 2021

County of	Estimate of total population	Population density (per km²)
City of Zagreb	807.254	1.259
Sisak-Moslavina County	145.904	33

Source: Statistical information 2021 (www.dzs.hr)

A long period of depopulation has resulted in many negative consequences, such as the reduction of the core population producing new generations, the reduction of the active working population, and the increasing care needs of the older population; in other words, increased economic and social burdens placed on the state budget in the areas of pension insurance, social and health care of the elderly, etc.[48]

Apart from the decreasing population, the contemporary demographic picture of Croatia is much like those of the other members of the EU. It is characterised by three processes: ageing, natural depopulation, and spatial polarisation of the population.

The average age, which was 34 fifty years ago, has risen to 43,4 in 2018 which ranks Croats among the oldest nations in Europe. One quarter of the population of Croatia is over 60 years old while the share of the young people aged 0 to 19 years at the state level is 19,6%.,

The share of women in the total population is 51,7%, and the share of men 48,3%. Such a ratio is present in most counties. The smallest share of the female population was in Lika-Senj County (50,1%), while the largest share was in the City of Zagreb (53,1%).

The share of the fertile contingent in the total female population continued to decrease. Therefore, in 2018, it amounted to 41,5%. Average number of children per woman of fertile age is 1.4 , it is below multi-year average for the EU-28 which is in the range of 1.55-1.62.[49]

The natural increase rate was negative at -3,9 (-15.761 persons). The negative natural increase was also confirmed by the vital index (live births per 100 deaths), which amounted to 70,1. The negative natural increase rate was recorded in all counties.[50]

A positive natural increase was recorded in 58 towns/municipalities, negative one in 492 towns/municipalities and in the City of Zagreb, while 5 towns/municipalities recorded a zero-natural increase.

3.2.3 Economy

After a six-year recession, 2019 was the fifth year in a row in which stable and moderate economic growth was achieved. The realized GDP growth rate was 2.9%, which is a slight increase compared to the previous year when the value of Gross domestic product (GDP) was 2.7%.[51]

The most important sectors of Croatia's economy is wholesale and retail trade, transport, accommodation and food services (23.1%), industry (20.4%) and public administration, defence, education, human health and social work activities (15.5%).[52]

[48] http://croatia.eu/index.php?view=article&lang=2&id=14
[49] https://www.hzjz.hr/wp-content/uploads/2019/08/Prirodno_kretanje_2018.pdf
[50] https://www.dzs.hr/Hrv_Eng/publication/2019/07-01-01_01_2019.htm
[51] https://www.hnb.hr/statistika/glavni-makroekonomski-indikatori
[52] https://ec.europa.eu/eurostat/statistics-explained/images/9/9f/Gross_value_added_at_current_basic_prices%2C_2008_and_2018_%28%25_share_of_total_gross_value_added%29_FP19.png

The service sector in total represents about 59% of the country's GDP, employing almost 70% of the workforce.

Regarding, the tourism sector, in 2018 international tourists' expenditure in Croatia amounted to almost 20% of GDP – by far the largest share in the EU. [53]

Intra-EU trade accounts for 68% of Croatia's exports (Italy 14%, Germany 13% and Slovenia 11%), while outside the EU 9% go to Bosnia and Herzegovina and 4% to Serbia. In terms of imports, 78% come from EU Member States (15% Germany, Italy 13% and Slovenia 11%), while outside the EU 3% come from both Bosnia and Herzegovina and China.[54]

Table 8. Gross domestic product for the Project area[55]

County	GDP, '000 HRK	GDP, '000 EUR	GDP per capita, '000 HRK	GDP per capita, '000 EUR	Share in national GDP (%)
City of Zagreb	125.020	16.758	155.541	20.850	34,1%
Sisak-Moslavina County	9.414	1.262	61.593	8.256	2,6

Available public data[56] show that significantly the largest share in the GDP of the country, of all counties makes the City of Zagreb (34%). The share for other counties varies from 1% to 8%.

BDP of Zagreb County makes 6% of national BDP, while in Sisak-Moslavina County is around 2%.

The largest share in gross value added (GVA) in the City of Zagreb make trade activities, followed by public administration, education, health, social welfare and other activities, as well as manufacturing and other industries. In Zagreb County those are manufacturing, mining, quarrying and other industries followed by wholesale and retail trade, transportation and storage, accommodation and food service activities. In Sisak-Moslavina County, the largest share in gross value added (GVA) makes manufacturing, mining, quarrying and other industries, followed by public administration, education, health, social welfare and other activities.

In 2020 the escalation of the coronavirus crisis and the measures introduced by public health authorities to limit the spread of the contagion have led to a significant decline in economic activity. Lengthy disruptions in global supply chains and falling demand, especially for travel and tourism - the single most important sector in the Croatian economy - could contribute to an even stronger economic recession. This would also result in a further widening of the fiscal deficit, requiring substantial borrowing and leading to a large increase in public debt.

The social and economic impact of the coronavirus pandemic is further exacerbated by the damaging earthquakes that struck the Croatian capital and its surroundings on March 22, 2020, following by earthquakes near Sisak in Petrinja on December 28-29, 2020. While the results of the damage assessment are still pending, the economic impact is expected to be very severe and reconstruction may take several years.[57]

According to data from Croatian Bureau of Statistics (CBS)[58]:

[53] https://ec.europa.eu/info/sites/info/files/economy-finance/eb036_en.pdf
[54] https://europa.eu/european-union/about-eu/countries/member-countries/croatia_en;
[55] https://www.dzs.hr/Hrv_Eng/publication/2020/12-01-03_01_2020.htm
[56] https://www.dzs.hr/Hrv_Eng/publication/2020/12-01-03_01_2020.htm
[57] https://www.worldbank.org/en/country/croatia/overview#3
[58] https://www.dzs.hr/Hrv/publication/StatisticsInLine.htm

- The gross domestic product increased in real terms by 0,4% in the first quarter of 2020, while the seasonally adjusted quarterly GDP increased by 0,3% compared to the same quarter of 2019 (Figure 11);

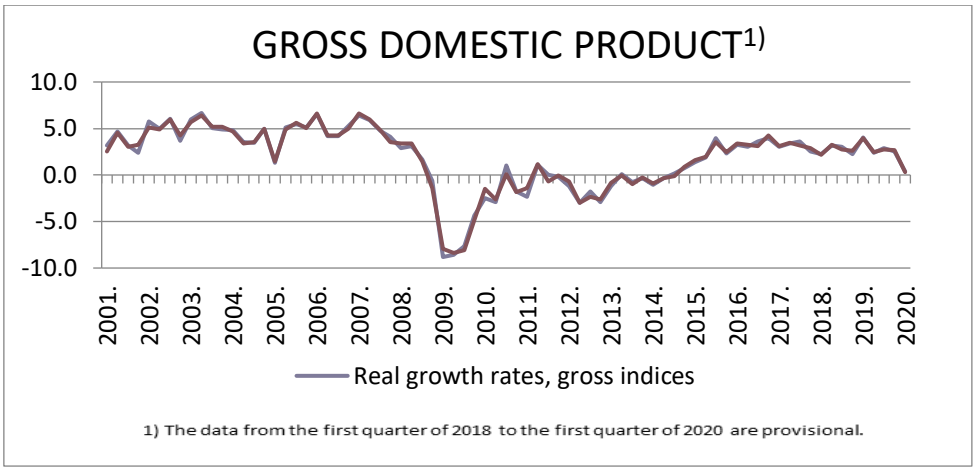


Figure 11. Gross domestic product over years and in May 2020, Croatia[59]

- Working-day adjusted industrial production in May 2020, as compared to May 2019, decreased by 12,4%;
- Working-day adjusted retail trade turnover in real terms in May 2020, as compared to May 2019, decreased by 7,8%;
- Working-day adjusted turnover from service activities in nominal terms in the Republic of Croatia in April 2020, as compared to April 2019, decreased by 33,5%;
- The working-day adjusted index of construction works in April 2020, as compared to April 2019, decreased by 4,7%;
- The working-day adjusted index of construction works in April 2020, as compared to April 2019, decreased by 4,7%;
- From January to April 2020, as compared to the same period last year, the export of the Republic of Croatia decreased by 4.9%, while the import decreased by 10.1%;
- In May 2020, the number of unemployed persons amounted to 157.839. The registered unemployment reached 9,5% in May 2020, which is 2,5 percentage points higer than in May 2019;
- Average gross earnings amounted to 9.057 kuna in April 2020, which is in real terms 0,4% higher than in April 2019. Average net earnings in the same period amounted to 6.622 kuna, which is in real terms 0,4% higher than in April 2019;
- The prices of goods and services for personal consumption, measured by the consumer price index decreased by 0,2% on average in June 2020 compared to June 2019, while the consumer price index excluding energy and food increased by 0,9% on average. The producer prices of industrial goods in June 2020, as compared to June 2019, decreased by 4,2%;

[59] Source: CBS

It is anticipated that Croatia will need to revisit its growth model and focus on specific policies to increase its resilience to exogenous shocks and raise the economy's growth potential.[60]

3.2.4 Social protection

The social welfare system in the Republic of Croatia is based on the principle of subsidiarity, which implies the responsibility of individuals and families for their own social security. The role of the state is to help, with the aim of preventing, mitigating and eliminating social vulnerability. Beneficiaries, rights and conditions for their realization, as well as other issues of importance for this activity, are defined by the Law on Social Welfare[61].[62]

About the recognition of the right in the social welfare system, except for compensation for housing costs and the right to heating costs, decides locally competent social welfare centre in the form of decision, according to the applicant's place of residence.

The recognition of the right to compensation for housing costs is decided by the local self-government unit and the City of Zagreb, in accordance with the provisions of the Social Welfare Act and special laws.

The recognition of the right to compensation for heating costs is decided by the regional self-government unit and the City of Zagreb, in accordance with the provisions of the Social Welfare Act.

Except social welfare centre, social services also provide:

- a social care home / community service centre,
- home help centre,
- associations, religious communities, other legal entities and craftsmen,
- natural persons as a professional activity,
- foster families.

In 2018, the share of social protection in the GDP of the Republic of Croatia amounted to 21,7%, which represents an increase of 0,1 percentage points compared to 2017. The GDP in current prices increased by approximately 16,5 billion kuna, while total social protection expenditures increased by approximately 3,9 billion kuna.

Concerning receipts, social contributions were the most frequent ones (59,9% of all social protection receipts in 2018). General government contributions followed with 36,8%.

Social protection benefits accounted for 98,3% of total social protection expenditures in 2018. By type of social benefits, those in cash were the most frequent ones (64,8%). By characteristics, non-means-tested social protection benefits (both in cash and in kind) were the most frequent ones (95,3%).

Viewed by social protection functions, the largest share of social benefits was spent on relieving the financial burden related to the Old-age risk (34,0% of all social protection benefits), followed by the Sickness/Health care function (33,6%). The least resources were spent on the Housing function (0,1%).

Comparing the data on the share of costs for the social protection in the national GDP with the EU Member States, the Republic of Croatia fell behind the EU-28 average by 6,3 percentage points in 2017. When it comes to data on social protection expenditures per inhabitant with EU Member States,

[60] https://www.worldbank.org/en/country/croatia/overview
[61] OG 157/13, 152/14,99/15, 52/16,16/17, 130/17 and 98/19
[62] https://gov.hr/moja-uprava/obitelj-i-zivot/socijalna-skrb/sustav-socijalne-skrbi/367

calculated in purchasing power standard, the Republic of Croatia fell behind the EU-28 average by 53% in 2017. According to this indicator, expenditures on all social protection functions in the Republic of Croatia were below the EU average, and in absolute terms, the Old-age function fell behind the most.

Table 9. Share of each function in total amount of social protection benefits over years, Croatia[63]

	2012	2013	2014	2015	2016[1)]	2017	2018
Total expenditures on social protection benefits, by function (%)	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Sickness/Health care (%)	35,0	32,9	31,7	33,0	32,6	33,3	33,6
Disability[2)] (%)	12,9	12,9	12,1	11,8	10,8	10,5	10,3
Old age[2)] (%)	31,4	32,9	33,7	33,3	33,5	33,7	34,0
Survivors (%)	9,8	10,0	9,6	9,3	8,9	8,7	8,5
Family/Children (%)	7,5	7,5	9,0	8,7	8,7	8,7	9,0
Unemployment (%)	2,3	2,6	2,5	2,6	3,7	3,3	2,9
Housing (%)	0,1	0,1	0,1	0,1	0,1	0,1	0,1
Social exclusion not elsewhere classified (%)	1,0	1,1	1,2	1,2	1,7	1,7	1,6

Note 1) Revised data; Note 2) In line with the ESSPROS methodology, disability pensions for beneficiaries above legal retirement age have been transferred to Old-age function.

3.2.5 Health Care

Despite a challenging economic context and major fiscal pressures on health expenditure, Croatia has managed to keep publicly funded health services accessible to its population. Croatia has seen major fluctuations in its per capita health expenditure in recent years, due to high unemployment rates and a challenging fiscal context. Strengthened health system governance will be crucial to ensure financial sustainability.

The Ministry of Health holds the stewardship role in the health system and is the main regulatory body, responsible for an array of functions, including health policy development, planning and evaluation, public health programmes, regulatory standards and the training of health professionals.

Croatia has a mandatory health insurance system, with the Croatian Health Insurance Fund (CHIF) being the sole insurer and the main purchaser of health services. The CHIF contracts with health care providers for the provision of services and plays a key role in defining which health services are covered by the publicly financed system. It also oversees performance standards and price-setting for services; is responsible for the payment of sick leave compensation, maternity benefits and other allowances; and is the main provider of complementary Voluntary Health Insurance (VHI) covering user charges (termed 'supplemental insurance' in Croatia).

The CHIF provides universal health insurance coverage to the entire resident population, and it is not possible to opt out of the mandatory health insurance system. Dependent family members are covered through the contributions made by working family members, while those who are not economically active (such as pensioners and the unemployed), as well as vulnerable groups (people with disabilities, those on low incomes) are exempt from contributions and are covered through state budget transfers. The benefit package is broad, covering most types of health services. While co-

[63] Source: CBS, https://www.dzs.hr/Hrv/publication/StatisticsInLine.htm (https://www.dzs.hr/Hrv_Eng/publication/2020/10-01-05_01_2020.htm)

payments have been introduced in recent years, exemptions for vulnerable groups ensure a good degree of financial protection.

Complementary health insurance (mainly to cover user charges in the mandatory health insurance system, see below) is voluntary and is purchased individually from either the CHIF or a private insurer. Over 60 % of the population has this additional insurance.

Health expenditure in Croatia is among the lowest among EU Member States, both in per capita terms and as a percentage of gross domestic product (GDP). Expenditure as a percentage of GDP was 6,8 % in 2017, below the EU average of 9,8 %, but higher than eight other EU countries.

Hospital care is delivered through a network of general and specialist hospitals, most of which are owned by the counties. Highly specialised tertiary care is provided by hospitals owned by the central government. Specialised outpatient services, such as consultations provided by secondary care specialists, are mostly delivered in hospital outpatient departments. Since 2009, hospitals contracted by the CHIF have been paid using a diagnosis-related group (DRG) system and spending limits, with the aim of reducing costs and increasing efficiency. [64]

Table 10. Founders responsible for investment in health care institutions

Founder	Responsible for investments
State	Investment and current maintenance of health care institutions - space, medical and non-medical equipment and means of transport and for informatization of health care activities, in accordance with the plan and program of health care measures in the public health service network for health care institutions founded by losses of health institutions **of which it is the founder**
State	Investment in hospitals and investment in all health care institutions **whose founders are units of regional self-government, i.e., the City of Zagreb or local self-government units, and are located in assisted areas**.
State	Investment in health care institutions **whose founders are units of regional self-government, ie the City of Zagreb or units of local self-government, in case of the need to remedy the consequences caused by a natural disaster or other catastrophe.**
Regional self-government units	Investment and current maintenance of health care institutions - space, medical and non-medical equipment and means of transport and for informatization of health care activities, in accordance with the plan and program of health care measures and public health service network, as well as cover of losses of health care institutions whose founder **of which it is the founder.**
Local self-government units	Investment and current maintenance of health care institutions - space, medical and non-medical equipment and means of transport and for informatization of health care activities, in accordance with the plan and program of health care measures and public health service network, as well as cover of losses of health care institutions whose founder **of which it is the founder.**

[64] https://ec.europa.eu/health/sites/health/files/state/docs/chp_hr_english.pdf; https://ec.europa.eu/health/sites/health/files/state/docs/2019_chp_hr_english.pdf

Table 11. Health institutions in Croatia, December 31,2019[65]

Health institutions	Number of institutions[66]	Founder[67]
Health center	49	Regional self-government unit and City of Zagreb
Clinical teaching hospital	5	State
Clinical hospital	3	State
Clinic	5	State
General hospital	22	Regional self-government unit and City of Zagreb
Special hospital	34	Regional self-government unit and City of Zagreb, local self-government unit and another legal entity and a natural person
Health resort	7	Regional self-government unit and City of Zagreb and another legal entity and a natural person
Public health institute	22	Regional self-government units and City of Zagreb
Other state institutes:		
Institute of transfusional medicine	1	State
Institute of emergency medicine	1	State
Emergency care station	21	Regional self-government unit and City of Zagreb
Polyclinic	358	Regional self-government unit and City of Zagreb and another legal entity and a natural person
Institution of occupational health	6	Persons with a completed university graduate study in health.
Pharmacy	186	Regional self-government unit and City of Zagreb and another legal entity and a natural person
Nursing care institution	280	Regional self-government unit and City of Zagreb and another legal entity and a natural person
Health company	648	Legal entity
Total	1.648	

Table 12. Health institutions in the project area

Health institutions	City of Zagreb	Sisak-Moslavina County
Clinical teaching hospital	2	0
Clinical hospital	3	0
Clinic	3	0
General hospital	0	1
Special hospital	5	0
Health resort	0	1
Health center	4	3
State Institutes	7	0
Emergency care station	1	1
Polyclinic	7	0

[65] Source: Public Health Institute
[66] https://www.hzjz.hr/periodicne-publikacije/hrvatski-zdravstveno-statisticki-ljetopis-za-2019-tablicni-podaci/
[67] https://www.zakon.hr/z/190/Zakon-o-zdravstvenoj-za%C5%A1titi

3.2.6 Education

Croatian education system consists of the following levels: early childhood and pre-school education, elementary education, high school education and higher education.[68]

Education in Croatia is available to all, under equal conditions, in line with their capabilities. Compulsory education is free of charge, as stipulated by law, while private schools and colleges/polytechnics can be established in accordance with the relevant legal framework. Universities are guaranteed autonomy and they can independently decide on their structure, organisation and operation[69].

Croatian education system is centrally managed by the Ministry of Science, Education and Sports (MSES). Besides MSES, other national public bodies involved in the regulation, development and quality control of the educational sector in Croatia are Education and Teacher Training Agency, Agency for Vocational Education and Training, Agency for Science and Higher Education, Agency for Mobility and EU Programmes and National Center for External Evaluation of Education.

In the Republic of Croatia, spending on education is close to the EU average. In 2017, Croatia spent 4,7% of GDP on education (the EU average is 4,6%).[70]

Table 13. Information on the establishers of educational institutions in Croatia

Educational institution	***Founder***
Kindergarten	- *State,* - regional self-government unit and City of Zagreb, local self-government unit, - religious communities, - another legal entity and a natural person.
Elementary school	- *state,* - local self-government unit, - regional self-government unit, - *another legal entity and a natural person*.
Secondary school and boarding home	- *state,* - regional self-government unit, - *another legal entity and a natural person.*
Adult education institution	- *state,* - local self-government unit, - regional self-government unit, - *another legal entity and a natural person.*
Art schools	- *state,* - local self-government unit, - regional self-government unit, - *another legal entity and a natural person.*
Higher education institutions	- *state,* - local self-government unit, - regional self-government unit, - *another legal entity and a natural person.*

Funds for financing the construction, extension and reconstruction of school premises and equipping school institutions for schools founded by the Republic of Croatia or a local self-government unit and

[68] https://www.azoo.hr/images/AZOO/Ravnatelji/RM/Hrvatski_obrazovni_sustav.pdf
[69] Articles 66 and 67 of the Croatian Constitution
[70] https://eacea.ec.europa.eu/national-policies/eurydice/content/organisation-education-system-and-its-structure-14_en

regional self-government unit are provided in the budget of local self-government units and regional self-government units.[71]

At the end of the 2018/2019 school year, there were 876 active (self-contained) basic schools which included 1,151 satellite schools and departments. [72]

There were 436 active upper secondary schools, included 739 school units of various kinds, depending on the educational plan and programme.[73] According to the CBS methodology, when one secondary school embraces several school units of different types, e.g. grammar school, technical, industrial and crafts school, then each unit is considered a separate school and is presented as such. Therefore, the number of upper secondary schools presented in Table 14. is larger than the actual number of upper secondary schools (locations).

Table 14. Basic and upper secondary schools in Croatia, beginning of 2019/2020 school year

	Kindergarten	Basic Schools[74]	Upper secondary schools[75]
Total	**1,699**	**2,027**	**739**
State (including RSGU and LSGU)	1,260	2,009	688
Private	377	9	33
Of religious communities	62	9	18
		Basic schools for disabled children and youth - state	
		88	

Table 15. Higher education institutions in Croatia[76]

Higher education institution	Total	Universities	Faculty and art academies	University center at public universities	Polytechnics	Colleges
Public	91	8	68	1	11	3
Private	28	2	-	-	4	22
Total	**119**	10	68	1	15	25

[71] Article 143 (1) (6), Act on education in primary and secondary schools (OG 87/08, 86/09, 92/10, 105/10, 90/11, 5/12, 16/12, 86/12, 94/13, 136/14 - RUSRH, 152/14, 7/17, 68/18, 98/19 and 64/20)
[72] https://www.dzs.hr/Hrv_Eng/publication/2020/08-01-02_01_2020.htm
[73] https://www.dzs.hr/Hrv_Eng/publication/2020/08-01-03_01_2020.htm
[74] https://www.dzs.hr/Hrv_Eng/publication/2020/08-01-02_01_2020.htm
[75] https://www.dzs.hr/Hrv_Eng/publication/2020/08-01-03_01_2020.htm
[76] https://www.azvo.hr/hr/vvivs/43-visoko-obrazovanje/603-visoka-uilita-u-republici-hrvatskoj, 2 August 2020

Table 16. Number of education institutions in the Project area

County of	Kindergarten[77]	Basic schools[78]	Secondary schools[79]	Higher education institutions[80]
City of Zagreb	189	130	91	19
Sisak-Moslavina County	20	37	15	1
Total	**209**	**167**	**106**	**20**

Table 17. Pupils and students boarding homes in the Project area

County of	Pupils boarding homes	Students boarding homes
City of Zagreb	17	4
Sisak-Moslavina County	1	1
Total	**18**	**5**

Source: https://mzo.gov.hr/istaknute-teme/odgoj-i-obrazovanje/srednjoskolski-odgoj-i-obrazovanje/ucenicki-domovi/463

[77] http://mzos.hr/dbApp/pregled.aspx?search=2&appName=Vrtici, 23 Nov 2021
[78] http://mzos.hr/dbApp/pregled.aspx?search=2&appName=OS, 23 Nov 2021
[79] http://mzos.hr/dbApp/pregled.aspx?appName=SS, 23 Nov 2021
[80] http://pregledi.mzos.hr/ustanove_VU.aspx, 23 Nov 2021

4 NATIONAL ENVIRONMENTAL AND SOCIAL LEGISLATION AND INSTITUTIONS RELEVANT FOR THE PROJECT IMPLEMENTATION

4.1 National environmental and social legislation

4.1.1 National environmental legislation

The following Croatian legislation define a legal framework for environmental management:

- Environmental Protection Act (OG 80/13, 153/13, 78/15, 12/18, 118/18),
- Regulation on environmental impact assessment (OG 61/14, 3/17),
- Nature Protection Act (OG 80/13, 15/18, 14/19, 127/19, 155/23),
- Waste Management Act (OG 84/21, 142/23)
- Air Protection Act (OG 127/19, 57/22)
- Water Act (OG 66/19, 84/21, 47/23)
- Energy Efficiency Act (OG 127/14, 116/18, 25/20, 32/21, 41/21)
- Noise Protection Act (OG 30/09, 55/13, 153/13, 41/16, 114/18, 14/21)

Environmental Protection Act regulates: environmental protection principles and objectives within the concept of sustainable development, environment components protection and environmental stress protection. Furthermore it regulates environmental protection entities, sustainable development and environmental protection documents, environmental protection instruments, environmental monitoring, information system, access to information on the environment, access to justice in the environmental issues, public participation in the environmental issues, responsibility for environmental damage, funding and general policy instruments in environmental protection as well as administrative and inspection control.

According to this Act environmental protection objectives are as follows:

- protection of human life and health,
- protection of flora and fauna, geodiversity, biological and landscape diversity and preservation of ecological stability,
- protection and improvement of the quality of individual environmental components,
- protection of the ozone layer and climate change mitigation,
- protection and restoration of cultural and aesthetic landscape values,
- prevention of major accidents involving dangerous substances,
- prevention and reduction of environmental pollution,
- continuous use of natural resources,
- rational use of energy and promoting the use of renewable energy sources,
- elimination of environmental pollution effects,
- improvement of the disturbed natural balance and restoration of its regeneration capabilities,
- achievement of sustainable production and consumption,
- phase-out and substitution of use of dangerous and harmful substances,
- sustainable use of natural assets,
- ensuring and development of long-term sustainability
- improving environmental status and securing a healthy environment.

These objectives should be accomplished through application of environmental protection principles and environmental protection instruments, prescribed by this Act and sub-laws.

Sustainable development principles are following: precautionary principle, principle of preservation of natural assets, biological diversity and landscape, substitution and/or compensation principle, principle of removal and remediation of environmental damage at the source, principle of integrated approach, principle of cooperation, polluter pays principle, principle of access to information and public participation, promotion principle, principle of the right of access to justice.

These principles should be applied to ensure the protection: of the soil and Earth's lithosphere, forest, air, water, marine and coastal zones, nature, protection against the effects of environmental burdening, against adverse effects of genetically modified organisms, noise, Ionising radiation protection and nuclear safety, adverse effects of chemicals, light pollution, waste management.

Different instruments and procedures are defined by this Act like: strategic environmental assessment of strategies, plans and programmes, environmental impact assessment and scoping procedure, environmental permitting procedure[81], etc.

Detail provisions of environmental impact assessment procedure are defined by **Regulation on environmental impact assessment.** This Regulation inter alia specifies: the criteria and procedure for conducting environmental impact assessment; the content of the EIA Report and Screening Report (preparation of the Screening Report is part of the screening process); the manner of participation of practitioners authorized to prepare the EIA Report/Screening Report; public participation process, the manner of work of the commission participating in the EIA procedure, development of guidelines for the preparation of EIA Report, etc. Regulation determines the list of interventions/projects that are within the competence of the MoEPGT and the competent administrative body in the counties and City of Zagreb for which it is necessary to conduct EIA or Screening procedure.

Nature Protection Act regulates the nature protection system and integral nature preservation and its parts and other related issues.

According to this Act nature protection objectives and tasks are as follows:

- preservation and / or restoration of biodiversity by preserving natural habitat types, wild species and their habitats, including all birds species that occur naturally in the territory of the Republic of Croatia, as well as bird eggs and nests, by establishing an appropriate protection, management and control system,
- preservation of landscape and geodiversity in the natural balance state and harmonised relations with human activities,
- determination and monitoring the state of nature,
- providing of nature protection system for its permanent preservation,
- ensuring the sustainable natural resources usage without significant damage to parts of nature and with the least possible disturbance of the balance of its components,
- contribution to the preservation of the soil naturalness, the quality preservation, water and sea quantity and availability, the preservation of the atmosphere and the production of oxygen, and the preservation of the climate,

[81] Permiting procedure according to Industrial Emissions Directive (IPPC, Directive 96/61/EC concerning integrated pollution prevention and control was repealed by Directive 2010/75/EU on industrial emission, IED)

- prevention or mitigation harmful interventions of people and disturbances in nature as a consequence of technological development and activities performance.

These objectives should be accomplished through application of nature protection principles and nature protection instruments, prescribed by this Act and sub-laws.

Nature protection and conservation principles are following: everyone must behave in such a way as to contribute to the conservation of biodiversity, landscape diversity and geodiversity and to the conservation role of nature; non-renewable natural assets should be used rationally and renewable natural assets sustainably; in the use of natural resources and spatial planning it is obligatory to apply the principles of sustainable use; nature protection is the obligation of every natural and legal person, and in that manner they are obliged to cooperate in order to avoid and prevent dangerous actions and damage, remove and repair the consequences of damage and restore natural conditions that existed before the damage; precautions, when there is a threat of serious or irreparable damage to nature; the public has the right to free access to information on the state of nature.

Different instruments and procedures are defined by this Act like: competences in administrative and professional preforming of nature protection activities; ecological network acceptability assessment; environmental assessment of strategies, plans and programmes; obtaining certificates and permits for interventions in protected areas etc.

Waste Management Act prescribes measures for the environmental protection and human health by preventing or reducing waste generation, reducing the negative effects of waste generation and waste management, reducing the overall effects of raw material use and improving the efficiency of raw material use and increasing recycling and reuse, which is necessary for the transition to a circular economy. It regulates the waste management system, including the order of priority of waste management, principles, goals and manner of waste management, planning documents in waste management, competencies and obligations in waste management, locations and facilities for waste management, waste management activities, cross-border waste transport, waste management information system and administrative and inspection supervision over waste management. This Act also prescribes measures and conditions for the operation of landfills and requirements for waste that may be disposed of in order to prevent or minimize harmful effects on the environment and human health due to waste disposal.

Air Protection Act determines the competence and responsibility for air protection, planning documents, monitoring and assessment of air quality, measures for prevention and reduction of air pollution, reporting on air quality and data exchange, air quality monitoring and air emissions, air protection information system, air protection financing, administrative and inspection supervision.

Water Act regulates the legal status of water, water resources and water structures, water quality and quantity management, protection against harmful effects of water, detailed reclamation drainage and irrigation, special activities for water management, institutional structure for conducting these activities and other issues related to waters and water well.

Energy Efficiency Act regulates the area of energy efficient use , adoption of plans at the local, regional and national level for improving energy efficiency and their implementation, energy efficiency measures, energy efficiency obligations, obligations of the energy regulator, transmission system operator, distribution system operator and energy market operators in connection with the transmission, i.e. transport and distribution of energy, obligations of energy distributors, energy and / or water suppliers, and in particular energy service activities, determination of energy savings and consumer rights in the application of energy efficiency measures.

Noise Protection Act establishes measures to avoid, prevent or reduce harmful effects on human health that cause environmental noise, including noise, in particular in relation to: determining noise exposure by making noise maps based on the method for assessing environmental noise, ensuring the availability of environmental data to the public, development and adoption of action plans based on data used in the development of noise maps. The provisions of this Act shall apply to the assessment and management of noise from the environment to which people are exposed, especially in built-up areas, public parks or other such areas in populated areas, in those areas in nature, in addition to schools, hospitals and other buildings.

Also, Croatia ratified Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel 1989), Published in OG–IT No. 3/94, came into force with respect to the Republic of Croatia on 7 August 1994. In 2019 Croatia ratified amendment to Basel Convention - Act on Ratification of Amendments to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal OG-IT No. 7/19.

The main regulation which defines conditions for the transport of dangerous goods including hazardous waste in certain branches of transport is **Act on the Transport of Dangerous Goods (OG 79/07, 70/17).** It entered into force on January 1, 2008 and implements the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) as well as the corresponding Annexes A and B, which are amended every other (odd) year. This Act stipulates the obligations of persons participating in transport, the conditions for packaging and vehicles, the conditions for appointing safety advisers, rights and obligations, competence and conditions for training persons participating in the transport; competence state authorities and overseeing law enforcement. Thereby, it prescribes preventive safety measures and the procedure in case of an accident, measures in case of spillage or leakage of dangerous substances, documentation that must be possessed during the transport of dangerous substances and other requirements that must be met during the transport of dangerous substances.

According to the Act on the Transport of Dangerous Goods, participants in the transport of dangerous goods are obliged to take all necessary measures to prevent an accident, or to minimize the consequences of an accident. The carrier, consignor, consignee and organizer of transport must cooperate with each other and with the authorized persons of the competent authorities in order to exchange information on the need to take appropriate safety and preventive measures, and procedures in case of accident.

In case of an accident, participants in the transport of dangerous goods are obliged to immediately inform the MoI (112) and provide all information necessary to take appropriate measures. In the event of an accident for which there is an obligation to report, the carrier, safety advisor or the transport organizer must submit the prescribed report to the MoSTI.

In the case of loss of dangerous goods during transport, the carrier is obliged to take all necessary measures to find the lost dangerous goods, and notify the MoI without delay.

In case of spillage or leakage of dangerous substances, the carrier is obliged to insure, collect or dispose of dangerous substances that spilled or expired during transport, or place them in a designated place or otherwise make them safe and notify the MoI.

If the carrier is not able to act in accordance with the above, he is obliged to call a legal or natural person authorized to act in case of accidents or incidents with dangerous substances, at the expense of the carrier.

Detailed written instructions on how to act in the case of an accident must be present in the vehicle when transporting dangerous goods (standardized instructions for all types of transport, in a language understood by the vehicle crew, and the carrier is obliged to provide it to its drivers). The mandatory content of these instructions is prescribed by Chapter 5.4.3.4. of Annex A of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) which has been transposed into the national legislation by Article 62 of Act on the Transport of Dangerous Goods (**Error! R eference source not found.**).

In addition to these instructions, the transport of dangerous goods in the vehicle must be accompanied by the following documents:

- document on the transport of dangerous goods (the sender hands it over to the driver together with the goods). The data that must be stated in the document are prescribed, and their obligatory order is also prescribed. Indicate: UN number, dispatch name, hazard statement, packing group, tunnel code, number and description of the package or IBC container, total quantity of each dangerous substance (as volume, gross weight or net weight), name and address of consignor
- certificate on the driver's qualification (the driver must undergo training in an authorized institution and obtain a certificate from the MoSTI);
- ehicle certificate of validity (for vehicles of type EXII, EXIII, FL, OX, AT and MEMU in authorized stations for technical inspection);
- confirmation of individual vehicle inspections (technical inspections, brake inspections, periodic inspections);
- additional insurance and transport authorization (authorizations must exist for the transport of explosives (class 1) and the transport of radioactive substances (class 7)).

Other relevant sub-legislation from the perspective of project activities, which arise from the primary environmental laws are as follows:

- Regulation on information and participation of the public and interested public in environmental issues (OG 64/08);
- Ordinance on the environmental pollution register (OG 3/22);
- Regulation on the ecological network and the competencies of public institutions for the management of ecological network areas (OG 80/19, 119/23);
- Ordinance on waste management (OG 106/22);
- Ordinance on medical waste management (OG 50/15, 56/19);
- Regulation on municipal waste management (OG 50/17, 84/19, 14/20, Decision of the Constitutional Court of the Republic of Croatia, 31/21, Decision and Ruling of the Constitutional Court of the Republic of Croatia);
- Ordinance on the monitoring of emissions of pollutants into the air from immovable sources (OG 47/21);
- Regulation on limit values of emissions of pollutants into the air from immovable sources (OG 42/21);
- Ordinance on air quality monitoring (OG 72/20);
- Ordinance on issuance of water law acts (OG 9/20, 39/22);

- Ordinance on limit values of wastewater emissions (OG 26/20);
- Ordinance on energy audit of buildings and energy certification (OG 88/17, 90/20, 1/21, 4/21);
- Ordinance on the method of preparation and content of noise maps and action plans and on the method of calculation of permitted noise indicators (OG 75/09, 60/16, 117/18, 146/21).

Detailed information on primary laws and sub-legislation is available at web site of MoEPGT: https://mzoe.gov.hr/o-ministarstvu-1065/djelokrug-4925/4925

The environmental legal, regulatory and policy framework in the Republic of Croatia is ensured through the following main instruments:

- Environment Impact Assessment
- Natura 2000 Appropriate Assessment
- Location and Building permitting process
- Physical Planning

The regulations in the field of spatial planning determine the possibility of construction on certain land, the basic conditions for construction. This legislation defines criteria based on which a location permit is issued.

Physical planning is defined by Physical Planning Act (OG 153/13, 65/17, 114/18, 39/19, 98/19, 67/23) and other regulation (main requirements for physical planning, strategic and planning documents, procedures for their adoption and implementation, procedure for issuing location permit etc.).

The implementation of every project, thus including also projects of infrastructure development, reconstruction etc., have to be carried out on "land" on which the construction of a certain structure is allowed, meaning the land has to be so-called building land on which, in line with effective physical planning documents or physical plans, the respective location permit can be obtained in conformity with the provisions of the Physical Planning Act. This is additional safeguard mechanism closely related to the environment.

The location of the planned activities/projects must be marked in physical plans, before the construction starts. State/county/local Physical Plans already give certain measures and limitations regarding the improvement and protection of nature and the environment, cultural heritage and other protected values.

All buildings subject of this project will be rehabilitated/reconstructed in situ within the bounds of existing building footprints or on available publicly owned land.

Indoor air quality

Indoor air quality is affected by many other factors, including cooking, heating, the use of products such as wax or polish to clean surfaces, building materials such as formaldehyde in plywood and slow-burning materials. There is also radon from the soil.

Indoor air quality is a regulated by several acts: Law on Construction (OG 153/13, 20/17, 39/19, 125/19), Law on Chemicals (OG 18/13, 115/18, 37/20), Law on Communal Economy (OG 68/18, 110/18, 32/20), Law on OHS (OG 71/14, 118/14, 154/14, 94/18, 96/18), Law on Radiological and Nuclear Safety (OG 141/13, 39/15, 130/17, 118/18, 21/22, 114/22).

Law on Chemicals transposes EU regulatory framework for management and use of chemicals to Croatian legislation, including REACH (EC 1907/2006) that aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of

chemical substances and, Regulation (EC) No 1272/2008 — classification, labelling and packaging of substances and mixtures (CLP legislation).

By Law on Radiological and Nuclear Safety (OG 141/13, 39/15, 130/17, 118/18, 21/22, 114/22) and its by-laws, among other, Council Directive 2013/59 / Euratom of 5 December 2013 on basic safety standards for protection against the dangers arising from exposure to ionizing radiation, and repealing Directive 89/618 / Euratom, 90/641 / Euratom, 96/29 / Euratom, 97/43 / Euratom and 2003/122 / Euratom (OJ L 13, 17.1.2014) is transposed into the Croatian legislation.

According to this Directive, for EU Member States, the reference level for indoor and workplace radon should not exceed 300 Bq m- ^{3}. This reference level has been transposed into Croatian legislation by the Ordinance on radiation limits, the recommended dose limit and the assessment of personal radiation (OG 38/18, 8/22).

Action Plan for Radon for the Period of 2019 – 2024 (OG 118/18) defines different activities and measures for reduction of radon radiation of people living in the Republic of Croatia and consequently to reduce the risk of lung cancer associated with increased radon radiation (e.g. measures for developing a system for dealing with elevated radon concentrations, measures for developing a system for the application of appropriate protection measures that will gradually reduce the number of existing buildings in which the level of radon exceeds the reference level and prevent the entry of radon into buildings that are still planned to be built, etc).

Ordinance on monitoring the state of radioactivity in the environment (OG 40/18, 6/22) determines: the conditions, methods, places and deadlines for systematic testing and monitoring of the type and activity of radionuclides in air, soil, sea, rivers, lakes, groundwater, solid and liquid precipitation, drinking water, food, housing, public and work spaces, monitoring the state of the environment and the consequences of the state of the environment due to the operation of the facility, monitoring the state of radioactivity in the environment in case of emergency, list of work activities, conditions for performing work activities and conditions, criteria and procedures.

Full list of by-laws regulating radioactivity protection is available at website of Ministry of Interior: https://civilna-zastita.gov.hr/podrucja-djelovanja/radioloska-i-nuklearna-sigurnost/propisi/235.

4.1.2 National social legislation

The right to equality and non-discrimination is a fundamental human right protected by the Constitution of the Republic of Croatia and other legal acts such as the Constitutional Act on National Minorities Rights (OG NN 155/02, 47/10, 80/10, 93/11, 93/11), the Labor Act (OG 93/14, 127/17, 98/19, 151/22), the Gender Equality Act (OG 82/08, 69/17) and the Anti-discrimination act (OG 85/08, 112/12).

Fundamental obligations and rights arising from employment relationships and principles of prevention and occupational safety rules are stipulated by the Labor Act (OG 93/14, 127/17, 98/19, 151/22) and Occupational Safety and Health Act (OG 71/14, 118/14, 94/18, 96/18).

Conditions for approving the entry, stay and work of foreigners are prescribed by the provisions of the Foreigners Act (OG 133/20, 114/22, 151/22), the Law on EEA Member States Nationals and Their Family Members (OG 66/19, 53/20, 144/20, 114/22).

Labor Act manages relationship between parties involved in the process of employment. It protects and applies to any physical person that has concluded an employment contract with an employer.

The national policy, principles of prevention and occupational safety rules, obligations of the employer, rights and obligations of workers, including supervision and misdemeanour liability in the Republic of Croatia, are regulated by the Occupational Safety and Health Act.

Activities involving involuntary land acquisition are not eligible for financing under the project and hence, provisions on expropriation procedures are not applicable under the project.

The legal framework regarding land acquisition is defined by:

- Law on Obligatory Relations (OG 35/05, 41/08, 125/11, 78/15, 29/18, 126/21, 114/22, 156/22, 155/23), regulates the basics of obligatory relationships (general part) and contractual and non-contractual obligations (special part), including provisions related to the donation agreement;
- Law on State Survey and Real Estate Cadastre (OG 112/18, 39/22) regulates, among other things, the state survey, the real estate cadastre, the infrastructure cadastre, the building register, the register of spatial units and the register of geographical names;
- Law on Property and Other Real Rights (OG 91/96, 68/98, 137/99, 22/00, 73/00, 129/00, 114/01, 79/06, 141/06, 146/08, 38/09, 153/09, 143/12. 152/14, 81/15, 94/17) establishes a general regulation of the ownership.

Other relevant laws and by-laws are:

- Pension Insurance Act (OG 157/13, 151/14, 33/15, 93/15, 120/16, 18/18, 62/18, 115/18, 102/19, 84/21, 119/22);
- Act on the List of Occupational Diseases (NN 162/98, 107/07);
- Ordinance on the use of personal protective equipment (OG 5/21);
- Ordinance on the protection of workers from the risk of exposure to hazardous chemicals at work, limit values of exposure and biological limit values (OG 91/2018, 1/21, 148/23);
- Ordinance on testing the working environment (OG 16/16, 120/22);
- Ordinance on inspection and testing of work equipment (OG 16/16, 120/22);
- Ordinance on jobs where a minor may not be employed (OG 89/15, 94/16, 109/19);
- Ordinance on safety signs (OG 91/15, 102/15, 61/16);
- Ordinance on safety at work for workplaces (OG 105/20);
- Ordinance on the protection of workers from the risk of exposure to vibration at work (OG 148/23);
- Ordinance on safety at work on temporary construction sites (OG 48/18);
- Ordinance on the protection of workers from exposure to noise at work (OG 148/23);
- Ordinance on the protection of workers from risk related to exposure to asbestos (OG 40/07);
- Ordinance on placing personal protective equipment on the market (OG 89/10);
- Act on mandatory health monitoring of workers occupationally exposed to asbestos (OG 79/07, 139/10, 111/18);
- Ordinance on jobs in special work conditions (OG 5/84);
- Ordinance on risk assessment (OG 112/2014, 129/19);

– Instructions for handling waste containing asbestos (OG 89/08).

4.1.3 Overview of the institutional framework

The main central government stakeholders regarding environmental issues are Ministry of Environmental Protection and Green Transition (MoEPGT) and Environmental Protection and Energy Efficiency Fund (EPEEF).

Ministry of Environmental Protection and Green Transition is the competent state body for the development and implementation of policies in the area of environmental protection: air, water, soil, solid waste, biological diversity and other natural resources, and ozone layer protection, climate change. Ministry is also competent body for preparation of strategic and planning documents, implementation of environmental impact assessment procedure (EIA procedure) and collecting and analysing data on environment and reporting on the state on environment.

Ministry of Culture and Media is the competent state body with regard to preparation and adoption of legislation in the field of cultural heritage protection, keeping the Cultural Heritage Register, issuing prior approval for works at cultural heritage sites, managing chance findings procedures.

Ministry of Physical Planning, Construction and State Assets is responsible for preparation and adoption of legislation on physical planning and construction, preparation of spatial strategic and planning documents at the national level, issuance of location, building and use permit (location permits defined by national physical plan and special regulation, for interventions taking place at the area of two or more counties)**.**

According to Act on Reconstruction of Earthquake Damaged Buildings in the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County (OG 21/23), **Fund for Reconstruction of the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County (Reconstruction Fund)** is established. The founders of the Reconstruction Fund are Republic of Croatia with the founding share of 80%, the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County with the founding share of 20% in their real estate budgets within their areas. Fund will perform professional and other tasks of preparation, organization and implementation of the reconstruction of buildings damaged by the earthquake and monitoring of the implementation of all reconstruction measures. The Reconstruction Fund is foreseen as a body for implementing decisions prepared by MoPPCSA. MoPPCSA is responsible for preparation and adoption of decisions on reconstruction and financial assistance, initiated at the request of the owner or co-owner of the damaged buildings or construction inspection authority, and Reconstruction Fund is responsible for implementation of these decisions. Fund will: conduct payment of financial assistance, implementation of the reconstruction, removal of buildings and construction of replacement houses, selection of certified civil engineers and architects or companies who prepare technical documentation, selection of contractors and supervising engineers, the auditors and providers of technical and financial control of the project, conclude and monitor the implementation of the works contracts and provide MoPPCSA data on reconstruction, after completion of construction works take over the building from the contractor and handing it over to the owner or co-owners together with the technical documentation, etc.

Ministry of Labour, Pension System, Family and Social Policy is responsible for employment policy, pension insurance system and social security policy occupational health and safety. The National Council for Occupational Safety, established by the Government of the Republic of Croatia, is in charge for monitoring in the field of occupational health and safety. Since this is a multidisciplinary topic, in addition to these institutions and regulations deriving from the Occupational Safety and Health Act

(OG 71/14, 118/14, 94/18, 96/18), other competent authorities, such as the **Ministry of Health**, participate in preparation, implementation and supervision of the occupational health and safety policy.

Ministry of the Interior along with administrative works, also carries out other works related to: road traffic safety, motor vehicle registration; explosives; fire protection

State Inspectorate is responsible for inspection in the field of environmental protection; air protection, sustainable waste management, protection from light pollution, water management, nature protection, cross-border traffic and trade with wildlife, energy, occupational safety and health, construction, etc.

Local and regional self-government units' responsibilities (which are not assigned to state bodies by the Constitution or law): social and child protection, education, health care, emergency preparedness. Local and regional self-government units are responsible for activities related to the arrangement of settlements and housing, spatial and urban planning, communal activities, child care, social welfare, primary health care, upbringing and primary education, culture, physical culture and sports, consumer protection, protection and improvement of the natural environment and jobs fire and civil protection.

The Zagreb City Institute for the Conservation of Cultural and Natural Heritage performs activities related to: research and planning for the protection of cultural heritage; protection and preservation of cultural heritage and protection measures; preparation of conservation documentation; issuance of conditions and permits; nature protection; works and interventions in the regional park , significant landscape, forest park, natural monuments and park architecture; performance of works outside the build-up area; supervision of public institutions for the management of protected parts of nature; and other tasks assigned to it.

The Environmental Protection and Energy Efficiency Fund is the central body for collecting and investing extra-budgetary resources into programs and projects that protect nature and the environment, energy efficiency and renewable energy sources. In the system of management and control of the utilization of EU structural instruments in Croatia, EPEEF performs the function of Intermediate Body level 2 for the specific objectives in the fields of environmental protection and sustainability of resources, climate change, energy efficiency, and renewable energy sources.

Environmental monitoring activities are not centralized, as competences are divided, according to the type of monitoring, between different state and public bodies. In general, the MoEPGT are responsible for monitoring activities of waste management, nature protection and biodiversity, air quality and noise nuisance. **Other monitoring activities are carried by Ministry of Agriculture, Croatian Waters, Croatian Meteorological and Hydrological Service, and other public bodies.**

4.1.3.1 Act on Reconstruction of Earthquake Damaged Buildings in the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak- Moslavina County and Karlovac County

On September 11, 2020 Croatian Parliament adopted the Act on Reconstruction of Earthquake Damaged Buildings in the City of Zagreb, Krapina-Zagorje County and Zagreb County. The Act came into force after publishing in Official Gazette on September 16, 2020. After the earthquake in Sisak and Petrinja in December 2021, this Act has been amended in order to include also Sisak-Moslavina County and Karlovac County.

Act on Reconstruction of Earthquake Damaged Buildings in the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County (OG 21/23) (further in document Reconstruction Act) regulates: the procedure of reconstruction or removal of buildings in the area of the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County, damaged or destroyed by the earthquake occurred on March 22, 2020 and December 28-29, 2020, manner of housing persons affected by the earthquake (including construction of replacement private houses), the competent authorities and deadlines for these actions, and all other related issues.

Regarding the reconstruction of earthquake damaged buildings, by adoption of Reconstruction Act certain provisions from existing legislation regulating construction works and provisions of Act on Mitigation and Elimination of the Consequences of Natural Disasters (financial assistance) are suspended.

Implementation of activities defined by Reconstruction Act will be co-financed by the Republic of Croatia, City of Zagreb, Sisak-Moslavina County and Karlovac County.

For the purpose of reconstruction of earthquake damaged area and assisting the owners or co-owners of damaged and destroyed multi-dwelling buildings, residential and commercial buildings, business buildings and family houses, Reconstruction Act defines:

- Reduction and simplification of legally required documentation/procedure and thus time necessary for reconstruction (in comparison to a regular legal procedure), costs reduction by ensuring co-financing of this procedure by the Republic of Croatia, City of Zagreb, Krapina-Zagorje, Zagreb county, Sisak-Moslavina County and Karlovac County,
- Establishment of the Fund for Reconstruction of the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County (Reconstruction Fund),
- Organization and implementation of reconstruction of earthquake damaged buildings (including financial support) by: complete reconstruction of the building and construction structure, structural reinforcement and repair of construction structure, repair of non-structural elements, or removal of destroyed buildings,
- Construction of replacement family houses with financial assistance by the Republic of Croatia, City of Zagreb, Krapina-Zagorje County, Zagreb county, Sisak-Moslavina County and Karlovac County,
- Financial assistance for the temporary protection of buildings from the effects of the atmosphere and the removal and adherence of dangerous parts of buildings that could endanger human life or health (repair or replacement of chimneys and gable walls and the repair of stairs and elevators),
- Financial assistance for the works on the reconstruction of damaged buildings for owners and co-owners who renovate buildings by themselves,
- Possibility for owners and co-owners of buildings to perform structural reinforcement above the level of renovation defined by the Technical Regulation for Building Structures (OG 17/17, 75/20), and to carry out a complete renovation of the building, by paying the difference in costs,
- Temporary and permanent housing for persons affected by the earthquake by renting or providing ownership on the real estate.

In addition to the Reconstruction Fund according to Reconstruction Act establishment of a special advisory body - the Professional Council for the Renewal is planned. Council will perform professional

consulting activities related to the implementation of the Reconstruction Act. This Council will consist of representatives of state officials, the City of Zagreb, representatives of professional and educational institutions such as the Faculty of Civil Engineering, the Faculty of Architecture, members of the Croatian Chamber of Civil Engineers, Croatian Chamber of Architects, Institute of Economics, etc.

4.1.3.2 Technical requirements and arrangements defined by the Act on Reconstruction of Earthquake Damaged Buildings in the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County related to Component 1 of the project

The Reconstruction Act defines that Government of the Croatia will adopt different sub-laws - programs of measures and reconstruction activities, by which activities of renovation or removal of damaged buildings, construction of replacement family houses and housing of people affected by the earthquake will be defined in more details. These programs will define: the location of the area where the earthquake recovery measures will be implemented and if necessary zonation of the earthquake damaged area, analysis of the existing condition and the resulting damage, assessment of possible further harmful consequences, the organizational structure and the competent bodies for the implementation of individual measures, deadlines for implementation, criteria for selection of initial participants in the reconstruction (operational coordinators, designers, auditors and the provider of technical and financial control, contractors and supervising engineer, etc), conservation guidelines for buildings that are not individually protected cultural heritage and those buildings that are not completely renovated, procedure for submitting the request for reconstruction, etc.

For the area of the historical urban entity of the City of Zagreb, preparation of program for complete restoration of the historical urban entity of the City of Zagreb is foreseen. This program will be prepared by Institute for Physical Planning of the City of Zagreb.

As anticipated, in October 2020, Decision on the Adoption of the First Program of Measures for the Reconstruction of Buildings Damaged by Earthquakes in the Area of the City of Zagreb, Krapina-Zagorje County and Zagreb County (OG 119/20) is adopted. The Program has been renewed two times – first in February 2021, and again in September 2021 and finally in March 2023, Decision on the Adoption of the Program of Measures for the Reconstruction of Buildings Damaged by Earthquakes in the Area of the City of Zagreb, Krapina-Zagorje County and Zagreb County (OG 28/23) has been adopted. By this Program measures for renovation of public buildings, multi-dwelling buildings, office buildings, residential and commercial buildings and family houses in the City of Zagreb, Zagreb County, Krapina-Zagorje County, Sisak-Moslavina County and Karlovac County are defined. This includes measures, guidelines and criteria for: public procurement, analysis of the current situation and damages incurred and prediction of possible further harmful consequences with damage assessment, assessments of renovation costs, criteria for conduction renovation of damaged buildings (competent authorities and their responsibilities, responsibilities of contractors (supervision engineers, technical designs, etc.), priorities and deadline for renovation, conservation guidelines for buildings which are not individually protected cultural properties and which are not renewed in full, process for submitting official request for renovation and removal of buildings damaged by earthquake, applying for financial assistance, etc.

Reconstruction Act regulates renovation of:

- Public buildings,
- Multi-dwelling buildings,
- Office buildings,

- Residential and commercial buildings,
- Family houses.

Provisions of Reconstruction Act apply also, after meeting certain legal conditions, on buildings which are in the process of legalization and to illegal build objects.

According to Article 17, earthquake damaged buildings, depending on their purpose and degree of damage, shall be renovated by:

1. Repairing non-structural elements
2. Repairing the construction
3. Reinforcing the construction
4. Complete reconstruction of the building construction
5. Complete reconstruction of the building.

Table 18. Overview of type of damaged buildings and methods for their recovery according to Reconstruction Act

Type of damaged building (Article 16 of the Reconstruction Act)	Application of damaged buildings renovation methods depending on type of damaged building (the Reconstruction Act)
Public buildings	**Complete reconstruction of the building.** The same applies to business premises and other special parts of buildings intended for the performance of educational or health activities.
Multi-dwelling buildings	**Repair of non-structural and structural elements, reinforcing the structure and complete reconstruction of the building**[82] If building is individually protected cultural heritage, then shall be restored by complete reconstruction of the building, except for their special parts (apartments, business premises and other special parts of the building) in which no final construction works are performed
Office buildings	**Repair of non-structural and structural elements, reinforcing the structure and complete reconstruction of the building.** If building is individually protected cultural heritage, then shall be restored by complete reconstruction of the building, except for their special parts (apartments, business premises and other special parts of the building) in which no final construction works are performed
Residential and commercial buildings	**Repair of non-structural and structural elements, reinforcing the structure and complete reconstruction of the building.** If building is individually protected cultural heritage, then shall be restored by complete reconstruction of the building, except for their special parts (apartments, business premises and other special parts of the building) in which no final construction works are performed
Family houses	**Repair of non-structural and structural elements, reinforcing the structure and complete reconstruction of the building.** If building is individually protected cultural heritage, then shall be restored by complete reconstruction of the building, except for their special parts (apartments, business premises and other special parts of the building) in which no final construction works are performed
Description of damaged buildings renovation methods depending on their purpose and degree of damage (the Reconstruction Act)	
Repair of the non-structural elements	Repair of non-structural elements is the repair or replacement of non-structural elements of a building (roof, gables, parapets, partition walls, chimneys, elevators, etc.) specified in the Technical Regulation

[82] Complete reconstruction of the building shall be performed upon request of the owner or co-owner if they commit to pay the difference between complete reconstruction of the building and costs of repairing non-structural and structural elements and construction reinforcing (same applies for office buildings, residential and commercial buildings, and family houses)

Type of damaged building (Article 16 of the Reconstruction Act)	Application of damaged buildings renovation methods depending on type of damaged building (the Reconstruction Act)
Repair of the construction	Construction repair is the performance of repair and reinforcement works of an earthquake-damaged construction structure of a building, by which the mechanical resistance and stability of the building in relation to seismic activity in accordance with the Technical Regulation, is achieved.
Construction reinforcement	Construction reinforcement is the performance of reinforcement works of an earthquake-damaged construction structure of a building by which an increase in the mechanical resistance and stability of the building in relation to seismic activity in accordance with the Technical Regulation, is achieved.
Complete reconstruction of the construction	Complete reconstruction of the structure is the performance of works to strengthen the earthquake-damaged construction structure of the building by which the mechanical resistance and stability of the building in relation to seismic activity in accordance with the Technical Regulation is achieved.
Complete reconstruction of the building	Complete reconstruction of the building means complete renovation of the building structure and execution of the necessary preparatory, construction, final and installation works, i.e. works that bring the building into a state of full construction usability to the level required by applicable regulations and related standards, as well as professional rules. In addition to other necessary works, if necessary, complete renovation of the building include the repair of non-structural elements, repair of the structure, reinforcement of the building structure and / or complete renovation of the structure.

Renovation of the buildings must be carried out according to the levels of reconstruction as defined by Technical Regulation for Building Structures (OG 17/17,75/20, 7/22).

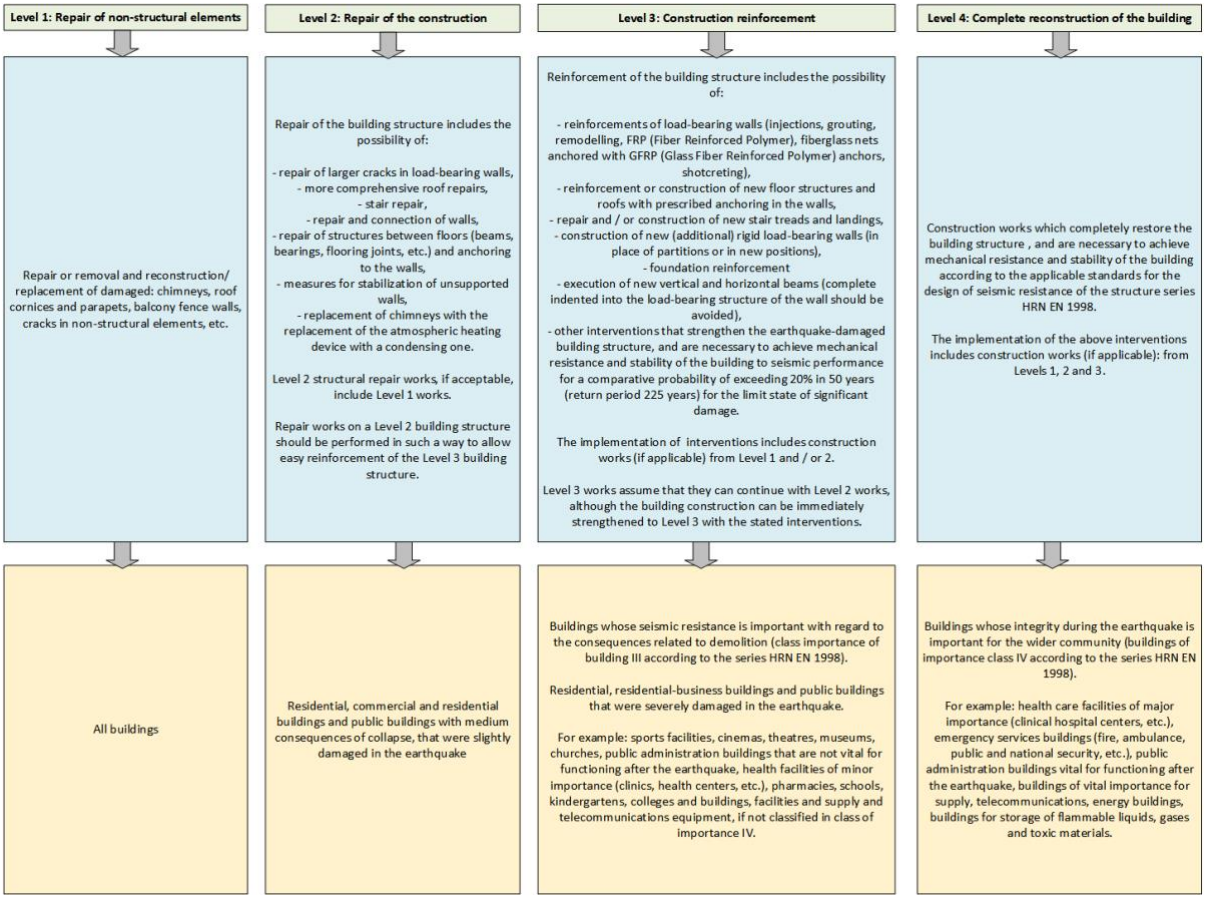


Figure 12. Levels of reconstruction of earthquake damaged building structures in relation to mechanical resistance and stability according to Technical Regulation for Building Structures (OG 17/17, 75/20,7/22)

The owner or co-owners of a building may, in the process of making a decision on renovation, request the design and execution of reinforcement of the building construction that is above the level defined by Technical Regulation if they commit to cover the cost difference.

Damaged buildings must be renovated based on project of reconstruction of the building structure[83] and project of the complete reconstruction of the building. While preparing these projects the provisions of existing construction regulations governing the issue of meeting the basic requirements for construction in the main project must apply. In the case that building is an individually protected cultural heritage or located in the historic urban entity of the City of Zagreb, projects must be prepared in accordance with special conditions determined by the competent body (in accordance with the regulations governing the protection of cultural heritage).

The renovated building may be used after receiving the final report of the supervising engineer and a written statement of the contractor on the work performed and maintenance conditions. The renovated building for which the final report has been prepared shall be considered, in terms of construction regulations, an existing building for which a valid use permit has been issued.

According to Reconstruction Act buildings that have lost their mechanical resistance and / or stability to the extent that they have collapsed or that their renovation is not possible (destroyed buildings), shall be removed. For the removal of a building that is a cultural heritage, or a building located within the historical urban entity of the City of Zagreb, the consent of the competent body for cultural heritage must be obtained. For the removal activities the consent of the owner or all co-owners of the building, has to be obtain or it can be performed in accordance with the regulations governing construction inspection. The destroyed buildings must be removed in accordance with the removal project which has to be prepared in accordance to construction regulation. Removal project must have a report on the auditor's control related to meeting the basic requirements of mechanical resistance and stability.

4.1.3.3 Financial arrangements defined by the Act on Reconstruction of Earthquake Damaged Buildings in the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County

The implementation of Reconstruction Act will be financed by:

- the state budget,
- the budgets of the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County,
- the owners or co-owners of real estate
- funds from other sources obtained in accordance with special regulations and other forms of financing.

The shares of different sources of funding are variable depending on the purpose or status of use of the real estate (for living (owner lived in the building), buildings in which economic activity is performed etc.).

Furthermore, the Reconstruction Act incorporates social criteria, i.e. income and property census. Citizens whose houses and apartments were damaged in the earthquake, and they are at a minimal wage and do not have significant property, the state/local self-government unit /regional self-government units will fully finance the construction renovation of real estate. Construction renovation

[83] The project of reconstruction of the building structure designs the repair of the structure, reinforcement of the structure and / or complete reconstruction of the structure and, if necessary, repair of non-structural elements

for the disabled, people who live with disabled persons and social welfare beneficiaries receiving maintenance assistance will also be fully funded.

Also, the Reconstruction Act defines the cases in which a replacement family house is being built where instead of building a replacement family house, the owner can choose to pay financial assistance for eligible costs, which cannot be higher than the estimated construction value of the house to which the owner is entitled.

Criteria for temporary accommodation are also defined, if during the renovation or construction of a replacement building there are no suitable housing conditions. In these cases, the state / local self-government unit / regional self-government units will give in rent apartments of appropriate size, and if necessary, provide temporary accommodation at their own expense until the apartment is rented out.

Croatia plans to renovate all damaged buildings using public budget (state, regional, local) according to the Reconstruction Act different:

- Construction and renovation of family houses, business, residential and commercial and multi-dwelling buildings as well as the construction of replacement family houses that are unusable or temporarily unusable, including the costs of temporary storage of things will be financed from state and county budget.
- Removal of buildings that have lost their mechanical resistance and stability to the extent that they have collapsed or that their restoration is not possible, and which will be removed on the basis of Reconstruction Act will be financed from state budget.
- Renovation of office buildings and parts of buildings in which economic activity is performed will be financed in accordance with the State Aid Act (OG 47/14, 69/17).

4.1.3.4 Legal procedure for initiating reconstruction or removal of the earthquake damaged buildings and implementation steps

Renovation or removal of damaged buildings, construction of replacement family houses, payment of financial assistance for temporary protection of a building, financial assistance for renovation and financial assistance instead of construction of a replacement family house shall be carried out on the basis of a decision issued by the MoPPCSA. This decision shall be made in accordance with the Program of measures, taking into account determined condition of the building and other facts established in the procedure.

The procedure for making a decision on the renovation or removal of a damaged multi-dwelling buildings, residential-commercial buildings shall be initiated at the request of the building manager or the representative of the co-owner.

The procedure for making a decision on the renovation or removal of office buildings and family houses (including construction of a replacement family house) shall be initiated at the request of the owner or co-owner of the building.

If the owner, co-owner or manager does not submit a request for a decision on renovation and does not submit the consent of the majority of co-owners, or the owner is unknown or unknown residence, the building shall be treated in accordance with regulations governing construction inspection.

The procedure for making a decision on financial assistance for temporary protection of a building shall be initiated at the request of the manager or representative of the co-owner of an multi-dwelling building and a residential-commercial building or at the request of the owner or co-owner of a business building or family house.

Renovation or removal of a public buildings shall be carried out on the basis of a decision of the owner and / or founder or legal person or body to which the building has been given for management. Decision must be made in accordance with the Program of measures. The decision shall be implemented and financed by the owner of the public building and / or the founder or legal entity or body to which the building is managed, through a certified architect, certified civil engineer or contractor, or legal entity or body to which the building is given for management in the same manner, if the owner of the building so decides.

The implementation of the renovation of buildings, removal of buildings and construction of replacement family houses include following:

1. Selection of certified civil engineers and certified architects or companies in which they are employed, and who prepare required projects

2. Selection of the auditor who prepares the project control report

3. Selection of contractors

4. Selection of a supervising engineer who carries out construction supervision

5. Selection of the provider of technical and financial control of the project

6. Concluding and monitoring the implementation of the contract on works referred to in items 1 to 6 and entering data on reconstruction in the network application of the MoPPCSA

7. Taking over the building from the contractor and handing it over to the owner or co-owners together with the technical documentation

8. Other necessary actions.

The decision on the renovation or removal of the building and the construction of a replacement family house shall be implemented after the technical and financial control procedure of the project has been carried out.

4.1.4 Protection of cultural heritage

Historical buildings, cultural and historical entities and landscapes are protected as cultural heritage by the Act on the Protection and Preservation of Cultural Property (OG 69/99, 151/03, 157/03, 100/04, 87/09, 88/10, 61/11, 25/12, 136/12, 157/13, 152/14, 98/15, 44/17, 90/18, 32/20, 62/20, 117/21, 114/22) – further in text Act on Cultural Heritage. Competent authority is Ministry of Culture and Media.

Among other, this Act defines types of cultural property, and protection and preservation of cultural heritage.

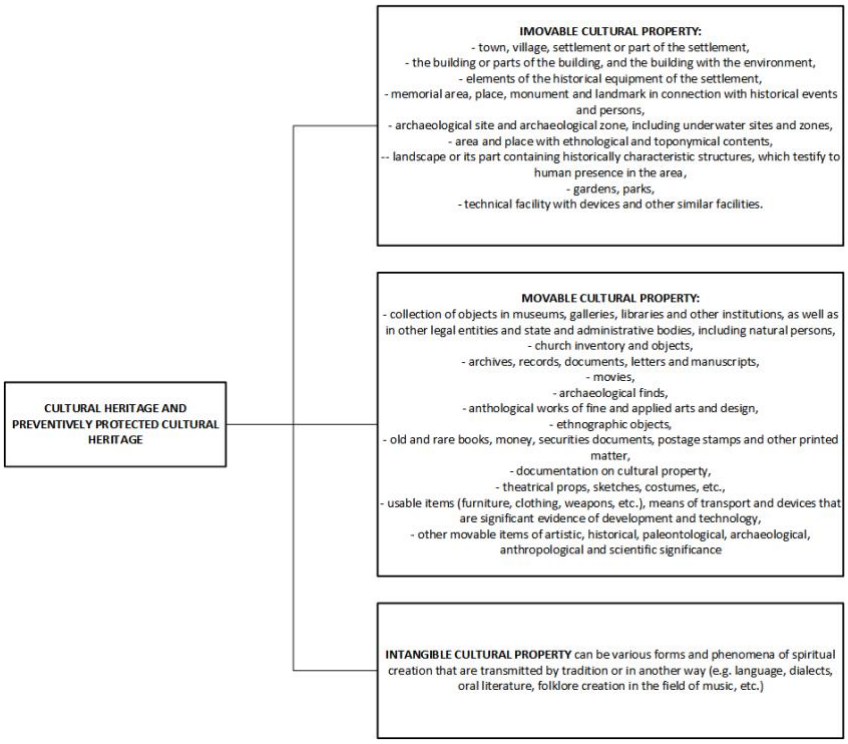


Figure 13. Types of cultural property according to Act on the Protection and Preservation of Cultural Property (OG 69/99, 151/03, 157/03, 100/04, 87/09, 88/10, 61/11, 25/12, 136/12, 157/13, 152/14, 98/15, 44/17, 90/18, 32/20, 62/20, 117/21, 114/22)

Also, Republic of Croatia ratified following international conventions:

- Act on the Ratification of the Convention on the Protection of Underwater Cultural Heritage (OG International Conventions 10/04),
- Convention for the Protection of the Architectural Heritage of Europe, Granada, 1985 (OG International Conventions 6/94),
- Convention on the protection of cultural goods in the event of armed conflict and its Protocol relating to the prohibition on exports of cultural goods from occupied territories (OG, International Conventions, 12/93, 6/02 promulgation),
- Act on the Ratification of the UNIDROIT Convention on Stolen or Illegally Exported Cultural Objects, drawn up in Rome, 24 June 1995 (OG, International Conventions, 5/00, 6/02 promulgation),
- Act on the Ratification of the European Convention on the Protection of Archaeological Heritage (revised), 1992, drawn up in Valetta, 16 January 1992 (OG International Conventions, 4/04 and 9/04 promulgation),
- Act on the Ratification of the Convention on the Protection of Intangible Cultural Heritage (OG International Conventions 5/05, 5/07 promulgation),
- UNESCO Convention on Measures to Protect and Prevent Unauthorised Imports, Exports and Transfer of Cultural Goods (OG International Conventions, 12/93),
- Convention on the Protection of World Cultural and Natural Heritage (OG International Conventions, 12/93: adopted in Paris, 1972). The Republic of Croatia became a party to the Convention pursuant to the notification of succession of 8 October 1991 (Entered into force on 8 October 1991),
- Regulation on the promulgation of the Agreement between the Government of the Republic of Croatia and the Government of the United States of America on the protection and

preservation of certain cultural goods (OG International Conventions, 9/06, 2/07 promulgation),

- Act on the Ratification of the Second Protocol to the Convention on the Protection of Cultural Goods in the Event of Armed Conflict (OG International Conventions 11/05)
- Act on the Ratification of the Framework Convention of the Council of Europe on the value of cultural heritage to society (OG International Conventions 5/07),
- Regulation on the Ratification of the Treaty between UNESCO and the Government of the Republic of Croatia on the Establishment of the Regional Centre for Underwater Archaeology in Zadar, Croatia, as a Category II Centre under the auspices of UNESCO (OG 1/09),
- Act on the Ratification of the Convention on European Landscapes (OG International Conventions 12/02),
- Regulation on the promulgation of the Treaty between the Government of the Republic of Croatia and UNESCO regarding the continuation of activity of the Regional Centre for Underwater Archaeology in Zadar, Croatia, as a Category II Centre under the auspices of UNESCO (OG International Conventions 5/16).

The Ministry of Culture and Media, based on official decision, determines the cultural heritage, and defines protection measures and the obligation to sign in the Cultural Heritage Register.

In the Cultural Heritage Register of the Ministry of Culture and Media it is possible to check whether a certain building/area/item is protected as a cultural heritage: https://registar.kulturnadobra.hr/.

This information can also be requested from the Conservation Department of the Ministry of Culture and Media (conservation departments are organized by counties).

In the case that certain property of local significant is not determinate under protection as a cultural property (as defined by Act on Cultural Heritage) a representative body of the county, City of Zagreb or municipality may declare it as a protected, if it is located in their territory.

Protection of the cultural heritage is also part of physical planning process and building permitting process, regulated by Construction Act and Physical Planning Act.

According to Act on Cultural Heritage spatial planning documents, depending on the type and area that planning documents cover, must contain data from the conservation base[84], along with a set of measures for the protection of immovable cultural property located in the area covered by the plan. The conservation base is determined by the competent authority for the area covered by the spatial plan, and it contains general and special conditions for the protection and preservation of cultural property, boundaries of the contact zone of cultural property and the method of protection in the contact zone. In the case that the competent authority has not determined the conservation base, it is obliged to determine the system of measures for the protection. The spatial planning document may be adopted only with the prior consent of the competent authority confirming that it is in accordance with the conservation base or the established system of protection measures. **For the cultural-historical entities/area[85], it is obligatory to prepare conservation base, which also includes the area of the contact zone.**

[84] According to Act on Cultural Heritage definition of conservation base is: professional documentation that contains a graphic and textual part, and includes identification, analysis of the situation, valorisation of the situation and measures for the preservation of cultural and historical values

[85] Protection of cultural and historical entities is defined by Act on the Protection and Preservation of Cultural Property: „cultural-historical entity is considered to be a settlement or part of a settlement, as well as an area, which are protected as a cultural good

According to Act on Cultural Heritage for work performance on cultural heritage, it is necessary to obtain prior approval from the competed body[86]. Obtaining prior approval is regulated by the Ordinance on Documentation for Prior Granting of Works on Cultural Property (OG 134/15). Obtaining this approval is an integral part of the location and building permitting processes. It is also necessary to obtain this approval for interventions that can be performed only on the basis of the main project or without main project.

For projects/interventions for which location permit is required, for the purpose of conceptual design preparation, the competent body, at the request of the competent body for issuing location permit, determines special conditions for protection of cultural heritage. Special conditions established for the purpose of making the conceptual design can be used to prepare the main design required for the issuance of a building permit. During the building permitting process, the compliance of the main project with special conditions (i.e. special conditions for protection of cultural heritage determined by location permit) are checked and certificate that the main project is prepared in accordance with the special conditions for the protection of cultural heritage must be issued.

For complex interventions on cultural heritage[87] for which it is necessary to conduct preliminary research and / or assessment of the impact on cultural heritage the competent authority is authorized to determine the special conditions in a form of conservation study.

For the construction of simple and other buildings and works[88] within the cultural-historical entity/area, on an individual cultural property, as well as works in the area within the boundaries of the cultural property, which can be performed without location / building permit, in accordance with the main design, before commencement of the work it is necessary to obtain special conditions for the protection of cultural heritage. For the projects/interventions that can be performed without location/building permit and without main design it necessary to obtain prior approval from the competent body (if necessary competent body will determine special conditions). Prior approval is also issued for: conservation, restoration, relocation of cultural heritage and other similar works, operation of industrial and other facilities and sites, rehabilitation and adaptation of cultural heritage etc.

According to the Croatian cultural heritage protection practice, the building/constructing permit usually contains provision about the possibility to find and protection of cultural heritage (if any), particularly if the planned activities are related to the digging and other e.g. restoration (of old buildings).

In case that during the construction works some valuable object/s appear at the construction site, construction works will be stopped, and conservators informed. They will come at construction site, evaluate situation and decide about the following procedure. Depending on the site, the works can be continued with additional measures to protect archaeological sites or conservation conditions, but in the event that it is not possible to adequately protect the site, the works can be permanently

[86] Conservation Department of the Ministry of Culture and Media, and for the City of Zagreb the City Institute for the Protection of Cultural and Natural Monuments in Zagreb

[87] A more complex intervention is an intervention that refers to several developmental historical layers of a building (construction and stylistic) that are not visible in the existing condition or it is an intervention on a building made by complex application of several different materials, which is not documented to protect and preserve cultural heritage under Act on Cultural Heritage.

[88] Simple and other construction works and works defined by Ordinance on simple and other constructions and works (OG 112/17, 34/18, 36/19, 98/19, 31/20, 74/22, 155/23). Works that can be performed: a) without location/building permit and without main design, b) without location / building permit, in accordance with the main design / standard design, c) in the event of construction damage when people and assets are directly in danger, without building permit construction can be restored to the original condition in line with the act according to which it was built or the by project of the existing condition)

suspended. According to the Construction Act, the supervising engineer checks whether works are being carried out in accordance with the construction permit, the main project and the applicable regulations and thus controls the measures and conditions related to the protection of cultural assets.

According to Article 75. of the Cultural Heritage Act in the event of the occurrence or declaration of extraordinary circumstances, the Ministry of Culture and Media will make an inventory of damage to cultural property, in cooperation with local and regional self-government units in whose areas the cultural property is located and enter damage to cultural property in the Register of damages caused by natural disasters [89]. In order to mitigate and eliminate the damage to cultural property, the Minister of Culture and Media will develop and adopt a program of measures for the protection of cultural property in cooperation with local and regional self-government units. I accordance with this, Act on Reconstruction of Earthquake Damaged Buildings in the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County (OG 21/23) foresees the preparation of the program for complete restoration of the historical urban entity of the City of Zagreb, as well as cultural and historical entities within the territories of Sisak-Moslavina and Karlovac counties.

4.1.5 Protection of landscape

No specific law or regulation/ordinance that regulate landscape issues were adopted in Croatia. Some sectoral approaches, such as the protection of cultural heritage and protection of nature and the environment, partly include landscape issues, while spatial planning is recognized as a common and integrative instrument of its protection.

Integrated approach and an important degree of landscape protection in Croatia has been formally established by the Acceptance of the European Landscape Convention Act (OG 12/2002). Legal protection of the landscape, aligned with the EU Environmental Acquis as the rest of the national legislation, is also covered by:

- Physical Planning Act (OG 153/13, 65/17, 114/18, 39/19, 98/19, 67/23),
- Environmental Protection Act (OG 80/13, 153/13, 78/15, 12/18, 118/18),
- Nature Protection Act (OG 80/13, 15/18, 14/19, 127/19, 155/23),
- Act on the Protection and Preservation of Cultural Property (OG 69/99, 151/03, 157/03, 100/04, 87/09, 88/10, 61/11, 25/12, 136/12, 157/13, 152/14, 98/15, 44/17, 90/18, 32/20, 62/20, 117/21, 114/22).

Three Ministries: Ministry of Environmental Protection and Green Transition, Ministry of Culture and Media and the Ministry of Physical Planning, Construction and State Assets are responsible for landscape care. Both spatial planning and environmental systems are the main tools for landscape conservation. Spatial planning documentation includes landscape issues. Environmental Impact Assessment as well as Strategic Environmental Assessment are the tools that ensures measures for interventions and strategic and planning documents in order to avoid or mitigate potential adverse impacts on landscape.

[89] Register of damages caused by natural disasters is a digital database of all damages caused by natural disasters in the Croatia. The content, form and submission of data in this Register is defined by the Ordinance on the Register of damages from natural disasters (OG 65/19)

5 OVERVIEW OF THE WORLD BANK ENVIRONMENTAL AND SOCIAL STANDARDS

5.1 Environmental and Social Framework

The World Bank developed an Environmental and Social Framework (ESF) setting out the World Bank's commitment to sustainable development through application of Bank Policy (defined in the ESF) and a set of Environmental and Social Standards that are designed to support Borrowers' projects, with the aim of ending extreme poverty and promoting shared prosperity.

The Environmental and Social Standards (ESS) set out the mandatory requirements that apply to the Borrower and projects. They present set of obligatory guidelines and instructions with the main objective to foster efficient and effective identification and mitigation of potentially adverse environmental and social impacts that may occur in the development projects, with proper stakeholder engagement and sustainable management. **WB ESS, supported by WB Group Environmental, Health and safety Guidelines (ESHG) are applied in parallel to the national policies where, as a rule, the stricter one prevails.** There are 10 ESS.

Each of the ESSs sets out a number of objectives. The objectives describe the outcomes that each of the ESSs is intended to achieve.

In some circumstances, the Borrower will identify certain risks and impacts as part of the environmental and social assessment that are not specifically covered in the ESSs; such risks or impacts have to be addressed in accordance with the mitigation hierarchy[90] and the objectives of ESS1.

Detailed overview of WB Environmental and Social Standards (ESS) is available on web site: https://www.worldbank.org/en/projects-operations/environmental-and-social-framework/brief/environmental-and-social-standards).

Not all of these ESS are relevant for this project, but ESS1, ESS2, ESS3, ESS4, ESS5, ESS6, ESS8 and ESS10 are.

World Bank Group Environmental, Health, and Safety Guidelines (EHSG)[91] are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP). They are living documents and are occasionally updated. The General EHSG contain information on cross-cutting environmental, community health and safety, occupational health and safety and construction and decommissioning issues potentially applicable to all industry sectors and it should be used together with the relevant Industry Sector Guideline(s)[92].

The applicability of the EHSG should be adjusted to the hazards and risks determined for each project on the basis of the results of an environmental assessment in which site-specific variables, such as

[90] (a) Anticipate and avoid risks and impacts; (b) Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels; (c) Once risks and impacts have been minimized or reduced, mitigate; and (d) Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible

[91] https://www.ifc.org/wps/wcm/connect/29f5137d-6e17-4660-b1f9-02bf561935e5/Final%2B-%2BGeneral%2BEHS%2BGuidelines.pdf?MOD=AJPERES&CVID=jOWim3p

[92] https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines#IndustryEHS

country context, assimilative capacity of the environment, and other project factors, are taken into account.

When country regulations differ from the levels and measures presented in the EHSG, projects are expected to achieve whichever is more stringent. If less stringent levels or measures than those provided in these EHSG are appropriate, in view of specific project circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment.

The General EHS Guidelines are organized as follows:

Environmental	• Air Emissions and Ambient Air Quality • Energy Conservation • Wastewater and Ambient Water Quality • Water Conservation • Hazardous Materials Management • Waste Management • Noise • Contaminated Land
Occupational Health and Safety	• General Facility Design and Operation • Communication and Training • Physical Hazards • Chemical Hazards • Biological Hazards • Radiological Hazards • Personal Protective Equipment (PPE) • Special Hazard Environments • Monitoring
Community Health and Safety	• Water Quality and Availability • Structural Safety of Project Infrastructure • Life and Fire Safety (L&FS) • Traffic Safety • Transport of Hazardous Materials • Disease Prevention • Emergency Preparedness and Response
Construction and Decommissioning	• Environment • Occupational Health & Safety • Community Health & Safet

In this chapter summary of World Banks ESS and results of preliminary screening conducted during project preparation is presented. Detail information on necessary WB instruments/documents, resulting from environmental and social screening impacts conducted as a part on this ESMF, are presented in Chapter 8, while risk classification of activities that standards apply to in the Chapter 2.6.

5.2 ESS1 Assessment and Management of Environmental and Social Risks and Impacts

ESS1 applies to all projects which are supported by the Bank through Project Financing (IPF) and to which OP/BP10.00 applies. It sets out the Borrower's responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through IPF, in order to achieve environmental and social outcomes consistent with the ESSs.

The Bank classifies a proposed projects depending on the type, location, sensitivity, and scale of the project and the nature and magnitude of its potential environmental and social risks and impacts, into one of four categories:

- Projects with high risk,
- Projects with substantial risk,
- Projects with moderate risk,
- Projects with low risks.

Other areas of risk may also be relevant to the delivery of environmental and social mitigation measures and outcomes, depending on the specific project and the context in which it is being developed. These could include legal and institutional considerations; the nature of the mitigation and technology being proposed; governance structures and legislation; and considerations relating to stability, conflict or security.

Within ESS1, the Borrower is obliged to:

- Conduct environmental and social assessment of the proposed project (and its activities), including stakeholder engagement,
- Undertake stakeholder engagement and disclose appropriate information in accordance with ESS10,
- Develop an Environmental and Social Commitment Plan (ESCP) and implement all measures and actions set out in the legal agreement including the ESCP. ESCP presents one summary document that incorporates the material measures and actions that are required for the project to achieve compliance with the ESSs over a specified timeframe in a manner satisfactory to the World Bank. The ESCP should be developed as information regarding the potential risks and impacts of the project, it will take into account the findings of the environmental and social assessment, the Bank's environmental and social due diligence and the results of engagement with stakeholders.
- Conduct monitoring and reporting on the environmental and social performance of the project against the ESSs.

Depending on the project, a range of instruments can be used to satisfy the Bank's Environmental and Social Assessment (ESA) requirement: environmental impact assessment (ESIA), regional or sectorial EA, Environmental and Social Commitment Plan (ESCP) – material measures and actions required for the project to achieve compliance with the ESSs over a specified timeframe, strategic environmental and social assessment (SESA), environmental audit, hazard or risk assessment, environmental management plan (EMP) and environmental and social management framework (ESMF). EA applies

one or more of these instruments, or elements of them, as appropriate. When the project is likely to have sectorial or regional impacts, sectorial or regional EA is required.

ESS1 requires WB ESF application also on associated facilities and would also explain what are associated facilities, meaning "*facilities or activities that are not funded as part of the project and are: (a) directly and significantly related to the project; and (b) carried out, or planned to be carried out, contemporaneously with the project; and (c) necessary for the project to be viable and would not have been constructed, expanded or conducted if the project did not exist.*" For facilities or activities to be Associated Facilities, they must meet all three criteria.

According to the World Bank criteria Croatia Earthquake Recovery and Public Health Preparedness Project falls into the category of projects with substantial environmental and social risk.

This Standard is relevant to the overall project and for Component 1, subject of this ESMF

Although the long-term impacts of the Component 1 – Earthquake Recovery and Reconstruction are likely to be positive, its activities carry several risks. Planned interventions on public buildings include rehabilitation of structures, demolition of unsafe buildings and reconstruction the construction of new buildings, inclusive of functional upgrading and adoption of energy efficiency measures. Civil works entail immediate recovery activities such as debris removal. All these activities carry risks typical for construction works: operational health and safety and community safety risks, dust and noise emissions, traffic disruption, generation of large quantities of construction waste, exposure of workers and building occupants to hazard materials (e.g. asbestos containing materials) before and during demolition and rehabilitation activities; unsafe working conditions; and poor occupational health and safety practices. Expected impacts from these activities will be typical for construction works, therefore mostly predictable and readily mitigated, localized, impacts that include, but are not limited to: emission or dust, emission of noise, waste water, construction waste and small quantities of hazardous waste and risks to workers (OHS) and users of facilities.

Overall, the project is expected to mostly have positive social impacts as it will finance immediate needs for reconstruction of critical public infrastructure such as hospitals and schools and removal of debris, damaged roofs, chimneys, and other non-structural elements of public buildings that were damaged in the earthquake as to increase public safety.

The key potential social risks associated with project activities under Component 1 that finance hospital/school reconstruction/rehabilitation, relate to community health and safety (e.g., impact of construction works on staff and patients at health facilities, who continue to occupy building rehabilitation sites); exposure of workers and building occupants to hazard materials (e.g., asbestos containing materials, medical waste) before and during demolition and rehabilitation activities; unsafe working conditions; and poor occupational health and safety practices, including those that do not prevent COVID-19.
No involuntary land acquisition, restrictions on land use and involuntary resettlement are expected.

Within this standard the Borrower will prepare appropriate instruments to be used for specific sub-projects.

Those are Environmental and Social Management Plans (ESMPs) and Environmental and Social Management Plan Checklists (ESMP Checklists), Labor Management Procedures (LMP) and Voluntary Land Donation (VLD) all prepared in compliance with the World Bank Group's Environment, Health, and Safety (EHS) Guidelines.

These measures shall be implemented within specified timeframe and the status of implementation will be reviewed as part of project monitoring and reporting.

These site-specific documents will constitute an integral part of bidding documents for contractors. Detail information on necessary instruments/documents, resulting from environmental and social screening impacts, are presented in Chapter 8.

ESMF and site-specific environmental and social assessment documents (ESMPs and/or ESMP checklists) will be timely and appropriately disclosed and discussed with public.

Draft versions of the ESCP is prepared and will be further developed in parallel with the ESMF development.

5.3 ESS2 Labor and Working Conditions

Labor and working conditions or **ESS2** recognize the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Borrowers can promote sound worker management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions.

Main objectives of this standard are following: to promote safety and health at work; to promote the fair treatment, non-discrimination and equal opportunity of project workers; to protect project workers, including vulnerable workers such as women, persons with disabilities, children (working age) and migrant workers, contracted workers, community workers and primary supply workers, as appropriate; to prevent the use of all forms of forced labor and child labor; to support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law; to provide project workers with accessible means to raise workplace concerns.

Measures relating to OHS are aimed at protecting project workers from injury, illness, or impacts associated with exposure to hazards encountered in the workplace or while working. Such measures take into account the requirements of ESS2 and national law requirements on OHS and workplace conditions as they apply to the project. Appropriate OHS measures are incorporated into the design and implementation of the project to prevent and protect workers from occupational injuries and illness.

This Standard is relevant to the overall project and for Component 1, subject of this ESMF.

Under Component 1 activities, the project footprint is relatively small and does not entail a significant amount of labor as the intervention/rehabilitation/reconstruction works are expected to be small to medium scale.

Project workers will include direct workers including MoPPCSA staff who will be a mix of civil servants and consultants and contracted workers including employees of the contractors and their subcontractors.

It is not expected that primary supply workers are relevant as the project will unlikely source goods or materials from a single supplier on an on-going basis. Project activities will not require hiring of community workers. Most of the labor will be locally hired however it is expected that foreign labor will also be engaged, especially related to construction activities.

To manage labor and working conditions risks for the project, Labor Management Procedures are prepared based on the assessment of the Labor Act and Occupational Safety and Health Act and taking into account conditions under ESS2 (see ANNEX VI).

5.4 ESS3 Resource Efficiency and Pollution Prevention and Management

ESS3 recognizes that economic activity and urbanization often generate pollution[93] to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels. It sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life cycle.

In this ESS, "pollution management" includes measures designed to avoid or minimize emissions of pollutants, including short- and long-lived climate pollutants, measures which tend to encourage reduction in energy and raw material use, as well as emissions of local pollutants.

Main objectives of this standard are: to promote the sustainable use of resources, including energy, water and raw materials; **to avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities**; **to avoid or minimize project-related emissions of short and long-lived climate pollutants**; **to avoid or minimize generation of hazardous and non-hazardous waste; to minimize and manage the risks and impacts associated with pesticide use.**

To meet the above mentioned objectives the Borrower should conduct management procedures and implement measures regarding: resource efficiency, energy use, water use, raw material use, pollution prevention and management, management of air pollution, management of hazardous and non-hazardous wastes, management of chemicals and hazardous materials according to the requirements and conditions of ESS3.

This Standard is relevant to the overall project and for Component 1, subject of this ESMF.

Project activities will contribute to better resource efficiency as the rehabilitation and/or reconstruction of health and educational facilities will include energy efficiency measures like improved insulation and heating efficiency. The project is not significant user of water or material resources.

Regarding pollution prevention and management, releases of pollutants to air, water and land due to routine, non-routine, and accidental circumstances as well as unorganized noise management, waste management and management of hazardous substances are recognized as potential threat to environment. Those environmental impacts are expected to be of manageable, temporary and of local impact as they are related to the general construction activities on already existing location.

Large quantities of construction and demolition waste are expected, and there is a possibility of asbestos waste from certain older educational facilities. Also, proper waste management (PPE and equipment) will need to be safely and correctly collected, stored, transported, and disposed.

[93] The term "pollution" is used to refer to both hazardous and non-hazardous chemical pollutants in the solid, liquid, or gaseous phases, and includes other components such as thermal discharge to water, emissions of short- and long-lived climate pollutants, nuisance odors, noise, vibration, radiation, electromagnetic energy, and the creation of potential visual impacts including light

Through the implementation of procedures and measures stated in ESMF, site-specific ESMPs and ESMP checklist, as well as the project design, negative social and environmental impacts of project will be minimized and/or avoided.

5.5 ESS4 Community Health and Safety

ESS4 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable.

Main objectives of this standard are: to anticipate and avoid adverse impacts on the health and safety of project-affected communities during the project life cycle from both routine and nonroutine circumstances; to promote quality and safety, and considerations relating to climate change, in the design and construction of infrastructure, including dams, to avoid or minimize community exposure to project-related traffic and road safety risks, diseases and hazardous materials, to have in place effective measures to address emergency events; to ensure that the safeguarding of personnel and property is carried out in a manner that avoids or minimizes risks to the project-affected communities.

This Standard is relevant to the overall project and for Component 1, subject of this ESMF.

Civil works will be undertaken mainly in or around hospitals and schools, and maintaining the health and safety of employees and visitors, and nearby communities, throughout the construction phase is critical. Movement of heavy goods vehicles can lead to accidents. Potential threats to people and communities may be posed by uncovered or unbarricaded or no signage spots such as open holes, open electric cables, etc.

Given the small to medium scale nature of civil works primarily focused on rehabilitation/reconstruction of buildings, the impact and risk on community's health and safety is expected to be minor and manageable. No risks related to gender-based violence (GBV) are expected under the project activities. Most workers will be hired locally, and labour influx is expected to be low.

The project will ensure safety of staff and other visitors during the construction works by site-specific ESMPs/ESMPs Checklists and LMP.

5.6 ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

ESS5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons. Project-related land acquisition or restrictions on land use may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood), or both. The term "involuntary resettlement" refers to these impacts. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement.

Main objectives of this standard are: to avoid or minimize involuntary resettlement by exploring project design alternatives; to avoid forced eviction; to mitigate unavoidable adverse impacts from

land acquisition or restrictions on land use through timely compensation for loss of assets at replacement cost and assisting displaced persons in their efforts to improve, or at least restore, livelihoods and living standards, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher; to improve living conditions of poor or vulnerable persons who are physically displaced, through provision of adequate housing, access to services and facilities, and security of tenure; to ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and informed participation.

This Standard is relevant to the overall project and for Component 1, subject of this ESMF.

The part of the land to be used for the certain sub-project is donated on a voluntary basis without payment of full compensation.

ESS5 applies to permanent or temporary physical and economic displacement resulting from the following types of land acquisition or restrictions on land use undertaken or imposed in connection with project implementation:

a) land rights or land use rights acquired or restricted through expropriation or other compulsory procedures in accordance with national law;

b) land rights or land use rights acquired or restricted through negotiated settlements with property owners or those with legal rights to the land, if failure to reach settlement would have resulted in expropriation or other compulsory procedures;

c) restrictions on land use and access to natural resources that cause a community or groups within a community to lose access to resource usage where they have traditional or customary tenure, or recognizable usage rights. This may include situations where legally designated protected areas, forests, biodiversity areas, or buffer zones are established in connection with the project;

d) relocation of people without formal, traditional, or recognizable usage rights, who are occupying or utilizing land prior to a project-specific cut-off date;

e) displacement of people as a result of project impacts that render their land unusable or inaccessible;

f) restriction on access to land or use of other resources including communal property and natural resources such as marine and aquatic resources, timber and non-timber forest products, fresh water, medicinal plants, hunting and gathering grounds, and grazing and cropping areas;

g) land rights or claims to land or resources relinquished by individuals or communities without full payment of compensation;

h) land acquisition or land use restrictions occurring prior to the project, but which were undertaken or initiated in anticipation of, or in preparation for, the project.

For the Project relevant point is g) since the part of the land to be used (access road) for the certain sub-project is donated on a voluntary basis without payment of full compensation.

The voluntary land donation process has to be conducted in such a way that transparent records of all consultations and agreements reached are maintained. Voluntary land donation is defined as the ceding of a property by an owner who is:

a) appropriately informed;

b) can exercise free will, that is, can refuse to donate.

Voluntary land donations may involve some monetary or non-monetary benefits or incentives provided to the land donor by the project or by community members benefiting from a project (i.e., , improved public infrastructure, access to project benefits). Appropriately informed means that the owner has all available information regarding the proposed activity and its impacts, its land requirements, and its alternative activity sites, as well as his or her rights to compensation. The owner has also been provided with sufficient time to consider his or her disposition of the property, and has knowingly rejected the right to renege on his or her decision. Free will means that the owner can reject the proposal to give up his or her land, because, for example, there are viable alternatives available to the project (such as rerouting a water main if an owner refuses access to his or her property), or where no viable alternatives are available, the donation is to the benefit of the owner (such as a community-based investment project that benefits the owner of land to be donated).

5.7 ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

ESS6 recognizes the importance of maintaining core ecological functions of habitats, including forests, and the biodiversity they support. Habitat is defined as a terrestrial, freshwater, or marine geographical unit or airway that supports assemblages of living organisms and their interactions with the non-living environment. All habitats support complexities of living organisms and vary in terms of species diversity, abundance and importance. This ESS also addresses sustainable management of primary production and harvesting[3] of living natural resources.

Objectives of the ESS6: to protect and conserve biodiversity and habitats; to apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity and to promote the sustainable management of living natural resources.

This Standard is relevant to the overall project and for Component 1, subject of this ESMF.

None of the planned sub-projects is located in a protected nature area or in the area of the Ecological Network, nor are these areas in the immediate vicinity of the sub-projects.

All works will be carried out within the limited intervention scope (rehabilitation, reconstruction and construction mostly within the existing footprint of buildings or on available publicly owned land) in urbanized areas, though unlikely, temporary and predictable impacts to protected areas should not be completely ruled out. The related risks will be addressed through site-specific ESMPs/ESMP Checklists.

5.8 ESS7 Indigenous Peoples / Sub-Saharan African Historically Underserved Traditional Local Communities

Croatia does not have distinct ethnic, social and/or cultural groups as covered by ESS7. **Thus, this standard is not relevant for overall project nor for Component 1.**

5.9 ESS8 Cultural Heritage;

ESS8 recognizes that cultural heritage provides continuity in tangible and intangible forms between the past, present and future. It sets out measures designed to protect cultural heritage throughout the project life-cycle.

General objectives are as follows: to protect cultural heritage from the adverse impacts of project activities and support its preservation, to address cultural heritage as an integral aspect of sustainable development, to promote meaningful consultation with stakeholders regarding cultural heritage, to promote the equitable sharing of benefits from the use of cultural heritage[94].

The requirements of ESS 8 apply to cultural heritage regardless of whether or not it has been legally protected or previously identified or disturbed. While the ESS8 relays on the officially recognised cultural heritage, is not exclusive (community perception is also taken into account, opinion of CH associations, chambers of architects, etc.).

The requirements of ESS8 apply to all projects that are likely to have risks or impacts on cultural heritage. This will include a project which: (a) Involves excavations, demolition, movement of earth, flooding or other changes in the physical environment; (b) Is located within a legally protected area or a legally defined buffer zone; (c) Is located in, or in the vicinity of, a recognized cultural heritage site; or (d) Is specifically designed to support the conservation, management and use of cultural heritage. If previously unknown cultural heritage is encountered during project activities, a chance finds procedure should be followed. It has to be included in all contracts relating to construction of the project, including excavations, demolition, movement of earth, etc. The chance finds procedure sets out how chance finds associated with the project has to be managed.

A chance finds procedure is included in relevant procurement documents and instructions to contractors. A chance finds procedure is not a substitute for preconstruction surveys and analyses.

This Standard is relevant to the overall project and for Component 1, subject of this ESMF.

Certain sub-projects present a protected cultural property or are located in the area of protected cultural and historical entity and some are in the area that is recognized by local community as important and need to be considered although is not legally recognized or protected as cultural heritage. Cultural heritage related risks will be addressed through this ESMF and the development of Cultural Heritage Management Plan (CHMP).

[94] The term 'cultural heritage' encompasses tangible and intangible heritage, which may be recognized and valued at a local, regional, national or global level, as follows:

Tangible cultural heritage, which includes movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Tangible cultural heritage may be located in urban or rural settings, and may be above or below land or under the water;

Intangible cultural heritage, which includes practices, representations, expressions, knowledge, skills - as well as the instruments, objects, artifacts and cultural spaces associated therewith – that communities and groups recognize as part of their cultural heritage, as transmitted from generation to generation and constantly recreated by them in response to their environment, their interaction with nature and their history.

5.10 ESS10 Stakeholder Engagement and Information Disclosure

Stakeholder engagement is an inclusive process conducted throughout the project life cycle. Where properly designed and implemented, it supports the development of strong, constructive and responsive relationships that are important for successful management of a project's environmental and social risks. Stakeholder engagement is most effective when initiated at an early stage of the project development process, and is an integral part of early project decisions and the assessment, management and monitoring of the project's environmental and social risks and impacts.

This ESS must be read in conjunction with ESS1. Requirements regarding engagement with workers are found in ESS2. Special provisions on emergency preparedness and response are covered in ESS2 and ESS4. In the case of projects involving involuntary resettlement, Indigenous Peoples or cultural heritage, the Proponent will also apply the special disclosure and consultation requirements set out in ESS5, ESS7 and ESS8.

Objectives of the ESS10 are: to establish a systematic approach to stakeholder engagement that will help Borrowers to identify stakeholders and build and maintain a constructive relationship with them, in particular project-affected parties; to assess the level of stakeholder interest and support for the project and to enable stakeholders' views to be taken into account in project design and environmental and social performance, etc.

This Standard is relevant to the overall project, and for Component 1, subject of this ESMF.

The Initial Stakeholder Engagement Plan (SEP) was prepared as early as possible, before project appraisal, and was disclosed on the MoPPCSA and WB website on May 6, 2020 and it was periodically updated (in May 2022, in August 2023 and in July 2024).

The SEP defines a program for stakeholder engagement, including planned public information disclosure and ways in which the project team will communicate with stakeholders throughout the project cycle. The SEP includes a grievance mechanism allowing citizens to raise concerns, provide feedback, or make complaints about any project related activities, whereby multiple channels for grievance uptake exist and citizens' project-related inputs are aggregated and followed-up on by a focal point in PIU (in the MoPPCSA). The grievance mechanism will also cater to the interests and concerns of direct and contracted workers.

With the evolving situation, as the Croatian Government has taken measures to impose strict restrictions on public gatherings, meetings and people's movement, the general public has also become increasingly concerned about the risks of transmission, particularly through social interactions. Hence alternative ways will be adopted to manage consultations and stakeholder engagement in accordance with the local laws, policies and new social norms in effect to mitigate prevention of the virus transmission. These alternate approaches that will be practiced for stakeholder engagement will include: having consultations in small groups if smaller meetings are permitted, else making reasonable efforts to conduct meetings through online channels (e.g. webex, zoom, skype etc.); diversifying means of communication and relying more on social media, chat groups, dedicated online platforms & mobile Apps (e.g. Facebook, Twitter, WhatsApp groups, project weblinks/websites etc.); and employing traditional channels of communications such TV, radio, dedicated phone-lines,

SMS broadcasting, public announcements when stakeholders do not have access to online channels or do not use them frequently.

The affected parties[95] under this project component include: administrators, health care staff, patients, teachers, educational staff, pupils and parents of earthquake-affected hospitals and primary/secondary schools; organizations representing the constituencies above, such as the Croatian Patients Association, representatives of Parents Councils and homeowners' associations; potential beneficiaries of the medium-term housing reconstruction financial support program; neighbouring communities in the areas where the buildings are rehabilitated/ reconstructed; workers at construction sites; representatives and citizens of the City of Zagreb and Sisak-Moslavina County.

Other Interested Parties[96] under this project component include: *public sector stakeholders* - Ministry of Interior (lead authority for all types of disasters), Ministry of Culture and Media (regarding the protection of cultural heritage), Ministry of Regional Development and EU Funds, Ministry of Finance, School founder – local government, Potential suppliers of goods and service providers involved in the project; *private sector stakeholders* - Potential suppliers of goods and service providers involved in the project, *Academia* - University of Zagreb, its research and teaching staff, students and administrative staff, Zagreb University Faculty of Civil Engineering; *Non-governmental organizations* - Institute for the Development of Education, Chamber of Civil Engineers, Chamber of Civil Engineers and Architects, Zagreb Society of Architects, The Croatian Red Cross, firefighting operational forces and Croatian Mountain Rescue Service, operational forces, which provided assistance and shelter for people in the immediate aftermath, of the earthquake, Civil protection units and commissioners, site coordinators, legal persons in the civil protection, system at national, regional and local level, *media* – television, radio stations, online and print newspapers, Croatian National News Agency HINA, social media sites and discussion groups; *International partners* - WHO Country Office, EU, UNICEF, Norway.

Disadvantaged / vulnerable individuals or groups[97] - Patients who were evacuated from damaged hospitals/health facilities; temporarily displaced people whose homes have been severely damaged, people with disabilities, socially vulnerable groups; Roma households and the elderly.

5.11 Results of the preliminary assessment of Environmental and Social Standards (ESS)

Table 19. Preliminary assessment of ESS

Environmental and Social Standards (ESS)	Relevant to the Project		Preliminary assessment
	Yes	No	
ESS1 Assessment and Management of Environmental and Social Risks and Impacts	✓		Environmental and social risks and impacts have been preliminary identified. As an instrument that details the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental and social

[95] Persons, groups and other entities within the Project Area of Influence (PAI) that are directly influenced (actually or potentially) by the project and/or have been identified as most susceptible to change associated with the project, and who need to be closely engaged in identifying impacts and their significance, as well as in decision-making on mitigation and management measures

[96] individuals/groups/entities that may not experience direct impacts from the Project but who consider or perceive their interests as being affected by the project and/or who could affect the project and the process of its implementation in some way;

[97] persons who may be disproportionately impacted or further disadvantaged by the project(s) as compared with any other groups due to their vulnerable status4, and that may require special engagement efforts to ensure their equal representation in the consultation and decision making process associated with the project.

Environmental and Social Standards (ESS)	Relevant to the Project		Preliminary assessment
	Yes	No	
			impacts, or to reduce them to acceptable levels; and the actions needed to implement these measures the templates for ESMPs and ESMP Checklists will be prepared. Further development of already drafted ESCP will be conducted.
ESS2 Labor and Working Conditions	✓		Since the project will include direct workers including MoPPCSA staff who will be a mix of civil servants and consultants and contracted workers including employees of the contractors and their subcontractors, LMP will be prepared.
ESS3 Resource Efficiency and Pollution Prevention and Management	✓		With respect to Resource Efficiency and Pollution Prevention and Management mitigation measures to address environmental impacts will be prepared as well as templates for site-specific ESMPs/ESMPs checklist.
ESS4: Community Health and Safety	✓		To ensure safety of staff and other visitors during works, mitigation measures to address environmental impacts are prepared as well as templates for site-specific ESMPs/ESMPs Checklist.
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	✓		There will be no involuntary land acquisition, restrictions on land use and involuntary resettlement. Voluntary Land Donation process and VLD template protocol are developed.
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	✓		Since the Project may produce low to moderate adverse effects, to protect and conserve biodiversity and habitats, mitigation measures to address environmental impacts will be prepared as well as templates for site-specific ESMPs/ESMPs Checklist.
ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities		✓	Croatia does not have distinct ethnic, social and/or cultural groups as covered by ESS7. Thus, this standard is not relevant.
ESS8: Cultural Heritage	✓		Certain sub-projects present a protected cultural property or are located in the area of protected cultural and historical entity, and some are in the area that is recognized by local community as important and need to be considered although is not legally recognized or protected as cultural heritage. Cultural heritage related risks will be addressed through this ESMF and the development of Cultural Heritage Management Plan (CHMP).
ESS9: Financial Intermediaries		✓	This standard is not applicable as the project does not envision involvement of financial intermediaries.
ESS10: Stakeholder Engagement and Information Disclosure	✓		The Initial Stakeholder Engagement Plan (SEP) was prepared as early as possible, before project appraisal, and was disclosed on the MoPPCSA and WB website on May 6, 2020 and it was periodically updated (in May 2022, in August 2023 and in July 2024).

6 GAP ANALYSES OF ESS AND NATIONAL LEGISLATION COMPLIANCE

As a member of the European Union, Republic of Croatia has harmonized its environmental regulations and standards in line with EU directives. A comprehensive list of the legal and institutional frameworks has been analysed during the process of developing the current ESMF with the conclusion that the environmental regulations are in general in line with WB safeguards and policies.

Several minor differences between national legislation and WB ESS were identified, regarding ESS3, ESS6 and ESS10.

In relation to social impacts, the Croatian legislation is in line with WB safeguards and requirements in terms of human health and safety, public consultation or provisions for addressing the relation and impact of the project to neighbouring properties and communities.

National legislation is in compliant with all ESS2 prescriptions, and no differences have been identified. For more information on national legislation see Chapter 4.1

Detailed information on discrepancy between ESSs and national legislation are given below, Table 20.

Table 20. Compliance analysis of ESS and national legislation

Environmental and Social Standards (ESS)	National environmental and social framework	Gaps
ESS1 Assessment and Management of Environmental and Social Risks and Impacts	- Environmental Protection Act (OG 80/13, 153/13, 78/15, 12/18, 118/18), - Regulation on environmental impact assessment (OG 61/14, 3/17), - Regulation on information and participation of the public and public concerned in environmental matters (OG 64/08), - Nature Protection Act (OG 80/13, 15/18, 14/19, 127/19, 155/23), - Act on Reconstruction of Earthquake Damaged Buildings in the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County (OG 21/23), - Decision on the Adoption of the Program of Measures for the Reconstruction of Buildings Damaged by Earthquakes in the Area of the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County (OG 28/23), - Occupational Safety and Health Act (OG 71/14, 118/14, 94/18, 96/18), - Construction Act (OG 153/13, 20/17, 39/19, 125/19), - Labor Act (OG 93/14, 127/17, 98/19, 151/22), - Gender Equality Act (OG 82/08, 69/17), - Anti-discrimination act (OG 85/08, 112/12), - Foreigners Act (OG 133/20, 114/22, 151/22).	According to ESS1 Borrower must conduct environmental and social assessment of all projects proposed for Bank financing to help ensure that projects are environmentally and socially sound and sustainable. Croatian legislation defines different mechanisms for environmental and social assessment of projects. The environmental legal, regulatory and policy framework in Croatia is ensured through the following main instruments: Environment Impact Assessment, Location and Building permitting process (opinion of competed authorities for meeting environmental conditions has to be issued as a part of permitting procedure, e.g. for water protection, protections of cultural heritage, etc.), Physical Planning (preparation of physical plan is subject of strategic environmental assessment). Although for certain projects/interventions legally is not specifically required to conduct procedure of environmental assessment, assessment is ensured by application of these mechanisms (elimination and/or mitigation of possible negative environmental and social impact from a planned project is ensured). Environmental and social assessment national and WB instruments cannot be directly compared and alignment and application of these instruments have to be checked for every project/sub-project.
ESS2 Labor and Working Conditions	- Labor Act (OG 93/14, 127/17, 98/19, 151/22), - Gender Equality Act (OG 82/08, 69/17), - Anti-discrimination act (OG 85/08, 112/12), - Occupational Safety and Health Act (OG 71/14, 118/14, 94/18, 96/18), - Foreigners Act (OG 133/20, 114/22, 151/22).	**There is no gap on the policy level.**

Environmental and Social Standards (ESS)	National environmental and social framework	Gaps
ESS3 Resource Efficiency and Pollution Prevention and Management	- Waste Management Act (OG 84/21, 142/23), - Ordinance on waste management (OG 106/22).	**Difference is identified in the field of waste management record keeping.** For hazardous waste management according to ESS3, waste owner must obtain documentation on handing over waste to the final destination. National legislation does not define such an obligation. Waste owner decides voluntarily whether to be provided with information on the final destination. According to the national legislation owner's responsibility ceases when waste is handed over to the authorized company. If authorized company is waste collector, which is a common case, and if waste owner does not request this information, the final destination will be unknown.
ESS4: Community Health and Safety	- Occupational Safety and Health Act (OG 71/14, 118/14, 94/18, 96/18), - Pension Insurance Act (OG 157/13, 151/14, 33/15, 93/15, 120/16, 18/18, 62/18, 115/18, 102/19, 84/21, 119/22), - Act on the List of Occupational Diseases (OG 162/98, 107/07), - Act on mandatory health monitoring of workers occupationally exposed to asbestos (OG 79/07, 139/10, 118/18), - Waste Management Act (OG 84/21, 142/23).	**There is no gap on the policy level**
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	- Law on Obligatory Relations (OG 35/05, 41/08, 125/11, 78/15, 29/18, 126/21,114/22, 156/22, 155/23), - Law on State Survey and Real Estate Cadastre (OG 112/18, 39/22).	The ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement is relevant for the aspects of voluntary land donation. Gap analysis on involuntary land expropriation is not required since the project allows voluntary donation for the purpose of the project. Relevant procedures are presented in the VLD protocol to meet ESS5 requirements.
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	- Environmental Protection Act (OG 80/13, 153/13, 78/15, 12/18, 118/18), - Nature Protection Act (OG 80/13, 15/18, 14/19, 127/19, 155/23), - Regulation on environmental impact assessment (OG 61/14, 3/17)	**According to national legislation, preparation of BMP is not required.** In the case where **significant risks and adverse impacts on biodiversity have been identified**, the Borrower, according to the ESS6, is obliged to develop and implement a Biodiversity Management Plan (BMP). BMP typically includes key biodiversity

Environmental and Social Standards (ESS)	National environmental and social framework	Gaps
	- Regulation on the ecological network and the competencies of public institutions for the management of ecological network areas (OG 80/19, 119/23), - Ordinance on conservation objectives and conservation measures for target bird species in ecological network areas (OG 11/22), - Ordinance on the list of habitat types and habitat map (OG 27/21, 101/22).	objectives, activities to achieve these objectives, an implementation schedule, institutional and gender-inclusive responsibilities, and cost and resourcing estimates. Indicative content of the BMP is prescribed by ESS6. BMP is equal to the Program for Monitoring and Reporting on the State of Conservation Objectives and the Integrity of the Ecological Network Area (Program) which is mandatory part of the EIA procedure. The obligatory content of the Program isn't legally prescribed and, in most cases, don't contain financial information as it is required by ESS6 BMP.
ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not applicable	**This Standard is not relevant.** Croatia does not have distinct ethnic, social and/or cultural groups as covered by ESS7. Thus, this standard is not relevant.
ESS8: Cultural Heritage	- Act on the Protection and Preservation of Cultural Property (OG 69/99, 151/03, 157/03, 100/04, 87/09, 88/10, 61/11, 25/12, 136/12, 157/13, 152/14, 98/15, 44/17, 90/18, 32/20, 62/20, 117/21, 114/22)	**There is no gap on the policy level with regards to the protection of tangible cultural heritage. Impacts on intangible heritage are not expected under the project.**
ESS9: Financial Intermediaries	Not applicable	**This Standard is not currently relevant.** This standard is not applicable as the project does not envision involvement of financial intermediaries
ESS10: Stakeholder Engagement and Information Disclosure	- Environmental Protection Act (OG 80/13, 153/13, 78/15, 12/18, 118/18) - Regulation on environmental impact assessment (OG 61/14, 3/17), - Regulation on information and participation of the public and public concerned in environmental matters (OG 64/08)	**According to national legislation, preparation of SEP is not required.** Although the procedures related to public information disclosure and grievance mechanism in the process of EIA are comprehensively and in detail covered by national legislation and in line with ESS10 requirements, the preparation of programme like SEP for specific project isn't required by national legislation. As it is mentioned, public consultation and engagement is covered in national legislation, including the right to address petitions, request information on projects carried by public bodies, consultation of neighbours and communities, etc.; however, the processes for reaching potentially impacted persons and communities also can be improved to incorporate WB principles,

Environmental and Social Standards (ESS)	National environmental and social framework	Gaps
		by engaging actively with these persons/groups, especially with vulnerable groups where such situations will surface. According to national legislation public consultation process is a part of EIA procedure and is conducted for every project/sub-project.

7 SCREENING OF POTENTIAL ENVIRONMENT AND SOCIAL IMPACTS

According to the national legislation all construction works must be designed and built in such a way that it will, throughout its life cycle, not be: threat to the hygiene or health and safety of workers or neighbours, have no exceedingly high impact on the environmental quality or on the climate during its construction, no leakage of toxic gases, emissions of dangerous substances, volatile organic compounds, greenhouse gases or dangerous particles into the air, emission of dangerous radiation, release of dangerous substances into ground water, marine waters, surface waters or soil, release of dangerous substances into drinking water or substances which have an otherwise negative impact on drinking water, faulty discharge of waste water, emission of flue gases or faulty disposal of solid or liquid waste, dampness in parts of the construction work or on surfaces within the construction work.

This means that all civil works must be designed and conducted in such a way that do not present unacceptable risks of accidents or damage in service or in operation such as slipping, falling, collision, burns, electrocution, injury from explosion, burglaries, etc. In particular, must be designed taking into consideration accessibility and use for disabled persons. Regarding noise protection, noise perceived by the workers or people nearby has to be kept to a level that will not threaten their health and will allow them to sleep, rest and work in satisfactory conditions. Additionally, construction works must be energy-efficient, using as little energy as possible and conducted in such a way that the use of natural resources is sustainable.

7.1 Environmental impacts

The environmental impacts of the Component 1 are expected in both Subcomponents 1.1 and Subcomponent 1.2, which include rehabilitation / reconstruction / construction works[98] and development of designs and studies related to rehabilitation and reconstruction of public buildings.

It is anticipated that for planned rehabilitation / reconstruction / construction works environmental risks are typical for construction works and would be easily predictable and mitigated. Yet, as the reconstruction works (construction of new buildings) will last longer than rehabilitation works and are of bigger scale, it is expected that some of the identified impacts will be more intense character in the case of reconstruction activities.

The environmental impacts of the Project (Component 1) are expected to be of manageable, temporary and of local impact, effectively anticipated, easily mitigated as they are related to the general construction activities on already existing location.

Environmental risks and possible impacts most commonly will include: **a) Air pollution b) Noise c) Surface or ground water pollution (including accidental spillage of machine oil, lubricants etc.) d) Soil pollution or erosion e) Cultural and historical heritage (chance finds and impact on protected cultural and historical entity); f) Biodiversity; g) Traffic disturbance h) and Waste generation and management.**

The works planned within the projects Component 1 should be complemented by functional upgrades and climate-resilient designs, including improved insulation to cope with extreme temperature and energy efficiency to address also climate-related risks. This means that rehabilitated and

[98] "Interventions" include: Immediate recovery activities are targeted to increase public safety by making urgent repairs to damaged buildings, focusing largely on removing debris and reducing the likelihood of debris falling on pedestrians and city dwellers. "Rehabilitation'" is structural strengthening of existing buildings to meet a higher seismic performance. "Reconstruction" is demolishment of existing buildings and subsequent construction of new buildings in replacement.

reconstructed health and education facilities have to be resilient to hydrometeorological and climate risks, such as flooding and other extreme weather events.

The increased energy efficiency is expected support climate change adaptation and sustainability.

More detailed information on foreseen impacts on the locations of rehabilitation / reconstruction / construction works are given below.

7.1.1.1 Air pollution

During the rehabilitation / reconstruction / construction works emissions of exhaust gases into the air (CO_2, NO_x, SO_2 and CO) from combustion of machinery and vehicles fuels will occur. In addition to this, due to the movement of the vehicle and the work of the construction machinery PM_{10} particles also increase and deposit on the surrounding surfaces. The intensity of this pollution depends primarily on weather conditions and on the strength of the wind that spreads PM_{10} particles into the surrounding surfaces.

Such emissions are fugitive nature and are limited to the narrower area and only to the working part of the day. The densely populated areas are particularly vulnerable to these impacts.

The reduction of air quality is considered to potentially affect workers onsite, school children and patients and offsite receptors such as surrounding communities. However, the significance of impacts from the different construction activities is expected to be moderate, localized and time limited.

7.1.1.2 Noise

Noise is an unavoidable environment impact during rehabilitation / reconstruction / construction works. It occurs during the operation of machine and equipment at the site (mainly in the processes like transport, loading/unloading machinery etc.). This impact is short-term, limited to the location of the site and the narrower area around the site, and ceases after completion of foreseen works.

Permissible noise level for the construction site is determined by the provisions of the Ordinance on the maximum allowed noise levels in the environment in which people work and live (OG 145/04) and amounts 65 dB. According to the mentioned ordinance, it is allowed to exceed that level for additional 5 dB in the period from 8 to 18 hours. It is exceptionally permitted to exceed the permissible noise level by 10 dB, in the case that it is required by technological process but up to a maximum of one night or two days over a period of thirty days.

It is desirable to carry out works in the period from 8 to 18 hours and not to carry works during the nights. Community / public should be informed in advance of any work activities to occur outside of normal working hours or on weekends.

It is generally not expected that noise levels will increase as a result of the Project implementation (in the use phase). However, this risk will be considered for sub-projects in the case-to-case basis.

In compliance with the prescribed limits, the impact of the project on the noise level is acceptable and not considered to be significantly negative.

7.1.1.3 Surface or ground water pollution

During the rehabilitation / reconstruction / construction works there is a possibility of impacting surface water and ground water due to uncontrolled spillage of fuels, oils, equipment lubricants, paints, varnishes and improper waste management during irregularly storage of fuels or some accidental situations.

Considering the distance of the surface water from the boundary of the site, during the repair / rehabilitation works, the surface water body may be affected if the work is carried out in such a way

that material is unlawfully disposed.

There will be no unregulated extraction of groundwater, nor uncontrolled discharge of process waters, cement slurries, or any other contaminated waters into the ground or adjacent streams or rivers.

7.1.1.4 Soil pollution or erosion

Possible negative impacts on the soil can be caused by fuels, lubricants and liquid materials used in construction, which can infiltrate into ground and underground as a result of elemental disasters, accidents or mismanagement of the equipment, transport vehicles and parts of the devices and system during performing the service when there is a risk of leakage of dangerous substances in the surroundings.

Possible minimum impact on the soil is reflected in the deterioration of the part of the surface and capturing of a certain amount of soil during construction of new buildings. Total amount of the removed useful surface layer upon completion of construction works permanently will remain in the same location in the form of backfilling material. The physical and chemical properties of the temporarily removed surface layer of soil will remain unchanged, as well as the non-contamination and ecological role, since all the amount of soil from the anticipated excavations will be preserved and subsequently used in environmental remediation upon completion of construction works.

7.1.1.5 Radon emissions

Radon is formed by the radioactive decay of radium found in soil and rocks and is found everywhere in the earth's crust. Guided by various transport mechanisms, it easily exits the ground into the air. Long-term exposure to high concentrations of radon can increase a risk of lung cancer. The first systematic survey of radon activity concentrations in residential buildings (radon survey) in the Republic of Croatia was conducted in the period from 2003 to 2005 with the aim of determining the average exposure of the population. For this purpose, the measurement of radon concentration was carried out in 1000 randomly selected residential buildings in Croatia in all counties applying the principle of population density; the corresponding number of measuring points was proportional to the county population. In this way, it was determined that the measured values of radon range from 4 - 751 Bqm-^{3} and that in about 3% of residential buildings in Croatia can be expected a value of radon concentration greater than 300 Bqm-^{3}.

In order to obtain a more detailed and representative insight into the state of radon indoors and to facilitate the identification and definition of areas within the Republic of Croatia where increased radon concentration is expected (priority areas), in 2012 more detailed measurements and mapping of radon began, to the extent permitted by financial and human capacity. In addition, radon measurements began to be carried out systematically in all schools and kindergartens in each county.

With this method of measurement, the coverage of counties is much higher and more representative than in 2003. The coordinates of the mentioned square network have been defined and harmonized with other European countries within the project of creating a European atlas of natural radiation. Measurements were performed by the passive method using nuclear trace detectors exposed continuously for one year.

So far, indoor measurements have been carried out with a total of about 6.000 detectors (727 schools, 228 kindergartens and 1.400 residential buildings) in 8 counties (Brod-Posavina, Virovitica-Podravina, Lika-Senj, Karlovac, Istria, Požega-Slavonia, Sisak- Moslavina and Vukovar-Srijem).

It was found that radon concentrations, depending on the county, range from 10 - 1600 Bq m-3, while the national (and EU) reference level is 300 Bq m- ^{3}. Within some counties can be found micro-locations with very high levels of radon and several times above the reference level.

Part of radon mapping results for houses, kindergartens, schools and radon in soil, can be found on

website of Ministry of Interior: http://radon.civilna-zastita.hr/radonski-zemljovidi/kuce/sisacko-moslavacka-zupanija/

7.1.1.6 Cultural and historical heritage

For sub-projects that present protected cultural good or are located in the protected cultural and historical area, and areas recognised by the community as important, there is a risk that conduction of civil works could transform landscapes and maintenance of cultural and regional identity.

Sub-Project Retrofitting of Croatian Institute of Public Health Building in Nazorova 53 is located within the cultural protection zone: Historical Urban Entity of the City of Zagreb that is protected cultural heritage (Register of Cultural Property no. Z-1525) and Sub-Project Reconstruction and upgrading of the building of the Faculty of Electrical Engineering in Zagreb is part of protected cultural good (complex of buildings A, B and C together with the plot) labelled as Z-5675 according to the Register of Cultural Goods of the Republic of Croatia, and according to the current spatial planning documentation (Article 93. of the General Urban Plan of City of Zagreb) classified under group 3.b Protected civil buildings in the area covered by the plan.

If rehabilitation/construction works are not properly conducted (in line with legal requirements) violation of harmony with local building culture and settlement layouts could appear and isolation of a heritage attribute from its surrounding environment, context, or a significant relationship.

If the location of the planned sub- project overlaps or is located close to the elements of cultural heritage, processes like excavation, mechanization and vibration may cause physical damage of architectural heritage or destruction of the archaeological find e.g. (direct or indirect obstruction of significant views or vistas from, within, or to a built).

If previously unknown cultural heritage is encountered during project activities, a chance finds procedure should be followed. It has to be included in all contracts relating to construction of the project, including excavations, demolition, movement of earth, etc. The chance finds procedure sets out how chance finds associated with the project has to be managed.

7.1.1.7 Biodiversity

There is a wide range of impacts that can affect biodiversity and habitats, including, for example, habitat conversion; interruption of important ecological processes such as species migrations, dispersal, or pollination; degradation of habitat quality (from air/water pollution or temperature change, light or noise pollution, habitat fragmentation); introduction of invasive alien species; and vulnerability to fire or other stresses.

Rehabilitation / reconstruction / construction works can affect biodiversity or habitats, this is however, is unlikely under the Component 1 as most of project activities are taking place in the existing physical footprint and/or on already urbanized area.

Since all works will be carried out within the limited intervention scope, rehabilitation, reconstruction and construction within the existing footprint of buildings and/or on urbanized areas, long term negative impact on biodiversity are not expected. The effects will be temporary, predictable, and typical for smaller civil works and, as such, easily mitigated.

None of the planned sub-projects is located in a protected nature area or in the area of the Ecological Network, nor are these areas in the immediate vicinity of the sub-projects.

Biodiversity impacts will be considered individually for sub-projects.

7.1.1.8 Traffic disturbance

During the execution of the work, due to the increased frequency of external transport of materials and techniques, temporary interruption in traffic may occur.

This is a short-term impact which will last only during the execution of the work. Certain quantities of land and other building materials on the roads are possible and may cause: difficulties in traffic flow, accidental damage of roads and stops due to overturning of trucks, spilling of materials etc.

It is possible that traffic patterns in the operational phase will change at some location as a result of Project implementation. The quality of the change is currently unknown and will be determined through location specific traffic studies.

7.1.1.9 Waste generation and management

On the location of rehabilitation / reconstruction / construction works waste generation will occur. As the reconstruction and construction works (construction of new buildings) will last longer than rehabilitation /intervention works, it is expected that in the case of construction activities higher amounts of waste will be generated.

Waste classification is stipulated by Ordinance on waste management (OG 106/22).

Mainly waste types from the following waste groups are expected to occur:

- group 08 - wastes from the manufacture, formulation, supply and use of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks
- group 17 - construction and demolition wastes (including excavated soil from contaminated sites)
- group 13 - - oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19 of waste catalogue)
- group 15 - waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
- group 20 - municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions (paper, plastics, glass, food waste etc).

Waste arising from infectious disease measures (protective gloves, masks, etc.) is considered to be municipal waste and should be handled in line with the WHO guidelines[99] and the guidelines on the official government website, and apply them at the site of the subproject[100].

In case of no asbestos demolition waste, hazardous waste is expected in negligible amounts. It will include the residues of varnishes, paints, as well as oil wastes from equipment.

In case of occurrence of asbestos, in the LMP (ANNEX VI) the guidelines on asbestos handling are given.

Each type of generated waste on the location has to be temporary stored in separate waste container which have to be labelled with waste type name and waste code. Construction waste has to be disposed exclusively in the designated locations. Whenever feasible the contractor should reuse and recycle appropriate and viable materials. Burning or illegal dumping of waste is strictly prohibited.

On the construction site, municipal waste generation is expected.

During and after finishing rehabilitation / reconstruction / construction works all waste have to be handed over to the companies authorized for the waste management, so the potential for a negative

[99] https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public
[100] https://koronavirus.hr/en

impact on the environment is reduced to a minimum.

Additionally, according to Reconstruction Act, MoEPGT, City of Zagreb and Sisak-Moslavina County at whose territory the renovation of buildings is carried out shall provide appropriate real estate for the purpose of temporary storage of construction waste generated as a result of the natural disaster. Details regarding the waste management of construction waste shall be determined in the program of measures, in accordance with a special regulation, respecting the principle of circular economy.

7.1.1.10 Community Health and Safety

As described in previous sub-chapters possible environmental impacts are of temporary nature and are predominantly linked to construction activities (implementation phase).

Civil works may case temporary disruptions to nearby communities such as: increased levels of noise, dust, or temporary disruptions to traffic, risk of road accidents for pedestrians, disruptions in utility services due to accidents or planned interventions (water, gas, electricity) and poor occupational health and safety practices, including those that do not prevent infectious disease transmission.

The emissions from construction activities (emissions from excavation equipment, other machinery and construction traffic, etc) can in short-term period (during working hours) deteriorate the ambient air quality and affect the public health.

The same is with noise and vibration pollution produced by vehicular movement, excavation and other construction machinery, concrete mixing, and other construction activities. These impacts are also short-term, limited to the location of the site and the narrower area around the site and thus it should not have significant negative impact on the community health and safety.

One of the key potential risks associated with the construction works is the increased risk of road accidents due to increased traffic of construction vehicles and congestion as a result of diversions. The risk is particularly higher for sub-projects that will take place in densely populated areas and/or for children where works are taking place near existing schools. Accidents can result in injuries including fatalities affecting both the community and workers. However, substantial road safety measures will be put in place to minimize the accidents.

Furthermore, the project area is prone to earthquakes which poses the risk from accidents, for workers and community, if earthquake occurs (e.g. demolition of a crane or other machinery). However, by properly organised construction site and applying defined protocols and standards this risk will be minimised.

As certain sub-projects are located in in the protected cultural and historical area, and the area recognised by community as valuable, there is a risk that conduction of civil works could transform landscapes and maintenance of cultural and regional identity and thus have a negative impact on community everyday life.

Risk of exposure of community to hazardous materials is limited. Management of hazardous materials, including hazardous waste, is related to construction activities and is short-term (finite duration of the construction activities). This risk will be mitigated in accordance with national labor and OHS policies as well as adhering to appropriate measures defined in this ESMF (by which emergency and preparedness response is defined – e.g. how to respond in the case of an accident during transportation of hazardous waste).

In operational phase activities under Component 1 will have positive impact on the community as rehabilitated or reconstructed buildings will have gender-responsive and universal access design

features. Also, the works will be complemented by functional upgrades and climate-resilient designs, including improved insulation to cope with extreme temperature and energy efficiency to address also climate-related risks).

Furthermore, for new construction (construction of new buildings) will be in accordance with EC8 (Eurocode 8) requirements and, for rehabilitation works, with safety provisions under the Act on Reconstruction of Earthquake Damaged Buildings in the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County. Combined, these standards will enhance the current functional safety performance of these buildings.

Other possible community health and safety impacts are elaborated in the sub-chapter 7.2.

7.2 Social impacts

Overall, the Component 1 of the project will have positive social impacts as it will finance immediate needs for rehabilitation and reconstruction of critical public infrastructure such as hospitals and schools and removal of debris, damaged roofs, chimneys, and other non-structural elements of public buildings that were damaged in the earthquake, as to increase public safety.

Under the project, people with disabilities will benefit from the universal access design features of the rehabilitated and reconstructed hospitals and schools.

Furthermore, energy efficiency measures for buildings are also likely to produce positive outcomes, by contributing to national objectives of reducing energy consumption and GHG emissions.

Social risk is assessed as low to moderate as the planned civil works will be site-specific with mostly no impacts beyond the footprint of the existing building. No involuntary resettlement impacts are anticipated, and no resettlement and involuntary land acquisition will take place. Any activities that might cause involuntary land acquisition or involuntary resettlement will not be eligible for financing.

The works to be performed are small to medium in magnitude and as such the impacts can be easily and predictably mitigated. There is a risk of labour influx.

Labor related risks, typically associated with a large and diverse workforce which is not case for this project, child labor, gender-based violence issues are not likely to occur. For certain occupations worker shortages is identified, and as a result, there is an increased and sustained demand for them in the Croatian labor market. These occupations are linked to construction sector.

The project is not expected to cause adverse social impacts. Civil works may case temporary disruptions to nearby communities such as: increased levels of noise, dust, or temporary disruptions to traffic, risk of road accidents for pedestrians, disruptions in utility services due to accidents or planned interventions (water, gas, electricity) and poor occupational health and safety practices, including those that do not prevent infectious disease transmission. The project will be implemented in strict adherence to the principles of equality and non-discrimination. During the reconstruction and rehabilitation of buildings certain quantities of asbestos waste can occur. Generally, use of asbestos is now very minimal but it may still be present in some older buildings. Hence, the foremost problem is exposure to asbestos during removal, demolition and repair activities.

Asbestos is only dangerous if it is fragmented and the fibres become airborne — as asbestos dust. If these fibres are inhaled, they can cause serious diseases. However, these are very rare amongst

people who are not exposed to high amounts of asbestos. They are mainly developed by people who work, or used to work, regularly with asbestos.[101]

Before starting reconstruction and rehabilitation works, the contractor must determine whether there is a possibility that materials containing asbestos are present.

In Croatia legislative framework regarding asbestos management and health and safety policy when handling asbestos is in place. For more details see LMP (ANNEX VI).

[101] https://ec.europa.eu/taxation_customs/dds2/SAMANCTA/EN/Safety/Asbestos_EN.htm

8 IMPACT MITIGATION AND ENVIRONMENTAL AND SOCIAL DUE DILIGENCE DOCUMENTS AND DECISIONS

8.1 Environmental due diligence procedure

Activities under subcomponent 1.1. and 1.2. carry small to medium risks typical for construction works: dust and noise emissions, traffic disruption, generation of large quantities of construction waste, unsafe working conditions (e.g. exposure of workers to hazard materials like asbestos containing materials), poor occupational health and safety practices. In the operational phase, at some locations, risk of radon emissions may be also present.

The potential risks and impacts are (i) predictable and expected to be temporary (ii) low to medium in magnitude; (iii) site-specific, mostly without impacts beyond the actual footprint of the project; and (iv) low probability of serious adverse effects to human health and/or the environment. The Project's risks and impacts can be easily mitigated in a predictable manner.

Yet, as there is possibility that certain sub-projects will last longer than others, like demolition and thereafter construction of new buildings, it is expected that some of the identified impacts will be more intense character and pose higher risk.

Table 21. Project activities which pose environmental risk

Activiti No.	Subcomponent	Type of activity	Description of the activity
1.	Subcomponent 1.1	Rehabilitation	Structural strengthening of existing buildings to meet a higher seismic performance and improve energy efficiency
2.	Subcomponent 1.1	Reconstruction	Demolition of unsafe buildings, and the in-situ reconstruction of new buildings to replace damaged buildings.
3.	Subcomponent 1.1	Construction	Construction of new buildings
4.	Subcomponent 1.2	Design	Development of designs and studies related to rehabilitation and reconstruction of public buildings.

Possible impacts identified in chapter 7.1 for all four activities can be easily removed or mitigated by applying of good construction practice and proper organisation of the construction site, and mitigation measures in the design as explained in text below.

Emissions to air can be reduced to minor levels through standard practices of good site management, such as water sprinkling to limit dust emissions in the area near the construction materials and non-asphalted roads, covering of surfaces with plastic coverings during material storage and transportation, limiting vehicles speed in the area and access roads, periodical cleaning of location and access roads, efficient use of modern attested construction machinery to minimize emissions, provided with mufflers and maintained in good and efficient operation condition. Additionally, to minimize dust (mainly PM_{10}) adequate locations for storage, mixing and loading of construction materials should be established. Also, material collection, material retention time at the site should be reduced to a minimum, in order to minimize exposure to wind.

To remove/mitigate **noise pollution** emission of noise must be in compliance with legally defined limits. It is desirable to carry out works in the period from 8 to 18 hours and not to carry works during the nights. Community / public should be informed in advance of any work activities to occur outside of normal working hours or on weekends. All equipment must be maintained in good operating condition and be attested. During operations the engine covers of generators, air compressors and other powered mechanical equipment shall be closed, and equipment placed as far away from

residential areas as possible.

Surface or ground water pollution can be prevented by proper organization of construction site, by regular maintenance of vehicles and machinery in service centres outside the site locations and responsible handling of liquid waste. Adding oil activities should be carried out on the part of the construction site that is derived from an impermeable working surface. In the case of an accident, any hazardous liquid should be removed from the soil using adsorption materials such as sand, sawdust or mineral adsorbents. Such waste material should be collected in tanks, stored in the space provided for hazardous waste storage and handed over to authorized companies. The probability of this negative impact also can be reduced by preventing hazardous spillage coming from tanks, containers (mandatory secondary containment system, e.g. double walled or bunded containers), construction equipment and vehicles (regular maintenance and check-ups of oil and gas tanks), by parking (manipulate) machinery and vehicles only on asphalted or concrete surfaces with surface runoff water collecting system.

The proper storm water drainage systems should be in place and care not to silt, pollute, block or otherwise negatively impact natural streams, rivers, ponds and lakes by construction activities.

Possibility of **soil pollution or erosion** can be reduced by regular maintenance and servicing of machines, by avoiding fuel and lubricant storage on site and by adhering the measures and standards for construction machinery. If installation of fuel storage tanks will be needed, they should have secondary tanks with sufficient volume to contain a spill from the largest fuel tank in the structure. The containment area will have a device (pump) to remove accumulated water. Total amount of the removed useful surface layer upon completion of construction works permanently will remain in the same location in the form of backfilling material. The physical and chemical properties of the temporarily removed surface layer of soil will remain unchanged, as well as the non-contamination and ecological role, since all the amount of soil from the possible excavations will be preserved and subsequently used in environmental remediation upon completion of construction works.

Each type of **generated waste** on the location has to be temporary stored in separate waste container which have to be labelled with waste type name and waste code and located at the solid surface foreseen for that purpose on the construction site. Construction waste has to be disposed exclusively in the designated locations. For management of PPE waste (protective gloves, masks, etc used for protection) it is necessary to follow the WHO and national official government guidance's and defined measures. This type of waste generated at construction site is considered municipal waste. Currently, Croatia has stricter conditions for managing waste protective equipment (gloves, masks, paper towel etc.) then those prescribed by WHO and EU guidelines. The Civil Protection Headquarters of the Republic of Croatia[102] issued recommendation for the waste management in the households and similar enclosed spaces (municipal waste).

Management of hazardous waste (asbestos waste) has to be done in accordance with national health and safety and waste management legislation. Final waste disposal has to be done by authorised waste management companies.

Procedure for chance findings and protection of **cultural and historical heritage** (protection of cultural-historical entities/area is relevant for this project) protection of is legally defined and should be applied. If during construction works some archaeological finds are encountered, works have to be stopped immediately and the competent authority informed. Works will resume only after

[102] https://civilna-zastita.gov.hr/vijesti/preporuke-za-kucanstva-i-ostale-zatvorene-prostore/2289

appropriate measures have been taken as required by relevant authority and after it confirms that works may continue.

To protect **biodiversity** the movement of heavy machinery have to be restricted to the road corridor. Handling of equipment and machinery have to be professional and careful to try to break out accidents such as fires or spills of large amounts of harmful substances into the environment, and thus adversely impact on the present flora and fauna. Work along watercourses and on watercourses and canals should be limited to as small an area as possible. It should be avoided, where possible, cutting of trees and other natural vegetation. In the case of removing vegetation, to prevent unnecessary loss of vegetation in the project area it is necessary to clearly marked the areas where vegetation will be removed. For the restoration of the removed natural vegetation cover, only autochthonous plant species that occur in the vegetation communities present in the wider area of the sub-project should be used.

It is desirable that the potential removal of vegetation is planned for the period when birds do not nest. All birds that nest they need to protect until their birds can fly. In case of finding the nests of endangered bird species, their disturbance should be prevented, and the central state body responsible for nature protection informed about the discovery.

Where possible, the area under rehabilitation / reconstruction / construction have to be fenced to lessen even occasional disturbance and dust on habitats and biodiversity. If noise barriers need to be constructed, they should be opaque or with a design and density of stickers that will prevent birds from entering the barriers as much as possible.

Traffic management have to be conducted in accordance with provisions of traffic legislation (e.g., appropriate lighting, traffic safety signs, barriers and flag persons that are seen easily or are easy to follow, road speed should be clearly posted). Transport should be avoided on access roads during rush hours.

Possible impacts on the **community health and safety** are linked to construction works. Contractor must ensure mitigation of these risks by adhering to WHO guidelines as well as Environmental Health and Safety (EHS) Guidelines of the World Bank Group and other good international industry practice (GIIP), and national guidance's and procedures.

Enforcement of environmental legislative framework will ensure minimising risk of affecting public health from deteriorating the ambient air quality and possible noise and vibration pollution.

To minimize this impact:

- keep construction equipment and machinery in an adequate technical condition; avoid idling of engines;
- water work sites in the course of dusty works or in case of especially hot and dry weather conditions;
- ensure that community is informed in advance of any work activities to occur outside of normal working hours,

Risk of road accidents due to increased traffic of construction vehicles and risk arising from accidents during transport of hazardous materials will be mitigated by implementation of provisions defined by Occupational Safety and Health Act and Act on the Transport of Dangerous Goods. The contractor who performs the construction works is obliged to arrange the site and to ensure that the works are carried out in accordance with the occupational health and safety regulations (e.g. appoint person responsible for safety at work, determining and marking construction site boundaries, ensure effective and safe transport routes, list of activities indicating hazardous works, define measures and instructions for

safety at work (e.g. earthworks, uncontrolled demolition of earthworks, carpentry etc.), ensure instructions on how to act in case of fires, earthquakes, etc.). Detailed written instructions on how to act in the case of an accident must be present in the vehicle when transporting dangerous goods as defined by Act on the Transport of Dangerous Goods.

Given the concentrated number of workers, there is a great potential for the spread of infectious disease in projects involving construction, as are the implications of such a spread. To minimise these risks contractor must apply measures and protocols defined in LPM.

If there will be a need for the migrant/foreign workers, the working conditions and terms of employment of migrant workers (domestic or foreign) should be the same or substantially equivalent to those of nonmigrant project workers performing the same type of work. This applies to migrant project workers employed or engaged directly by the Borrower or through a third party.

8.1.1 National due diligence documents and decisions

According to the national legislation, environmental impact assessment is obligatory for interventions defined in Annex I of the Regulation on environmental impact assessment (OG 61/14, 3/17).

Ministry of Environmental Protection and Green Transition is responsible for the procedures defined by Annex I and II, while administrative body in the county or in the City of Zagreb is responsible for the implementation of interventions defined by Annex III.

For interventions which have possible significant negative impact on the environment, and which are not listed in Annex I, II and III of the Regulation on environmental impact assessment, an opinion from competent authority (County, City of Zagreb) has to be obtain on is screening, or EIA needed or not.

Activities of Component 1 are not listed in Annex I, II and III of the Regulation on environmental impact assessment (OG 61/14, 3/17) and do not have possible significant negative impact on the environment, hence **environmental impact assessment does not have to be conducted.**

Due to declaring a natural disaster in the area of City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County or Karlovac County caused by earthquakes, according to the Articles 129 and 130 of the Construction Act, exception regarding building permitting process applies for construction works on earthquake damaged buildings. Accordingly, the earthquake damaged building can be returned to its original condition without obtaining a building permit.

Civil works under the Subcomponent 1.1 and 1.2 must be performed according to Act on Reconstruction of Earthquake Damaged Buildings in the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County (OG 21/23), respecting all legislation to which the Act refers.

Necessary administrative procedure and required technical documentation will depend on the type of civil works - levels of reconstruction of earthquake damaged building in relation to mechanical resistance and stability.

Damaged buildings must be renovated based on project of reconstruction of the building construction[103] and project of the complete reconstruction of the building. While preparing these projects the provisions of existing construction regulations governing the issue of meeting the basic requirements for construction in the main project must apply. In the case that building is located in

[103] The project of reconstruction of the building structure designs the repair of the structure, reinforcement of the structure and / or complete reconstruction of the structure and, if necessary, repair of non-structural elements.

the historic urban ensemble of the City of Zagreb, Krapina-zagorje and Zagreb County, projects must be prepared in accordance with special conditions determined by the competent body (in accordance with the regulations governing the protection of cultural heritage).

Declaring natural disaster and adoption of special Act regulating renovation of earthquake damaged area does not suspend application of environmental protection and OHS legislation. Furthermore, elements of Construction Act regulating environmental and social protection have to be respected during renovation process.

8.2 ESS due diligence documents

ESMF is developed in close cooperation with the relevant ministries. Due to the COVID19 consultation was mainly held through virtual meetings and by exchanging information and opinions by telephone and via e-mails.

Public consultation process for this ESMF started on January 5, 2021. The draft version of the ESMF was disclosed on Ministry of Physical Planning, Construction and State Assets web site, and also was available in hard copy at its premises, until January 22, 2021.

Public consultation meeting was held on January 21, 2021 and due to COVID 19 situation and measures in force in Croatia regarding public gatherings public consultation meeting was virtual.

During the consultation period no comments were received on ESMF nor electronically nor via hard copy.

Minutes of meeting from public consultation meeting are given in Annex VII.

There are three **Social Due Diligence instruments** that are to be used within the activities planned for this project.

1) Stakeholder Engagement Plan (SEP) is an instrument that is describing the planned stakeholder consultation and engagement process for the Project, as well as, the grievance mechanism for people to raise any concerns about the project activities.

Stakeholder refers to individuals or groups who are affected or likely to be affected by the project (**project-affected parties**) and may have an interest in the project (**other interested parties**).

The term “stakeholder engagement” is a way to describe a broader, more inclusive and continuous process between a project developer and those potentially affected by a Projects/(sub-) projects.

Stakeholder engagement can encompass a range of activities and approaches, including consultation, engagement, external relations, information disclosure and dissemination, and community participation. Stakeholder Identification and Analysis involves determining who the project stakeholders with more in-depth look at the interests of stakeholder groups, how they will be affected, and what influence they can have on a project. **Grievance Mechanism and Management** must be part of it.

The Initial Stakeholder Engagement Plan is prepared before project appraisal, and was disclosed on the MoPPCSA and WB website on May 6, 2020 and was periodically updated (in May 2022, in August 2023 and in July 2024).

Additionally at the sub-project level, especially in relation to Sub-component 1.1 and 1.2. detailed stakeholder engagement action plans will be developed.

2) Labor Management Procedure (LMP) The purpose of the LMP is to facilitate planning and implementation of the project. The LMP identify the main labor requirements and risks associated with the project and help the Borrower to determine the resources necessary to address project labor issues. The LMP is a living document, which is initiated early in project preparation, and is reviewed and updated throughout development and implementation of the project.

The document contains the following chapters:

1. OVERVIEW OF LABOR USE ON THE PROJECT
2. ASSESSMENT OF KEY POTENTIAL LABOR RISKS
3. BRIEF OVERVIEW OF LABOR LEGISLATION: TERMS AND CONDITIONS
4. BRIEF OVERVIEW OF LABOR LEGISLATION: OCCUPATIONAL HEALTH AND SAFETY
5. RESPONSIBLE STAFF
6. POLICIES AND PROCEDURES
7. AGE OF EMPLOYMENT
8. GRIEVANCE MECHANISM
9. CONTRACTOR MANAGEMENT
10. COMMUNITY WORKERS
11. PRIMARY SUPPLY WORKERS

Labor Management Procedure is prepared as a part of this ESMF and is given in ANNEX V**.**

Depending on the type, location, sensitivity, the scale of the project, the nature, magnitude and duration of potential environmental impacts for some sub-projects more intensive impacts and higher risk may be expected. For example, it refers to the reconstruction activities for which it is assumed that will last longer then intervention and rehabilitation activities, and thus will pose more intensive impacts. Also, because of wider scope of reconstruction activities generated amounts of construction waste will be higher in that case.

3) Voluntary Land Donation (VLD)

All potential voluntary land donations related to the Project are Subject to prior Bank approval, and the voluntary land donation process must be in line with the ESS 5. For that purpose, PIU team will prove that

(a) the potential donor or donors have been appropriately informed and consulted about the project and the choices available to them;

(b) potential donors are aware that refusal is an option, and have confirmed in writing their willing-ness to proceed with the donation;

(c) the amount of land being donated is minor and will not reduce the donor's remaining land area below that required to maintain the donor's livelihood at current levels;

(d) no household relocation is involved;

(e) the donor is expected to benefit directly from the project; and

(f) for community or collective land, donation can only occur with the consent of individuals using or occupying the land.

To prove above mentioned requirements, the PIU will maintain a transparent record of all consultations and agreements reached, as well as collect required documentation.

Voluntary land donation is defined as the ceding of a property by an owner who is:

- appropriately informed;
- can exercise free will, that is, can refuse to donate.

Voluntary land donations may involve some monetary or nonmonetary benefits or incentives provided to the land donor by the project or by community members benefiting from a project. Both can be broadly classified as a voluntary land donation, because the transfer of assets takes place without payment of compensation at replacement value.

Appropriately informed means that the owner has all available information regarding the proposed activity and its impacts, its land requirements, and its alternative activity sites, as well as his or her rights to compensation. The owner has also been provided with sufficient time to consider his or her disposition of the property, and has knowingly rejected the right to renege on his or her decision. Free will means that the owner can reject the proposal to give up his or her land, because, for example, there are viable alternatives available to the project (such as rerouting a water main if an owner refuses access to his or her property), or where no viable alternatives are available, the donation is to the benefit of the owner (such as a community-based investment project that benefits the owner of land to be donated).

In some cases, however, donations may be induced through informal pressure or, in extreme cases, coercion. In other cases, people may agree to donate land because they are not aware that they are entitled to compensation and they have not been given sufficient information to make an informed choice. To address these risks, it is important to conduct due diligence, as described above. In this regard, it is also important to confirm that donated land is free of occupancy or use by people other than the donor. Where land is donated by the owner, other users and occupiers of the land beyond the legal owner who will be physically or economically displaced as a result of the donation, should equally be consulted and the impacts on them should be addressed in accordance with this ESS.

Voluntary land donations are documented. This calls for:

a) written notification indicating the location and amount of land that is sought and its intended use;

b) a formal statement of donation signed by each owner or user involved, establishing informed consent and confirming that there is no disputed ownership and that there are no claims by renters, users, squatters, or encroachers. Any taxes or fees owed for processing or registration of the land transfer, if applicable, are paid in full by the Borrower, who maintains the records of donations, including documentation. Documentation is made available for review in any grievance that may arise. Ensuring transparency with regard to voluntary land donations may benefit from an independent third-party review.

Voluntary Land Donation Report template is presented in ANNEX V.

Given to that, sub-projects of reconstruction and construction are identified as sub-projects of moderate risk, while rehabilitation activities are of low to moderate risk. Therefore, a tailored/scoped environmental assessment is not required – just a comprehensive, standalone documents for each project, **ESMP for reconstruction and construction activities and ESMPs checklist for rehabilitation activities** (Table 22).

Activities that require the preparation of the ESMP Checklist are as follows:

- ***Activity No.1:*** **Rehabilitation of structures (Subcomponent 1.1)** - ***ESMP Checklist*** will help assess potential environmental impacts associated with the proposed sub-project, identify potential environmental improvement opportunities, and recommend measures for to the prevention, minimization and mitigation of environmental and social impacts.

Activities that require the preparation of the ESMP are as follows:

- ***Activity No. 2***: **Reconstruction (Subcomponent 1.1) - demolition of unsafe buildings, and the in-situ reconstruction of new buildings to replace damaged buildings,**
- **Activity No. 3: Construction (Subcomponent 1.1) - construction of new buildings,**
- **Activity No. 4: Design (Subcomponent 1.2) – development designs and studies related to rehabilitation and reconstruction of public buildings**

The content of the ESMP has to include: (i) Mitigation, (ii) Monitoring, (iii) Capacity development and training, and (iv) Implementation schedule and cost estimates.

The template for the ESMP is given in ANNEX IV.

Table 22. Environmental and social screening table

Activiti No.	Subcomponent	Type of activity	Description of the activity	ESS documentation required
1	Subcomponent 1.1	**Rehabilitation**	Structural strengthening of existing buildings to meet a higher seismic performance and improvement of energy efficiency	**Site-specific ESMPs for each individual sub-project in form of a checklist** **In case of sub-projects located in the area of protected cultural and historical entity CHMPs for each individual sub-project.** **SEP for individual sub-project.**
2	Subcomponent 1.1	**Reconstruction**	Demolition of unsafe buildings, and the reconstruction of new buildings to replace damaged buildings.	**Environmental and Social Management Plan (ESMP) for each individual sub-project.** **In case of sub-projects located in the area of protected cultural and historical entity CHMPs for each individual sub-project.** **SEP for individual sub-project.**
3.	Subcomponent 1.1	**Construction**	Construction of new buildings.	**Environmental and Social Management Plan (ESMP) for each individual sub-project.** **In case of sub-projects located in the area of protected cultural and historical entity CHMPs for each individual sub-project.** **SEP for individual sub-project.**
4	Subcomponent 1.2	**Design**	Development of designs and studies related to rehabilitation and reconstruction of public buildings	**Environmental and Social Management Plan (ESMP) for each individual sub-project.** **In case of sub-projects located in the area of protected cultural and historical entity CHMPs for each individual sub-project.** **SEP for individual sub-project.**

Cultural heritage related risks will be addressed through the development of Cultural Heritage **Management Plan (CHMP)** and, where applicable, with integrated conditions obtained in opinions and permits of competent authorities for interventions into physical cultural heritage. CHMP will be part of ESMP and annex to ESMP Checklist.

8.2.1.1 Environmental and Social Review (Step-by-Step}

For projects involving multiple sub-projects the World Bank requirements involve mandatory review of adequacy of local environmental and social requirements relevant for the sub-projects, as well as assessment of the Borrower's capacity to manage the environmental and social risks and impacts of such sub-projects, particularly, Borrower's capacity to (a) perform sub-projects screening; (b) ensure necessary specialists for conducting environmental and social assessment; (c) review findings of environmental and social assessment for individual sub-projects; (d) implement mitigation measures; and (e) monitor environmental and social impact during project implementation. The WB requires appropriate environmental and social assessment of sub-projects, preparation and implementation of such sub-projects (Substantial Risk, Moderate Risk and Low Risk subprojects) in accordance with national law and any requirement of the ESSs that the Bank deems relevant to such sub-projects by developing **and following procedures to secure ESF and regulation compliant implementation**. If necessary, the project may envisage measures to further strengthen Borrower's capacities.

The MoPPCSA PIU (PIU-1) ensures that environmental and social management is an integral part of sub-project planning, design, implementation, and operation and maintenance. The PIU-1 will screen, monitor and report on the environmental and social performance, national legislation and ESF compliance under each sub-project, ensure efficient application of measures as defined in site-specific management instruments including ESMF.

Each sub-project and its activities must undergo environmental and social assessment compliant to this ESMF, and consequently the ESF integrating stakeholder engagement activities including consultation and feedback.

The Environmental and Social assessment follows the 5 step Process to identify risks associated with specific sub-projects, screen out any high-risk activity, identify potential impacts and define measures aimed to prevent or minimize negative impacts and determine the type of management instrument required to meet the project standards.

STEP 1: Subproject screening and risk classification

The Environmental and Social Screening Questionnaire (ESSQ) provided in ANNEX II is filled out by the PIU 1 under the guidance of the PIUs Environmental and Social Specialists (ESS) for every sub-project. The ESSQ helps the ES specialist to determine the sub - project risk classification based on screening criteria and preliminary impact assessment. Screening according to the World Bank risk classification identifies that sub-projects under Component 1 are **moderate and low risk**.

ESSQ consists of four parts:

(1) Administrative and institutional data includes a narrative part that characterizes the project, including administrative and institutional data, and a brief description of technical contents of the project, as well as the location of the subproject,

(2) Question part with questions that should assist in determining whether the project in question is eligible for funding and questions on potential adverse environmental and social impacts covering all ESS 1-10, with two possible answers: "yes" or "no",
(3) Screening report proposing category risk for sub-project (and associated facilities if any) and required E&S instrument for both (Environemntal and Social Management Plan (ESMP)/ESMP Checklist/Cultural Heritage Management Plan (CHMP) /Environmental and Social Code of Practice (ESCOP)).

Determining risk will take into account relevant issues, such as the type, location, sensitivity, and scale of the project, use of hazardous or toxic materials, impacts on protected areas, impact on cultural heritage, existence of associated facilities etc. In this stage, the need for additional E&S studies is determined in order to properly address and mitigate ES risks (traffic study, noise study, environmental protection study, etc.).

Once the ESSQ is satisfactorily completed, the E&S Screening report is submitted to the WB together with the proposed decision on the category of the subproject/activity. The final decision requires endorsement of the World Bank.

STEP 2: Sub-Project Preparation

The PIU-1 prepares necessary documentation for sub-project implementation including, technical documentation for the sub-project to be financed including the technical description of the sub-project, TORs for development of additional studies, permits and approvals issued by competent bodies related to the implementation of the sub-project as well as the time schedule of works.

STEP 3: Preparation and Disclosure of ESMP/ESMP Checklist/CHMP/ESCOP and public consultations

Rehabilitation activities (Subcomponent 1.1) are expected to have small to medium environmental and social impacts. For reconstruction and construction activities (Subcomponent 1.1) and design (Subcomponent 1.2). ESMP will be developed for each sub-project (ANNEX IV). For rehabilitation activities (sub-component 1.1) ESMP Checklists will be prepared (ANNEX III).

Furthermore, for the Cultural Heritage Management Plans (CHMPs) for the buildings located in protected cultural-historical entities/area PIU will: (i) obtain all nationally required conditions and if necessary permits from the cultural heritage competent authority and integrate them in the CHMP; (ii) formulate CHMP, satisfactory to WB, that will reflect requirements of ESF and national legislation; (iii) disclose and consult CHMP, as an annex of ESMP/ESMP Checklists in line with the ESS10.

For Associated Facilities ESMP Checklist or ESCOPs (Environmental and Social Code of Practice) are developed. The Environmental and Social Code of Practice (ESCOP) aims to guide the avoidance, mitigation and/or management of the potential adverse environmental and social risks and impacts related to implementation and use of associated facilities. ESCOP is outlining the procedures that contractors will follow to address the Environmental and Social (E&S) risks and impacts that may arise from the implementation of sub-projects. The Project ESCOP includes ES risks and impacts that have been identified, and associated measures that will be implemented to avoid, mitigate or manage them.

Required additional studies will be reviewed by the PIU to meet all requirements prescribed in the TOR and to ensure compliance with national legislation and World Bank standards. All developed studies will be included into ESMPs as an Annex. All documents need to be prepared in Croatian and English language. When confident that the document meets WB quality and content requirements ES specialist submits the draft documents for in English language for the review by the World Bank.

After the WB approval is obtained, the documents (ESMP/ESMP Checklist with CHMP) must be disclosed in Croatian language and undergo public consultation process.

Public consultation and engagement are covered in national legislation, including the right to address petitions, request information on projects carried by public bodies, consultation of neighbors and communities, etc. Additionally, the processes for reaching and informing potentially impacted persons and communities will be amended by WB principles, and by engaging actively with these persons/groups, especially with vulnerable groups where such situations will surface.

These aspects are dealt in the current document, under the provisions for Grievance Redress Mechanism, Public Consultation and Social Risk mitigation measures and also through SEP.

PIU team members will be responsible for public disclosure of documents and for organizing and helding public presentations (as a part of public consultation process) of planned sub-projects and E&S instruments as well as the entire project implementation process.

Information about upcoming public consultations during the preparation of ESMP/ESMPs Check list/CHMP for respective sites will be posted on the Project website. It will be also disseminated using other information channels, like leaflets/flyers in public spaces and notes on the construction sites. The PIU will also explore means to disseminate this information in accessible formats, both online and offline.

Disclosure of draft ESMP/ESMP Checklist with CHMP when applicable will include public announcement for organization of the public disclosure containing the call for comments, draft version of ESMP/ESMP Checklist with CHMP developed for each sub-project and site-specific SEP developed for each sub-project in Croatian language.

The disclosure package will be publicly available on the Project website. Hard copies will be available in MoPPCSA.

All comments from the public will be addressed and if needed reflected in the ESMP/ESMPs checklist/CHMP/SEPs. All comments and questions from the public will be processed and together with feedback incorporated in the final version of the ESMP/ESMP Checklist/CHMP/site-specific SEP and captured in the minutes of the meeting. Documents will be considered finalized only after reflecting relevant comments obtained during the public consultations process.

The PIU will submit such final document to the WB with the confirmation of re-disclosure, and web address where documents can be accessed.

When satisfied with the quality of ESMP/ESMP Checklists/CHMP/SEPs, the Bank may decide to perform only post review of these documents. The PIU will include ESMP/ESMP Checklist including CHMPs if applicable in bidding and contracting documentation.

Table 23. Specific responsibilities for the identification, assessment and addressing environmental and social aspects of the project activities, by implementing body

Responsibility	Implementing body
Preparation of site-specific ESMP/ESMP Checklists/CHMP/ESCOP	MoPPCSA PIU
Review of additional studies	MoPPCSA PIU/WB
Review and approval of site-specific ESMP/ESMP Checklists/CHMP/ESCOP	WB
Integration of site-specific ESMP/ESMP Checklists/CHMP/ESCOP into Bidding Documents and respective Contracts	MoPPCSA PIU

Responsibility	Implementing body
Execution of site-specific ESMP/ESMPs Checklists/CHMP/ESCOP	Respective Contractor(s) and MoPPCSA PIU
Monitoring and reporting of compliance with ESMF and site-specific ESMP/ESMP Checklists/CHMP/ESCOP	MoPPCSA PIU and supervising engineer
Reporting compliance to WB	MoPPCSA PIU

STEP 4: Integration of ESMP/ESMP Checklist/CHMP/ESCOP in tender documents

ESMP/ESMP Checklist/CHMP/ESCOP will be prepared prior to the bidding of works and the final version integrated into tender documents for the selected sub-projects and in the contracts for their execution to be signed with the selected works contractors. The Contractors will be required to demonstrate that all mitigation measures have been accounted for to ensure sub-project implementation in environmentally and socially acceptable manner.

STEP 5: Implementation, project supervision, monitoring and reporting

The contractor (and consequently all its sub-contractors) is responsible for the implementation of ESMP/ESMP Checklist/CHMP/ESCOP measures and monitoring plan. MoPPCSA PIU regularly supervises works through site visits, review of documentations and other available means. Supervising Engineer is responsible for regular reporting of ESMP/ESMP Checklist/CHMP/ESCOP compliance to the MoPPCSA PIU. In the same time the MoPPCSA PIU reports on ESMF and ESMP/ESMP Checklist/CHMP/ESCOP implementation compliance to the WB in semiannual reports and regular progress reports. Reporting arrangements are subject to change depending on the PIU-1 performance and agreement with the WB.

Retroactive financing processing

Compliance with applicable ESSs (primarily ESS2, ESS3, and ESS4) requirements will be a precondition for retroactive financing of finished works. To be able to receive reimbursement, the Applicant will need to demonstrate that proposed works have been carried out in line with the national legislation, ESF and WB EHSG: The audit procedures will need to provide a proof, acceptable to the WB, that the proposed works have been carried out in a way consistent with material objectives of the ESF; ESSs requirements include, but are not limited to, e.g. that (i) no significant accidents, injuries or fatalities took place as a result of OHS measures failure, the Contractor carried out all required trainings, certifications, permits are obtained, appropriate OHS competency is in place, and other regulative and ESF requirements were met, during the re-financed operation; (ii) final waste disposal location can be established (through waste manifest, contract with the licensed company, other documents), etc. To ensure full compliance with the relevant provisions of the ESCP and the environmental and social requirements of the ESF, given the nature of such works (relatively small non-structural works and demolition of ruins), the Borrower and the IBRD agreed that the sample of activities be examined after the under the technical review process upon project effectiveness. For the selected sample, the Applicant must demonstrate (and the Borrower verify in the Audit Report) that works have been carried out in full compliance with the ESF. The size of the sample will be satisfactory to the WB and the sample itself streamlined to include all companies with registered significant OHS and E&S incidents. For this purpose, the Borrower will develop and distribute to Applicants an E&S questionnaire (content satisfactory to the WB) that would enable identification of works/sub-projects proposed of retroactive financing that carry larger E&S risks as well as those with registered OHS and E&S issues (e.g. registered or reported OHS accidents such as fatalities, significant injuries, negative inspection findings, etc.). Such works will be a subject of mandatory E&S audit. A part of the sample will also be randomly selected. The sample size will be agreed with the WB.

9 FEEDBACK AND GRIEVANCE REDRESS MECHANISM AND PUBLIC REACH AND CITIZEN ENGAGAMENT

The main objective of the Grievance Redress Mechanism (GRM) is to allow stakeholders to submit complaints, feedback, queries, suggestions, or compliments related to the overall management and implementation of the project. The GRM is intended to address issues and complaints from stakeholders in an efficient, timely, and cost-effective manner. Specifically, it provides a transparent and credible process for fair, effective and lasting outcomes. It also builds trust and cooperation as an integral component of broader community consultation that facilitates corrective actions.

Project Implementation Unit (PIU) will assign a staff member under the direct responsibility of the Head of the PIU to be responsible for managing the GRM.

Channels available to stakeholders who would like to submit complaints, feedback, queries, suggestions, or compliments are presented in the table below.

Table 24. Channels for submitting complaints, feedback, queries, suggestions, or compliments

- general address of PIU 1 (piu1@mpgi.hr);
- dedicated email address for each Sub-Project (Rebro3@mpgi.hr, Nazorova53@mpgi.hr, Hematologija@mpgi.hr, StrukovnaPetrinja@mpgi.hr; studentski.dom@mpgi.hr; info.fer@mpgi.hr);
- telephone number (+385 1 6448837 or +385 1 644 8819);
- postal address (Savska 41, 10 000 Zagreb);
- in-person complaints to facility administrators / building managers.

Any project-related feedback or grievance received via the channels listed in Table 24. should be forwarded within 24 hours to the PIU GRM focal point, who will register it in a dedicated Excel database and log the following information about it:

Allocated tracking number of the case; Date received; Name of feedback provider / complainant; feedback provider / complainant contact details; Nature of the feedback provided/complaint; Category of feedback category: general inquiry, project design (sub-category: environmental issues (noise, air, traffic, waste etc.), social issues, technical design), construction works (sub-category: environmental issues (noise, dust, traffic, waste/debris disposal), social issues, quality of works) and type of feedback (complaint, suggestion, compliment, request for documentation, inquiry); Information about the feedback provider / complainant along categories to be developed in the updated SEP; Action taken and response provided to the feedback provider / complainant; Date response was provided; Feedback provider / complainant satisfaction with response provided; Current status of the case.

Upon receipt of a project-related feedback or grievance, the PIU GRM focal point will acknowledge receipt of the feedback/grievance within 24 hours to the person who submitted it, outlining the way forward and how soon the feedback provider/complainant can expect to hear back from the project implementers.

In the case of complaints, the PIU GRM focal point will then investigate the submission by reaching out to relevant actors as appropriate.

Following the investigation, the PIU GRM focal point will propose a resolution to the complainant in writing within a maximum timeframe of 12 days from the moment the complaint was acknowledged. If an issue is still pending by the end of 12 days, the complainant will be provided with an update regarding the status of the complaint and the estimated time by which a proposed resolution will be

provided. All grievances should be resolved within a maximum of 21 days of receipt. To enhance accountability, these timelines will be disseminated.

In case a complainant is dissatisfied with the proposed resolution, an appeal may be lodged within 15 days following the receipt of the decision with the respective Ministry, who shall decide on the lodged appeal.

The details of the appeal process at the Ministry level (MoPPCSA) will be designed and elaborated in the final SEP.

As a final level of appeal, an administrative dispute may be instituted before the Administrative Court of the Republic of Croatia. If the amicable settlement of any major dispute in implementation fails for any reason, complainants may still seek a judicial settlement before the competent court.

Semi-annual summaries on complaints, feedback, queries, suggestions and compliments, together with the status of implementation of associated corrective/preventative actions, will be collated by the designated PIU GRM focal points, and referred to the PIU manager. The summaries will allow to assess the volume and nature of feedback received and enhance the project's ability to address it in a timely and effective manner. These reports will also be included in the reporting to the World Bank.

The GRM will be advertised widely, including through on-site information boards and posters at construction sites and in facilities targeted under the project, as well as on the Project website. To ensure a satisfactory level of involvement of all potential and relevant users of the envisaged online GIS platform, the platform will be advertised on the Project website, in local and national media programs, newspapers, social networks, etc.

Information on public engagement activities undertaken by the Project will be conveyed to the stakeholders by discloser of Stakeholder Engagement Report on the Project's website.

The entire process of monitoring and reporting based on the indicators and other ES aspects and measures, including the reporting of consultants to the PIU, and the reporting of the PIU to the World Bank and relevant ministries is in detailed described in the SEP.

To the extent possible, public outreach and citizen engagement activities for this Project will rely upon existing mechanisms and resources: public information boards with contact information publicly displayed in accessible locations around construction premises, online and print media (newspaper, magazines), posters and brochures, local and national media programs (radio and TV), newspapers, social media, websites (Ministries, Project's website https://www.oporavak-i-pripravnost.hr, https://www.koronavirus.hr/, http://www.hzjz.hr/), emails, SMS, etc.

To ensure that stakeholders understand the Project's risks and impacts and potential opportunities, all appropriate information will be disclosed to the stakeholders in a timely, understandable, accessible and appropriate manner and format.

The PIU team will closely work with the communications specialist, in order to facilitate community meetings, campaigns and surveys on issues specific to these groups, communicating information in a form and language that can be easily understood. It will be also identified ways to link public awareness and information efforts especially for vulnerable groups (e.g. people with disabilities, children/young people) or with gender networks and associations to help disseminate information and awareness.

World bank grievance redress service

The World Bank's Grievance Redress Service (GRS) is an avenue for people and communities to submit complaints directly to the World Bank if they believe a Bank-funded project has or is likely to adversely

affect them. This Service ensures that complaints received are promptly reviewed in order to address project-related concerns.

Also, the project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures.

Information on how to submit complaints to the World Bank's corporate GRS, is available via http://www.worldbank.org/GRS . Information on how to submit complaints to the World Bank Inspection Panel, is available via www.inspectionpanel.org .

10 PROJECT IMPLEMENTATION SETTING UP

10.1 Implementation

Croatia Earthquake Recovery and Public Health Preparedness Project – Component (1) - Earthquake Recovery and Reconstruction will be implemented by the Project Implementation Unit (PIU-1) that will be established within the MoPPCSA.

The MoPPCSA PIU will be responsible for Component 1 and will be accountable for reporting to both the World Bank and the PSC on all Project activities and progress.

The PIU-1 will be responsible for project coordination, the preparation of consolidated reports. It will be responsible for overall implementation, including functions such as procurement, technical inputs, progress monitoring, quality control, and social and environmental safeguards.

Oversight and guidance for the implementation of the SEP will also be provided by PIU-1. The PIU-1 will coordinate with other relevant government entities (e.g. the Ministry of Health, Ministry of Science, Education and Youth, Civil Protection Administration, etc.), and non-government organizations.

Required staff who will be engaged for project is shown in the following Table 25.

Main Responsibilities of MoPPCSA regarding environmental and social policies and standards:

a) Implements activities related to environmental and social policies and standards in accordance with the provisions of the loan agreement, ESCP and ESF;
b) Ensures that the terms of reference for any design consultancy services incorporate the World Bank requirements and environmental and social policies and standards as defined under this ESMs and sub-project ESMP/ESMPs Checklist/CHMP, including consultations on the results of environmental and social impact assessments and draft ESMP/ESMPs Checklist/CHMP, timely disclosure of draft and final ESMP/ESMPs Checklist/CHMP and screening for gender based violence (GBV);
c) Demonstrates, in the manner acceptable to the WB, compliance of finalized works with the ESF;
d) Ensures technical coordination of activities related to the preparation and implementation of ESMP/ESMPs Checklist/CHMP;
e) Ensures that the execution of construction works is in accordance with the ESMF and site-specific mitigation measures; Manages the GRM to monitor, respond and report on feedback provided by the public on the project's activities;
f) Collaborates with the communication and legal expert on communication about project activities to direct beneficiaries, affected persons and the wider public, particularly inclusive public outreach activities that are sufficiently nuanced and targeted effectively towards vulnerable groups (e.g. men/women, disabled, youth/elderly etc.);
g) Explores opportunities to consult and engage with project beneficiaries and members of the general public;
h) Develops a monitoring system of the activities, carries out and updates continuously the data base related to the implemented activities in order to dispose at any time of relevant monitoring information comparable and compatible concerning the problems of environmental protection on sites;

i) Monitors implementation of environmental and social policies and standards' activities including risks, impacts and mitigation measures in compliance with ESF, and update monitoring database on a regular basis. These include measures to mitigate the impact of construction activities, as well as health and safety protection measures, and reporting of any incidents as per ESIRT. Prepares and submits the initiation of legal documents for the approval of investments in accordance with the legal provisions in force;
j) Ensures the execution of the construction works in accordance with the general ESMF and relevant site-specific ESMP/ESMPs Checklist/CHMP and monitors and reports the social and environmental aspects of the project throughout its period of operation;
k) Prepares reports, as defined in the ESCP, and inform the project manager whenever there is a deviation from the pre-established program, in order to review the work plans;
l) Prepares periodic reports for the World Bank and cooperates for the realization of the biannual reports on the implementation state of the project;
m) Maintains contact with environmental and social specialists of the World Bank, and asks for advice on any problem that requires guidance regarding the activity in the field.

Table 25. PIU-1 staff engaged for the Project

Item	Name of position	No. of Government personnel	No. of external experts to be contracted
1	Project Manager		1
2	Deputy Project Manager	1	
3.	Assistant Project Manager	1	
4	Financial Manager		1
5	Technical Manager	1	
6	Procurement experts	1	1
7	Financial experts		1
8	Social/environmental experts		3
9	Monitoring/assessment experts		1
10	Communication expert	1	
11	Legal counsel/ legal advisor	1	
12	Construction Engineer	1	2
13	Architect	1	1
14	Secretary	1	1
TOTAL		**9**	**12**

World Bank will provide implementation support to overall Project (Component 1) through: close cooperation with PIUs, review of implementation performance and progress, implementation support missions, facilitating knowledge exchange, supervision and support on procurement process and financial management.

The World Bank team's social and environmental safeguards specialists will provide technical support and oversight throughout Project implementation and will take responsibility for initiating the timely preparation of required safeguards instruments. World Bank specialist will review all prepared ESF documents. Formal implementation support missions and field visits will ensure that the safeguards processes are in line with World Bank requirements. Capacity building activities will continue on an ongoing basis throughout project implementation.

World Bank will provide training on ESF and relevant standards to build capacity of the relevant PIU staff and guide them in the preparation, implementation, and supervision of all project's environmental and social instruments.

Furthermore, MoPPCSA PIUs will provide training on implementation of environmental and social due diligence documents to all staff working with contractors and sub-contractors that are responsible for environment, and social issues.

Table 26. Capacity support (training)

		TIMEFRAME	RESPONSIBILE ENTITY/AUTHORITY
TRAINING OF PIU STAFF	Basic training to all MoPPCSA and MoH PIUs staff on basic ESF and related environmental and social issues; In-depth training to PIUs' environmental, social specialists, and communications and community outreach specialist, as well as to all other staff responsible for ensuring full compliance with the ESF and relevant instruments on: • OHS, environmental and social assessments, • ESMP preparation, • Labour influx, community health and safety, • Stakeholder engagement and grievance redress, • WHO Guidelines on Safe Management of Wastes from Health-Care Activities • National sanitary norms and regulations. • Codes of conduct • Monitoring and reporting, and • Other relevant topics.	Initial training within three months after the Project Effectiveness Date. Refresher trainings at least once a year or as needed, during project implementation	Project Implementation Units/PIUs (MoPPCSA and MoH) Funding from the Project budget
TRAINING FOR CONTRACTORS' STAFF	Training on implementation of environmental and social due diligence documents (e.g. OHS, environmental and social assessments, labour influx, community health and safety, stakeholder engagement, grievance redress, codes of conduct, etc.) to all staff working with contractors and sub-contractors that are responsible for environment, and social issues.	Prior to commencing works	MoPPCSA PIU Funding from the Project budget

10.2 Reporting arrangements

The MoPPCSA PIU (PIU-1) will be accountable for reporting to both the World Bank and the Project Steering Committee (PSC) on all project activities and progress.

A PSC will be chaired by the MoPPCSA State Secretary and comprise representatives from the Ministry of Finance (MoF), MoH, MoSE, Ministry of the Interior, the City of Zagreb and Sisak-Moslavina County. The main responsibility of the PSC will be to review the annual project work plan, facilitate adequate multisectoral and cross-agency coordination, monitor the progress of Project implementation, and make recommendations to improve the Project implementation. The committee will meet at a minimum every six months. During the first year of the project, it may meet more frequently, and organize additional meetings as required.

For all sub-projects the environmental and social performance must be monitored in accordance with the legal agreement (including the ESCP).

Regular reports, as set out in the ESCP have to be provided to the Bank as a result of the monitoring. Such reports will provide an accurate and objective record of project implementation, including compliance with the ESCP and the requirements of the ESMP/ESMP checklist/CHMP.

Monitoring and evaluation will be carried out by the PIU-1 on the basis of the indicators and milestones developed in the Results Framework. Project monitoring will occur as a periodic function and will include carrying out process reviews/audits, reporting on outputs, and maintaining progressive records, as well as third-party monitoring and social auditing.

The PIU-1 will prepare consolidated semi-annual progress reports. It will cover the following: (a) physical and financial progress achieved against agreed implementation and disbursement indicators; (b) issues and problem areas, including comments on actions to address identified problems; and (c) work programs and cost estimates for the coming year, including revised estimates for the former period. The reports will also include data on grievances and resolutions to allow for timely corrective action.

Detailed responsibilities during the Project implementation and reporting obligations are given below in the Table 27. and Table 28.

Table 27. Responsibilities during project preparation/implementation

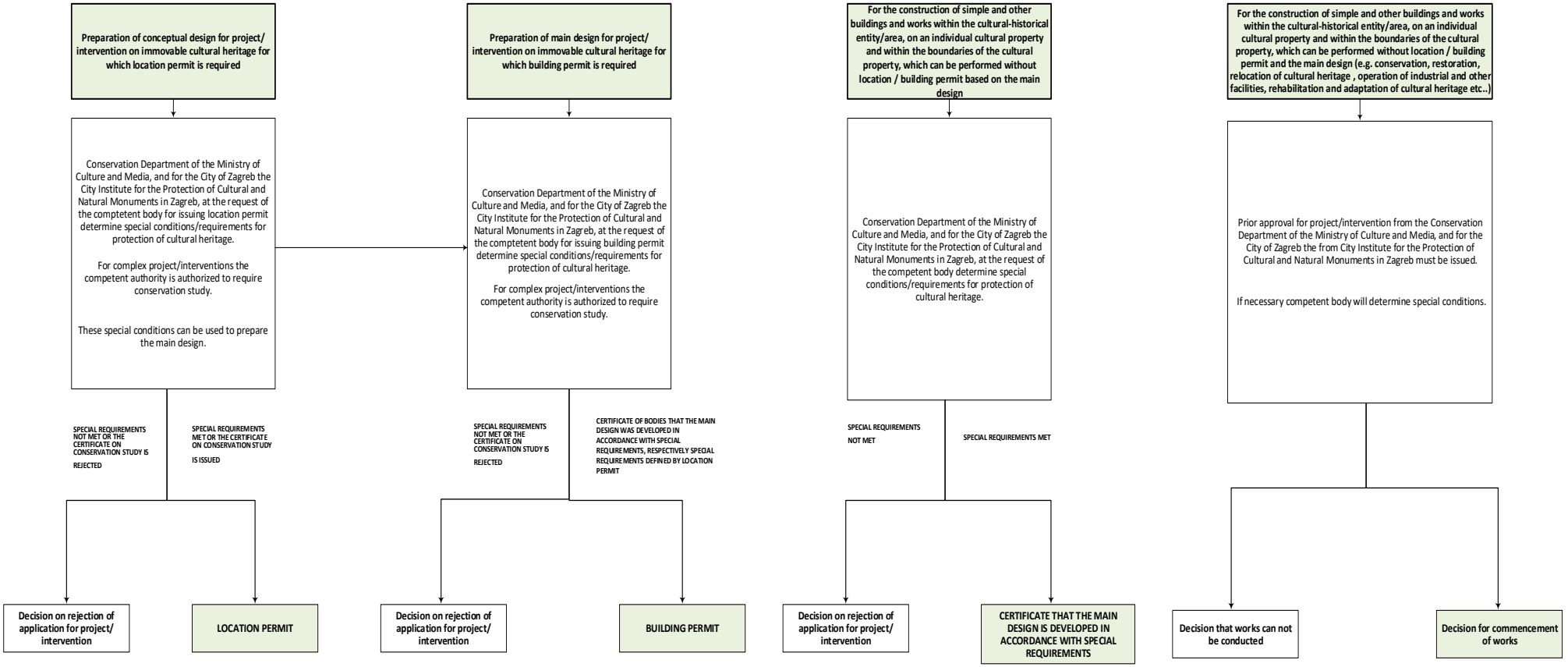
Responsible entity / authority	Material measures and actions
PIU-1 (MoPPCSA)	Responsible to ensure the implementation of the provisions of the ESMF by all parties, such as sub-project Borrowers and Contractors, including environmental and social monitoring, evaluation and reporting
The Environmental/Social Specialist (ES specialist)	- will be engaged by the PIU-1, - preparing site-specific ESMPs/ESMP Checklist/CHMP, - ensuring that all sub - projects are carried out with due regard to appropriate health, safety, social, and environmental standards and practices, and in accordance with the Safeguards Instruments (ESMF, site specific ESMPs/ESMP Checklists/CHMP), - advising and guiding the contractors on the identification, assessment and mitigation of environmental and social impacts at the sub-project level and preparation of monitoring reports, - conducting environmental/social supervision by carrying out document reviews, site visits and interviews with Contractor, Construction Supervisors at least once a month, - holding regular meetings with the Contractor and representatives from PIU-1, and beneficiaries, on a monthly basis, - project workers trainings regarding: • Occupational Health and Safety • Codes of conduct • Unacceptability of Gender-Based • Violence, Sexual Exploitation and Abuse • and Sexual Harassment • Workplace Grievance Redress • Mechanism • Waste management precautions - responding on WB requirements and Head of PIU
PIU-1 GRM focal points	- responsible for managing the Grievance Redress Mechanism (GRM)

Table 28. Reporting obligations during project implementation

Responsible entity / authority	Report	Frequency
Contractors (Supervising engineer) to PIU-1	- Monitoring reports (ESMPs/ESMP Checklists/CHMPs implementation and OHS issues reports.)	- Monthly (including initial/inception report)
PIU -1– reporting to WB	- Environmental and Social assessment implementation report	- Semi-annually unless differently required by WB (e.g. monthly upon request for activities with potentially substantial environmental and social risks)
The Environmental/Social Specialist (ES specialist)	- Brief description of issues identified, corrective action required or taken, timeline for corrective action agreed with contractor	- Upon completion of each site visit
GRM focal points for PIU 1	- Snapshot of status of complaints received/ resolved/ delayed (FGRM Report)	- Monthly
GRM focal points for PIU 1 and ES specialists	- Snapshots of stakeholder engagement activities carried, feedback provided/incorporated or rationale for not including feedback (SEP Report)	- Monthly
PIU-1 GRM focal points (part of the reporting to the World Bank)	- Summaries on complaints, feedback, queries, suggestions and compliments, together with the status of implementation of associated corrective / preventative actions, will be collated and referred to the PIU manager.	- Semi-annual
The PIU-1 to World Bank	- Progress report for WB on: physical and financial progress achieved against agreed implementation and disbursement indicators; issues and problem areas, including comments on actions to address identified problems; work programs and cost estimates for the coming year, including revised estimates for the former period; data on grievances and resolutions to allow for timely corrective action.	- Semi-annual
PIU 1 to World Bank	– Environment and Social Incident Report (ESIRT) (Incident/Accident Report for WB to promptly notify of any incident or accident related to or having an impact on the Project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers, including - WB has to notify the Bank within 48 hours after learning of the incident or accident	- Immediate

11 ANNEXES

ANNEX I. PROTECTION OF CULTURAL HERITAGE WITHIN BUILDING PERMITTING PROCESS ACCORDING TO ACT ON THE PROTECTION AND PRESERVATION OF CULTURAL PROPERTY (OG 69/99, 151/03, 157/03, 100/04, 87/09, 88/10, 61/11, 25/12, 136/12, 157/13, 152/14, 98/15, 44/17, 90/18, 32/20, 62/20, 117/21, 114/21)



ANNEX II. ENVIRONMENTAL AND SOCIAL SCREENING QUESTIONNAIRE AND SCREENING REPORT

This form is to be used by the PIU-1 to screen for the potential environmental and social risks and impacts of a proposed sub-project. It will help the PIU-1 in establishing an appropriate E&S risk rating for these sub-projects and specifying the type of environmental and social assessment required, including specific instruments/plans. Use of this form will allow the PIU-1 to form an initial view of the potential risks and impacts of a sub-project***. It is not a substitute for project-specific E&S assessments or specific mitigation plans.***

Table 29. Tentative environmental and social screening questionnaire

Name of the project	
Name of the sub-project:	
Estimated Investment:	
Start/Completion Date	
Brief description of the sub-project activities (describe main project features and location of work execution): *Annexes for all additional information can be supplemented if necessary (e.g.) maps with the geographical location of the project*	

No.	Screening Questionnaire	Yes	No	Not known	Not applicable	Additional Clarifications
1.	Is it sub-project listed in the WB exclusion list?					
2.	Will the sub-project include civil works?					
3.	Will the sub-project include reconstruction (new construction)?					
4.	Will the sub-project include only rehabilitation works?					
5.	Will the sub-project include only repair/intervention works?					
6.	According to national legislation does the subproject require EIA?					
7.	Has the opinion that EIA it is not needed been issue? (please attach)					
8.	Is the sub-project taking place in the nature protected or ecological network area?					

No.	Screening Questionnaire	Yes	No	Not known	Not applicable	Additional Clarifications
9.	Is preliminary assessment of acceptability for the ecological network area obtained from the competent authority? (please attached)					
10.	Is permission / confirmation regarding interventions in protected areas obtained from the competent authority? (please attach)					
11.	Will the sub-project affect endangered flora or fauna?					
12.	Will the sub-project affect some critical habitats (forest, wetlands, marshlands, aquatic ecosystems)?					
13.	Will the sub-project produce emissions to air (e.g. dust, air pollutants, green-house-gases emissions, etc.)?					
14.	Will the sub-project produce excessive noise and vibrations?					
15.	Are there any risks of contamination of surface waters?					
16.	Are there any risks of contamination of ground waters?					
17.	Are there any activities which will lead to physical changes of the water body?					
18.	Will the project produce negative impact to soil (erosion, contamination, etc.)?					
19.	Are there any areas or features of high landscape or scenic value on or around the location which could be affected by the sub-project?					
20.	Is the subproject located within or in the vicinity of any known cultural heritage site or is sub-project located in protected cultural and historical area?					
21.	Will the sub-project impact archeological or cultural heritage sites?					
22.	Will the sub-project generate non-hazardous wastes?					
23.	Will the sub-project generate hazardous wastes?					
24.	Will the sub-project generate asbestos wastes?					
25.	Will the sub-project generate significant amounts of wastes?					

No.	Screening Questionnaire	Yes	No	Not known	Not applicable	Additional Clarifications
26.	Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the sub-project?					
27.	Are there existing land uses within or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying that could be affected by the sub-project?					
28.	Are there areas within or around the location which are densely populated or built up, that could be affected by the sub-project?					
29.	May sub-project cause impact on community health and safety?					

Screening Report

Categorization of the Risk	☐ **Low Risk**	☐ **Moderate Risk**	☐ **Substantial Risk**	☐ **High Risk**
	The applicant needs to prepare:	The applicant needs to prepare:	The applicant needs to prepare:	The applicant needs to prepare:
	ESMP Checklist	ESMP Checklist ESMP	ESMP EIA	EIA
Environmental impacts identified (short description and note on significance)				
Social impacts identified (short description and note on significance):				
Additional comments:				

Project Categorization issued WB E&S Specialist: _____

Signature of responsible person: _____

Date: _____

ANNEX III. ESMP CHECK LIST TEMPLATE

The ESMP Checklist provides “pragmatic good practice” and it is designed to be user friendly and compatible with WB safeguard requirements. The checklist-type format attempts to cover typical mitigation approaches to common civil works contracts with localized impacts.

This document will help assess potential environmental impacts associated with the proposed sub-project, identify potential environmental improvement opportunities and recommend measures for to the prevention, minimization and mitigation of adverse environmental and social impacts.

ESMP Checklist is a document prepared and owned by beneficiary.

The checklist has one (1) introduction section and three (3) main parts:

Introduction or foreword part consisted of following sections:

- *Introduction* (sub-project description),
- *Environmental and social category* (environmental and social category is defined),
- *Potential environmental and social impacts* (potential impacts are defined)
- *ESMP Checklist* (concept and application of Checklist are explained),
- *Monitoring and reporting* (brief description of the monitoring and reporting process including responsibilities of involved stakeholders)

Part 1 - constitutes a descriptive part (“site-passport”) that describes the project specifics in terms of physical location, the institutional and legislative aspects, the project description, inclusive of the need for a capacity building program and description of the public consultation process.

Part 2 - includes the environmental and social screening in a simple Yes/No format followed by mitigation measures for any given activity.

Part 3 - is a monitoring plan for activities during project construction and implementation. It retains the same format required for standard World Bank ESMPs.

Table 30. Part I - General project and site information

INSTITUTIONAL & ADMINISTRATIVE				
Country				
Project title				
Scope of project and activity				
Institutional arrangements (WB) (Name and contacts)	(Task Team Leader)	Safeguards Specialists:		
Implementation arrangements (Borrower) (Name and contacts)	Safeguard/Environment Supervision	Works supervisor	Inspectorate Supervision	Works Contactor
SITE DESCRIPTION				
Name of site				
Describe site location				
Who owns the land?				
Valid operating permit, licenses, approvals etc.				
LEGISLATION				
Identify national &local legislation & permits that apply to sub-project activity(s)				
PUBLIC CONSULTATION				
Identify when / where the public consultation process took place and what were the remarks from the consulted stakeholders				
INSTITUTIONAL CAPACITY BUILDING				
Will there be any capacity building?	**[] N or []Y**			
ATTACHEMENTS				
Attachment 1: Site plan / photo Attachment 2: Agreement for construction waste disposal Other permits/agreements – as required				

Table 31. Part II - Environmental/Social screening

PART 2: ENVIRONMENTAL /SOCIAL SCREENING			
Will the site activity include/involve any of the following potential issues/risks:	**Activity**	**Status**	**Additional references**
	A. General conditions and social risk management		See Section **A**
	B. Asbestos handling and asbestos waste management • Materials containing asbestos are present	[ ] Yes [ ] No	If "Yes", See Section A, B**,** F below
	C. Interventions / rehabilitation • Increase in dust from intervention/rehabilitation activities • Transport of materials • Increase noise level • Increase in sediments loads in water bodies • Changes of water flow • Pollution of water/soil due to temporary waste, fuel, lubricants storage or spill leakage	[ ] Yes [ ] No	If "Yes", See Section A, C, F below
	D. Physical damage of cultural and historical heritage • Risk of damage to known/unknown historical buildings/cultural and historical area • Chance finds are encountered	[ ] Yes [ ] No	If "Yes", See Section A, C, D below
	E. Biodiversity • Vicinity of recognized protection area or ecological network • Disturbance of protected animal habitats • Cutting of trees/forest	[ ] Yes [ ] No	If "Yes", See Section E below
	F. Waste generation and management • Generation of waste	[ ] Yes [ ] No	If "Yes", See Section B, F below
	G. Traffic disturbance • Site specific vehicular traffic • Site is in a populated area	[ ] Yes [ ] No	If "Yes", See Section A, C, G below

Mitigation measures

A. General conditions

B. Asbestos handling and asbestos waste management

C. Interventions / rehabilitation activities

D. Cultural heritage

E. Biodiversity

F. Waste generation and management

G. Traffic disturbance

Table 32. Part III - Environmental and social mitigation measures

Activity	Parameter	Mitigation measures checklist
A General conditions	A1 Site organization, occupational and health safety, permits and certificates, community health and safety	a) the state inspectorate has been notified of upcoming activities and the copy of notification is available at the construction site, b) construction Work Plan is available at the construction site (in case that two or more contractors perform construction activities), and all occupational health and safety measures are ensured (all emergency response protocols and instructions have to be available at site, e.g. in case of earthquake, fire, etc)., c) assign person who is in charge of communication with and receiving requests/complaints from local population a) try to limit construction activities at night. When necessary, carefully schedule night work and inform affected community beforehand. b) all legally required permits have been acquired and are kept on site, c) contractor/subcontractors have valid operating licenses, d) all work is carried out in a safe and disciplined manner designed to minimize impacts on neighbouring residents and environment,

Activity	Parameter	Mitigation measures checklist
		a) transportation of hazardous substances and waste conduct in line with Act on the Transport of Dangerous Goods (OG 79/07, 70/17) and other relevant national legislation and World Bank standards (ESS4) b) mandatory use of protective equipment, workers' personal protective equipment and safety procedures comply with legislation and international good practice (e.g. wearing protective helmets, masks and safety glasses, harnesses and safety boots, appropriate masks or respirators when dealing with the asbestos, etc.), c) appropriate informative and warning signposting of the sites inform workers of key rules and regulations to follow, d) the construction location is fenced and marked, e) public is informed on the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works), f) entry for unemployed person within the project location is prohibited (within the warning tapes and fences when/where deem needed), g) open pits are covered and clearly marked when not worked on, h) the surrounding area near the project is kept clean, i) machines are handled only by experienced and appropriately trained personnel, thus reducing the risk of accidents, j) devices, equipment and fire extinguishers are always functional, so in case of need they could be used rapidly and efficiently. First aid kits should be available on the site and personnel trained to use it, k) staff is properly trained for the positions and work performed, workers hold valid workers certificates for e.g. certificates for electrical safety (for li-censed electrician), working with asbestos materials etc, l) procedures for cases of emergency (including spills, accidents, etc.) are available at the site, m) provide adequate lavatory facilities (toilets and washing areas) in the work site with adequate supplies of hot and cold running water, soap, and hand drying devices, n) purchased equipment installed and used respecting all safety measures prescribed by the producer of equipment and best practices, o) in the case of interventions / rehabilitation activities, if construction site is of such a nature that it is not possible, in line with construction practice, to disable access to the construction site to anyone except work site workers, then it is necessary to provide adequate replacement nearby p) no temporary storage of construction materials and waste occurs within any type of private property,

Activity	Parameter	Mitigation measures checklist
		q) ensure suitable arrangements for all necessary welfare and hygiene requirements and for the prevention of COVID-19 epidemics (regular delivery PPEs, ensure protocols for regular disinfection of rooms, equipment, tools, are in place and followed, ensure handwashing and other sanitary stations are always supplied with clean water, soap, and disinfectant, etc) r) Ensure trainings for workers on hygiene and other preventative measures against COVID-19 are carried out. s) in accordance with the epidemiological situation in the country, it is necessary to follow the WHO (https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public) recommendations and the recommendations at the official Government website for accurate and verified information on COVID19 (https://koronavirus.hr/en), a) determine risks of natural radon emissions either by monitoring or based on the available data in the national database. In the case there is a risk of exposure to unacceptable limits of radon address the issue of the sub-project design. Ensure that indoor levels of natural radon in the use phase of the building are in line with Act on Radiological and Nuclear Safety (OG 141/13, 39/15, 130/17, 118/18) and its by-laws (less than 300 Bqm-3).
B Asbestos handling and asbestos waste management	B1 Asbestos handling and asbestos waste management - Pre-Construction	a) determine whether there is a possibility that materials containing asbestos are present. – *The investor has to ensure that the contractor, prior to works of reconstruction has been informed about materials and substances that are consisted in the appropriate building and which represent asbestos waste or for which it is certain that after reconstruction works will become asbestos waste*, b) risk assessment must be done and regularly revised and supplemented in accordance with the changes that could affect worker exposure, c) take legally defined measures accordingly to results of risk assessment, d) working plan defined by article 14 of the Ordinance on the protection of workers from risk related to exposure to asbestos (OG 40/07) must be prepared. Drafted plan must be delivered to the state inspectorate on their request.
	B2 Asbestos handling and asbestos waste - Interventions / rehabilitation	a) equip workers with appropriate personal protective equipment for respiratory protection and other personal protective equipment, which workers must continually use, b) personal protective equipment for the protection of respiratory organs prior to giving to workers on use has to be tested in accordance with the provisions of the Ordinance on placing personal protective equipment on the market (OG 89/10), c) prevent the spread of asbestos dust or dust from material containing asbestos outside the premises or work site, d) workers should not be allowed to work on jobs where they can be exposed to asbestos dust or asbestos materials as long as they are not trained for safe working. Training program for workers

Activity	Parameter	Mitigation measures checklist
		must be conducted in accordance with the provisions of article14 of Ordinance on the protection of workers from risk related to exposure to asbestos (OG 40/07), e) the workers and their representatives have to be informed with written instructions and notices about: possible health risk due to exposure to asbestos dust or asbestos materials and the risk of tobacco use, maximum limit values and the way of air monitoring in the working environment, hygiene measures, including positive health effects due to smoking cessation, proper use and wearing of work or protective clothes and personal protective equipment, special preventive measures to reduce and prevent the exposure to asbestos dust or asbestos materials dust. Those instructions and notices must be placed in clearly visible places in the working rooms and have to be clear and easily understood, f) the workers and/or their representatives must be informed about the exceedances of the maximum permissible concentrations in case of exceeding, as soon as possible, counselling workers and/or their representatives on measures has to be taken or informing the workers and/or their representatives about measures taken in emergency situations have to be done, g) it has to be ensured that in an eight-hour time-adjusted average no worker is exposed to asbestos concentrations in the air of more than 0,1 fibres per cm^3, h) after removal, asbestos waste must be properly stored at the location and handed over to the authorized waste collector/waste treatment facility as early as possible in accordance with the waste management regulations, i) asbestos waste has to be stored in a covered container or a tightly closed bags (for construction rubble), thus preventing spreading, dispersing and spillage of that waste out of construction site due to weather conditions. j) during handling asbestos waste, it is necessary to stick to prescribed occupational safety requirements. Workers must have adequate protective equipment, protective masks and must undergo appropriate training for handling asbestos waste, k) in the case where the asbestos waste holder (who hands over asbestos waste to the authorized company) has not prepared asbestos waste for the transport in accordance with paragraph 2 of Article 21 and Article 19 of Ordinance on construction waste and waste containing asbestos (OG 69/16), this preparation has to be carried out by a person carrying out asbestos waste transport before performing the transport, l) it is forbidden to dispose asbestos waste into the mixed municipal waste and mixing with other waste and other non-waste materials, m) handing over the asbestos construction waste is responsibility of o contractor (article 59 of Act on Sustainable Waste Management (OG 94/13, 73/17, 14/19, 98/19)),

Activity	Parameter	Mitigation measures checklist
		n) in the case of hazardous asbestos waste documentation on handing over to the final destination must be obtain.
C Interventions / rehabilitation	Air Quality	a) sprinkle water to limit dust emissions in the area near the construction materials and non-asphalted roads. Use water with all land clearing, grubbing, scraping, excavation, land levelling, grading, cut and fill and demolition activities which may cause dusting and particles emissions, b) cover surfaces with plastic coverings during material storage and transportation, c) adequate locations for storage, mixing and loading of construction materials should be established, d) limit vehicles speed (30 km/h) in the area and access roads, e) periodically clean location and access roads from debris, f) use modern attested construction machinery to minimize emissions, provided with mufflers and maintained in good and efficient operation condition, g) additionally, to minimize dust (mainly PM10) from construction material collection, material retention time at the site should be reduced to a minimum, in order to minimize exposure to wind.
	Noise	a) maximum permissible noise level for the construction site is 65dB. It is allowed to exceed that level for additional 5 dB in the period from 8 to 18 hours. It is desirable to carry out works in the period from 8 to 18 hours and not to carry works during the nights, b) community should be informed in advance of any work activities to occur outside of normal working hours or on weekends, c) all equipment must be maintained in good operating condition and be attested, d) employees have to be asked to use personal hearing protection equipment in the cases defined by the article 8 of Ordinance on the protection of workers from noise exposure at work (OG 46/08), e) during operations the engine covers of generators, air compressors and other powered mechanical equipment shall be closed, and equipment placed as far away from residential areas as possible.
	Water quality	a) responsible handle the liquid waste, b) adding oil activities carry out on the part of the construction site that is derived from an impermeable working surface, c) handle all materials in accordance with instructions included in Material safety data sheets (MSDS) which have to be available at the construction site, d) in the case of an accident, any hazardous liquid remove from the soil using adsorption materials such as sand, sawdust or mineral adsorbents. Such waste material you have to collect in tanks, store in the space provided for hazardous waste storage and hand over to authorized companies, e) ensure that water pumped back to natural waterways never exceeds the regulatory water quality standards f) prevent hazardous spillage coming from tanks, containers (mandatory secondary containment system, e.g. double walled or bunded containers), construction equipment and vehicles (regular

Activity	Parameter	Mitigation measures checklist
		maintenance and check-ups of oil and gas tanks, tend to park (manipulate) machinery and vehicles only on asphalted or concrete surfaces with surface runoff water collecting system, g) organize and cover material storage areas, h) isolate wash down areas of concrete and other equipment from watercourse by selecting areas for washing that are not free draining directly or indirectly into watercourse, i) do not extract groundwater on unregulated way, nor discharge cement slurries, or any other contaminated waters into the ground or adjacent streams or rivers on uncontrolled way, j) ensure proper storm water drainage systems installed and take care not to silt, pollute, block or otherwise negatively impact natural streams, rivers, ponds and lakes by rehabilitation activities.
	Soil	a) regular maintain and service the construction machines, b) adhere the measures and standards for construction machinery, c) try to avoid fuel and lubricant storage on construction site, d) if installation of fuel storage tanks will be needed, they should have secondary tanks with sufficient volume to contain a spill from the largest fuel tank in the structure. The containment area has to have a device (pump) to remove accumulated water, e) the containers with hazardous substances should be kept in a leak-proof container to prevent spillage and leaking. This container should possess secondary containment system such as bunds (e.g. bunded-container), double walls, or similar. Secondary containment system must be free of cracks, able to contain the spill, and be emptied quickly, f) the containers with hazardous substances must be kept closed, except when adding or removing materials/waste. They must not be handled, opened, or stored in a manner that may cause them to leak.
D Physical damage of cultural and historical heritage	Cultural heritage and Chance finds	a) if the building is located in a protected cultural and historical area, notify and obtain approval/permits from competent authorities and address all construction activities in line with legislation, b) if during excavations some archaeological finds are encountered, works have to be stopped immediately and the competent authority informed. Works should be resumed only after appropriate measures have been taken as required by relevant authority and after it confirms that works may continue for all cases where the cultural heritage and its fundamental values can be protected at the existing location with special protection measures protect the cultural heritage on the spot.
E Biodiversity	Biodiversity	a) limit work to the visible part of the day, b) restrict the movement of heavy machinery to the road corridor, c) professionally and carefully handle of equipment and machinery to try to break out accidents such as fires or spills of large amounts of harmful substances into the environment, and thus adversely

Activity	Parameter	Mitigation measures checklist
		impact on the present flora and fauna, d) limit work along watercourses and on watercourses and canals to as small an area as possible, e) avoid, where possible, cutting of trees and other natural vegetation, f) in the case of removing vegetation, to prevent unnecessary loss of vegetation in the project area, clearly marked the areas where vegetation will be removed, g) for the restoration of the removed natural vegetation cover, use only autochthonous plant species that occur in the vegetation communities present in the wider area of the sub-project, h) the potential removal of vegetation plan for the period when birds do not nest. All birds that nest they need to protect until their birds can fly. In case of finding the nests of endangered bird species, prevent their disturbance, and inform about the discovery the central state body responsible for nature protection, i) where possible, the area under interventions / rehabilitation / reconstruction fence to lessen even occasional disturbance and dust on habitats and biodiversity. If noise barriers need to be constructed, they should be opaque or with a design and density of stickers that will prevent birds from entering the barriers as much as possible.
F Waste generation and management	Waste management	a) each type of generated waste on the location has to be temporary stored in separate waste container which have to be labelled with waste type name and waste code and located at the solid surface foreseen for that purpose on the construction site, b) Construction waste has to be disposed exclusively in the designated locations c) records of waste streams and amounts has to be kept for each type of generated waste at the location – *This is the obligation of the principal contractor, unless contractor and investor/another contractor didn't define in contract that investor/another contractor has to keep records,* d) all waste has to be handed over with appropriate documentation to the companies authorized for the waste management (companies that have adequate waste permit), e) in the case of hazardous waste information on handing over waste to the final destination must be obtained, f) whenever feasible the contractor should reuse and recycle appropriate and viable materials (except asbestos), g) mineral (natural) construction and demolition wastes have to be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and temporarily stored in appropriate containers. Depending of its origin and content, mineral waste has to be reapplied to its original location or reused, h) burning or illegal dumping of waste is strictly prohibited.

Activity	Parameter	Mitigation measures checklist
G Traffic disturbance relate to the increased frequency of external transport of materials and techniques	Traffic disturbance	a) traffic management have to be conducted in accordance with provisions of traffic legislation (e.g., appropriate lighting, traffic safety signs, barriers and flag persons that are seen easily or are easy to follow, road speed should be clearly posted), b) it is desirable to avoid transport on access roads during rush hours.

Table 33. Monitoring plan

Phase	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)
During **preparation**							
During **implementation**							
During operation							

CHMP (template is given in the ANNEX IV.), as an annex of ESMP in line with the ESS10, must be enclosed and special conditions for the protection of cultural heritage (if applicable) have to be attached.

ANNEX IV. CONTENT OF THE ESMP

Environmental and social management plan (ESMP) consists of the set of mitigation, monitoring, and institutional measures to be taken during implementation and operation of a project to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels. The ESMP also includes the measures and actions needed to implement these measures. The set of responses to potentially adverse impacts has to be identified; requirements for ensuring that those responses are made effectively and in a timely manner have to be determined and the means for meeting those requirements described.

Therefore, it will include following parts:

a) ***Mitigation –*** identification and summarizing all anticipated adverse environmental and social impacts (including those involving indigenous people or involuntary resettlement); description—with technical details—of each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate; estimation of any potential environmental and social impacts of these measures; taking into account other mitigation plans required for the project.

b) ***Monitoring*** **-** the monitoring section of the ESMP provides a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and monitoring and reporting procedures to ensure early detection of conditions that necessitate particular mitigation measures, and furnish information on the progress and results of mitigation.

c) ***Capacity Development and Training*** - to support timely and effective implementation of environmental and social project components and mitigation measures, the ESMP draws on the environmental and social assessment of the existence, role, and capability of responsible parties on site or at the agency and ministry level. Specifically, the ESMP provides a specific description of institutional arrangements, identifying which party is responsible for carrying out the mitigation and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training). To strengthen environmental and social management capability in the agencies responsible for implementation, the ESMP recommends the establishment or expansion of the parties responsible, the training of staff and any additional measures that may be necessary to support implementation of mitigation measures and any other recommendations of the environmental and social assessment.

d) ***Implementation Schedule and Cost Estimates*** - for all three aspects (mitigation, monitoring, and capacity development), the ESMP provides an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and the capital and recurrent cost estimates and sources of funds for implementing the ESMP. These figures are also integrated into the total project cost tables.

Given the above, ESMP for the sub-projects under Component 1 has to consist sections as follows:

Table 34. Structure of site specific ESMPs

Section	Description
Executive summary	Should provide a general summary of the ESMP contents and key findings, in a vocabulary that is easily understood by the general public. It should be clear, concise ranging from 1 to 3 pages;
Introduction	An introduction describing the ESMP purpose, objectives, principles and methodology. This section should introduce the sub-project proponents, the study team, and provide other relevant information. The layout of ESMP should also be described to facilitate its use.
Sub-project description	A description of the sub-project which will include background, purpose and different components. Also indicate any sub-project specific resource requirements such as material, manpower, equipment, etc.
Environmental baseline of sub-project area	This section gives site specific overview of baseline covering physical and biological environment like: air quality, waste management, nature protection, noise, temperatures, rainfall etc.
Social-economic baseline of sub-project area	This section describes socio-economic profile of the sub-project area like: administrative division, community structure, population, economy, cultural heritage sites, health care, education etc.
Stakeholder consultation and information disclosure	This section will describe the objective, process, and outcome of the stakeholder consultations carried out during the ESMP preparation. This section should also list arrangements for disclosing sub-projects information in order to comply with the Bank's Policy of Disclosure of Information
Impacts and mitigation	This section will identify all environmental and social impacts with cost effective and feasible measures to reduce adverse environmental impact to acceptable level. It will describe with technical details mitigation measures including the type of impact to which it relates to. It will also describe methodology for social impacts.
Institutional arrangement and trainings for users and contractors	Detailed description of institutional arrangements, roles and responsibilities and reporting procedures should be presented. There may be a need to train people to carry out these responsibilities, and to provide them with equipment and supplies. Reporting procedure including grievance redress mechanism should also be proposed.
ESMP Implementation Budget	An ESMP implementation budget estimates are provided here. The budget will include funds for institutions development activities, training programs for implementation teams and local/national institutions, technical assistance to authorities, costs for preparations of EMPs and other safeguard documents.
Environmental and social monitoring and mitigation plans	This section will provide specific description and technical details of monitoring measures including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions. The monitoring and reporting procedures will ensure early detection of conditions that necessitate particular mitigation measures, and furnish information on the progress and results of mitigation.
Cultural Heritage Monitoring Plan	For sub-project located in the protected cultural and historical area there is a risk that conduction of civil works could transform landscapes and maintenance of cultural and regional identity. CHMP will be developed according to CHMP template and special conditions for the protection of cultural heritage (if applicable) and will be attached.
Annexes	Technical annexes to support ESMP implementation

Table 35. Environmental and social mitigation plan template - Civil Works Preparation / Implementation phase

Potential impact	Proposed mitigation measures	Costs	Responsibility	
			Implementation	Supervision
a) OHS and community safety issues				
b) Air pollution				
c) Noise				
d) Surface or ground water pollution				
e) Soil pollution or erosion				
d) Biodiversity (flora and fauna)				
e) Traffic disturbance				
f) Waste generation and management				
j) Other				

Table 36. Cultural heritage management plan (CHMP)

CHMP measures			
Phase	**Mitigation measure**	**When should the measure be implemented**	**Implementation responsibility**
During activity preparation			
During activity design			
All phases			

Table 37. Environmental and social monitoring plan - Civil Works Preparation / Implementation phase

What parameter is to be monitored?	***Where is the parameter to be monitored?***	***How is the parameter to be monitored?***	***When is the parameter to be monitored (frequency of measurement)?***	***Why is the parameter to be monitored?***	***Cost***	***Responsibility***	
						Implementation	***Supervision***
Project activity:							

ANNEX V. CONTENT OF VOLUNTARY LAND DONATION REPORT AND VOLUNTARY LAND DONATION PROTOCOL

CONTENT OF VOLUNTARY LAND DONATION

1.Introduction

- project background

- subject of the Voluntary Land Donation Report

- rationale and the objective of the Voluntary Land Donation Report

2.Policy framework

- relevant national legislation

- scope of application of ESS5

3. Project description

- general information

- background information

- land ownership

4. Scope of Voluntary Land Donation

5. Voluntary Land Donation Process

6. Annexes

VOLUNTARY LAND DONATION PROTOCOL

Voluntary land donations are documented. This calls for:

- written notification indicating the location and amount of land that is sought and its intended use; and
- a formal statement of donation signed by each owner or user involved, establishing informed consent and confirming that there is no disputed ownership and that there are no claims by renters, users, squatters, or encroachers.

Any taxes or fees owed for processing or registration of the land transfer, if applicable, are paid in full by the project, who maintains the records of donations, including documentation. Documentation is made available for review in any grievance that may arise.

As with any other activity involving project-affected persons, a grievance mechanism is in place to allow consideration of, and timely response to, grievances raised by land donors (and other persons affected by the transfer of land). In terms of vulnerable people or communities, women users of land to be donated, or in the case of collective or community lands to be donated, users of those lands, may be at risk of being passed over in the decision-making process, unless they are consulted.

R.BR.	***STEPS***	***ACTIVITY***
1.	Verification and documentation that land required for the project is given voluntarily and the land to be donated is free from any dispute on ownership or any other encumbrances.	Conducting interviews with landowners and documenting verification.
2.	Verification that no significant livelihoods impacts will affect the potential donors.	Interviews with landowners.
3.	Verification that the land donation does not displace tenants or suspend their labour activities, if any.	
4.	Verification that the potential donors have the ability to exercise refusal without coercion and/or threats and has also been provided with sufficient time to consider his or her disposition of the property, and has knowingly rejected the right to renege on his or her decision.	
5.	Establishing and carrying out the informed consultations.	Carrying out the informed consultations in good faith with all potential land donors.

6.	Voluntary Land Donation Monitoring	PIU1 monitors the process. WB verifies that land donation due diligence has been conducted in accordance with the prescribet procedures.
7.	Establishing Grievance Redress Mechanism.	Establish direct communication line between landowners and PIU1 Team. All donors are informed about available World Bank Projects GRM established for the sub-project.

LABOR MANAGEMENT PROCEDURES (LMP)

XIII -1. OVERVIEW OF LABOR USE ON THE PROJECT

XIII - 1.1 Number and characteristics of project workers

ESS2 categorizes the workers into: direct workers, contracted workers, community workers and primary supply workers. The LMP applies to all project workers in the following manner:

- People employed or engaged directly to work specifically in relation to the project;
- People employed or engaged by contractors to perform work related to core function of the project, regardless of location;
- People employed or engaged by the primary suppliers.

Project workers include the Ministry of Physical Planning, Construction and State Assets (MoPPCSA) staff, consultants, and contracted /subcontracted workers. The project footprint is relatively small and does not entail a significant amount of labour, as the interventions, reconstruction and rehabilitation works will be small to medium scale, so it is unlikely that a large number of workers would be needed. Primary supply workers are not relevant as the project will unlikely source goods or materials from a single supplier on an on-going basis. Project activities will not require hiring of community workers.

As currently envisioned, the project will be implemented by the MoPPCSA staff who are civil servants and who will remain subject to the terms and conditions of their existing public sector employment agreements. Potential institutional capacity strengthening will be done through hiring of consultants to perform specialized tasks such as environmental and social safeguards functions. These consultants would be part of PIU and paid through the loan funds. The project will also deploy contractors and very likely subcontractors for interventions, rehabilitation and reconstruction works, but the number of workers to be contracted/subcontracted is not known yet. Furthermore, project will include contractors, for preparation of Housing Reconstruction Support Program Design (Sub-component 1.3).

Direct Workers: The number of MoPPCSA staff, who are civil servants involved in project activities. In addition, potential institutional capacity strengthening will take place through the hiring of a about 9 consultants. These consultants, along with MoPPCSA staff would be part of project implementing unit (PIU). It is foreseen to employ: project manager, financial manager, environmental/social specialists, financial expert, monitoring/assessment expert, construction engineer, architects to help MoPPCSA staff during the project implementation.

Contracted Workers: The civil works under the project are expected to be conducted by authorised contractors for varying durations depending on the works requirements. It is not known at this time whether the contractor will engage any subcontractors to carry out some aspects of the work. The contractor must perform and ensure work and workers related to the core function of the project. Such functions of a project constitute those production and/or service processes essential for a specific project activity or activities without which the project cannot continue. Contracted and subcontracted workers will have access to a grievance mechanism described afterward. At this stage the exact number of workers is not known, and it will be known when implementation of subprojects begins.

Although rehabilitation works are of small-scale nature there is a potential of labour influx.

Migrant Workers: A residence permit based on employment is a specific permit, which provides temporary residence and allows one to work for a specific Croatian company in Croatia. Contractors may engage migrant workers subject to meeting national requirements for work permits.

Any person who is not a Croatian citizen (does not have Croatian citizenship) is considered a foreigner. Conditions for the residence and work of third-country citizens in the Republic of Croatia are governed by the provisions of the Foreigners Act (OG 133/20) and the Ordinance on the Status and Work of the Foreigners in the Republic of Croatia (OG 52/12, 81/13, 38/15, 100/17, 61/18, 146/20).

From January 1, 2021 there is no limit to the number of foreign workers that can be hired within Croatia. If a Croatian employer want to hire a non-EU national, then they must request permission from the state employment agency - Croatian Employment Service, before they can request a work and residence permit for a foreign worker. Croatian Employment Service will perform a labor market test to determine if they will grant the company permission to hire the foreigner (deadline for labor market test is 15 days from the date the employer requested permission). The labor market test should confirm that there are no unemployed Croatian or other EU/EEA citizens who meet the employer's requirements.

Exemption from the labor market test:

- Deficient occupations (in Croatia a large share of deficient occupations are related to construction sector and tourism);
- Extension of the work permit for the same employer and the same third-country national;
- Seasonal employment of third-country nationals in agriculture, forestry, catering and tourism (for up to 90 days during one calendar year);
- Groups listed in the Article 110 of the Foreigners Act (key staff in companies, EU blue card, persons transferred within the company, etc.).

In both cases employers must issue a positive opinion which checks, for example, whether they have paid all obligations to workers and the state, whether they violate labor market rules and whether they have at least one third of domestic workers employed.[104].

XIII -2. ASSESSMENT OF KEY POTENTIAL LABOR RISKS

Given the small to medium scale nature of construction works and works of a consulting nature for sub-component 1.3., no major labor risks are envisaged. Although It is expected that most contracted workers will be hired locally as there has been a growing trend of the required imported labor force in Croatia, especially in construction sector, there is a possibility that foreign workers will be engaged.

All contractors will be required to have a written contract with their workers materially consistent with objectives of ESS2.

No instances of child or forced labor are likely to happen under the project as legislation on employment and labour are fully harmonized with the International Labor Organization (ILO) conventions (particularly ILO Forced Labor Convention No. 29 ratified by the Republic of Croatia) and the European Union Directives inclusive of convention on forced labor and convention on elimination of child labor and protection of children and young persons. The Republic of Croatia as an EU Member State, but also as a member state of the ILO since 1992, must ensure that all acts and regulations related to social dialogue/tripartite consultations; employment and labor (inclusive of elimination of forced and child labor); equality of opportunity and treatment; collective bargaining; grievance redress and labor dispute settlement; sustainable social security system, freedom of association; etc.,

[104] The afore-mentioned conditions must be fulfilled throughout the whole period of residence of the third-country national in the Republic of Croatia.

are in compliance with International Labor Standards. International labor standards and directives as well as national acts, regulations and directives are enforced well in Croatia.

According to the 2019 Country Reports on Human Rights Practices on Croatia by US Department of State, the chapter on Acceptable Conditions of Work states that: the Government of Croatia effectively enforced wage laws, and penalties were sufficient to deter violations. Minimum wage was slightly above official poverty income level. The law limits overtime to 10 hours per week and 180 hours annually.

The government set health and safety standards to harmonize with EU laws and regulations. Responsibility for identifying unsafe situations remains with occupational safety and health experts and not the worker.

Project activities do not involve activities that have a high potential for harming people or the environment.

Risks involve general occupational health and safety hazards such as: use of heavy equipment, trip and fall hazards, exposure to noise and dust, falling objects, exposure to hazardous materials and exposure to electrical hazards from the use of tools and machinery. Persons under the age of 18 will not be employed under the Project. Many workers will be exposed to occupational health and safety hazards, primarily including but not limited to:

- Working at height
- Electrocutions and Electrical works
- Traffic accidents
- Lifting of heavy structures
- Accidents with exposed rebars
- Exposure to construction airborne agents (dust, etc.)
- Ergonomic hazards during construction
- Vibration of heavy construction equipment
- Use of rotating and moving equipment;
- Lack of workers' awareness on occupational health and safety requirements such as the use of personal protective equipment (PPE) and safe workplace practices;
- Exposure to hazardous substances (e.g. paints, varnishes, asbestos)
- COVID-19 risk.

Since the intervention, rehabilitation and reconstruction works are of small to medium-scale, there are no risks related to gender-based violence (GBV) and deployment of security forces. No other social risks are considered to be relevant for the project activities. However, in case they arise, the MoPPCSA will revise these procedures to prevent further any negative impact.

XIII -3. BRIEF OVERVIEW OF LABOR LEGISLATION: TERMS AND CONDITIONS

Based on the due diligence done, the national legislation meets objectives, requirements, and prescriptions of ESS2 on Working Conditions and Management of Workers Relationships and on Protecting the Workforce and Occupational Health and Safety (OHS issues and grievance mechanism).

In the Republic of Croatia, fundamental obligations and rights arising from employment relationships are stipulated by the Article 7 of the Labor Act (OG 93/14, 127/17, 98/19). This Article defines that the employer shall be obliged to ensure work for an employed worker and pay remuneration for the work performed, and the worker shall be obliged to complete the work following the instructions provided

by the employer in line with the nature and type of work. Furthermore, according to paragraph 2, the employer shall be entitled to determine the place and the manner of performing the work and shall respect the workers' rights and dignity. Paragraph 3 outlines that the employer shall be obliged to ensure safe working conditions with no detrimental effects on the health of the worker, following a special law and other regulations.

Working hours

The Labor Act in chapter 8 defines the working time, starting with the definition of working time (Article 60), while Article 61 stipulates that full-time work shall not exceed 40 hours a week. Articles 66 and 67 define the flexibility of working time. Thus, the duration of workers' working time may be evenly or unevenly distributed over days, weeks, or months. Therefore, where working time is unevenly distributed, its duration may in one period be longer than full-time work or part-time work, and shorter in another. Laws and regulations define the patterns of working time, collective agreement, agreement between the works council and the employer, working rules, or employment contract.

Rest breaks

Rest breaks and vacations are also defined by Labor Act. Daily break is defined by the Articles 73 and 74, while Article 75 regulates a weekly break period. According to these Articles the worker who works at least six hours a day is entitled to a daily period of rest (a break) of a minimum of 30 minutes. The part-time worker or two or more employers with total daily working hours at all employers of at least 6 or 4.5 hours is entitled to a break at each employer proportionate to his contracted part-time work. The rest period is counted in working time. The worker is entitled to a minimum daily rest period of 12 consecutive hours per 24-hour period; a weekly minimum uninterrupted rest period of 24 hours plus the hours of regular rest; and the minor is entitled to a weekly minimum continuous rest period of 48 hours. The rest must be used by the worker on Sundays or the day before or day after Sunday.

Where the worker is not in a position to use the rest period as previously mentioned, he or she must be afforded equivalent periods of compensatory weekly rest right after his working time with no weekly rest, or with a shorter period of rest. As an exception, the shift workers or workers who due to objective reasons or organization of work cannot use the rest period must be afforded a weekly minimum uninterrupted rest period of 24 hours, without counting the daily rest. Remuneration and compensation are regulated by Article 90-97 of the Labor Act. According to Article 90, the employer is obliged to calculate and pay remuneration to the worker in the amount provided through law, collective agreement, working regulations, or employment contract. The Article 91 regulates equal pay for women and men, while the Article 94 stipulates that the worker has a right to an increased remuneration for arduous working conditions, overtime and night work, and for work on Sundays, holidays, and on other days that are not working days according to the law.

Non-discrimination

The Labor Act in Article 7 in paragraph 4 prohibits any direct or indirect discrimination in the area of labor and working conditions, including the selection criteria and requirements for employment, advance in employment, professional guidance, education, training, and retraining. The employer is also obliged to protect the workers' dignity during the work in case of acts, uncalled for and contrary to the Labor Act and special legal provisions, of superiors, collaborators, and persons with whom the worker contacts regularly while performing his tasks. The Articles 31-32 define prohibition of discrimination of pregnant workers, women who have recently given birth or are breastfeeding, while the Article 39 vetoes discrimination regards advance in employment or the exercise of other rights.

Some other forms of discrimination are any not allowed by the Labor Act: prohibition of discrimination of the members of the works council (the Article 157-158); and discrimination on the ground of membership or non-membership in an association or participation or non-participation in various activities (the Article 166).

Information disclosure

Regarding the demands on information and documentation, the Labor Act in Article 8 prescribes that before the worker starts working, the employer shall be obliged to enable the worker to acquaint himself with the employment-related regulations and inform the worker about the organization of work as well as health and safety protection at work. Furthermore, the rules on safety and health at work, collective agreements, and working regulations must appropriately be made available to the workers[105]

Freedom of association and Collective Bargaining

The right to organize is set by the Constitution (Article 43 and 60), the Labor Act, ILO Conventions No 98 and 87, and other international treaties to which the Republic of Croatia is a party. All employees, except active military staff, have the right to establish and join trade unions. According to the Article 165 of the Labor Act, workers have the right, according to their own free choice, to establish and join a trade union, subject to only such requirements which may be prescribed by the statute or internal rules of this trade union. Article 186 explains the prohibition of discrimination on the ground of membership in a trade union or participation in trade union activities. The Labor Act, in many articles, stresses the importance of regular and timely payment of salaries and wages as well as social contributions. The prohibition of child labor and stipulated minimum age for work (paragraphs 17 and 18 of the ESF) are fully incorporated in Croatian legislation, particularly in the Labor Act. In the same way, Article 122 of the Labor Act determines the minimum notice period from two weeks to three months, depending on the duration of tenure with the same employer.

Worker's organization

Workplace representation in Croatia is provided both through trade unions and works councils, although if no works council has been set up, the union representative can take on almost all its duties and responsibilities. The Labor Act in Article 192 stipulates:

(*1) A collective agreement shall regulate the rights and obligations of the parties to the agreement. It may also contain legal rules governing the conclusion, contents, and termination of employment, social security issues, and other issues arising from or related to employment*

(2) The legal rules contained in a collective agreement shall be directly applicable and binding on all persons who are subject to the collective agreement, following the provisions of this Act.

(3) A collective agreement may contain rules related to the composition and methods of work of the bodies authorized for amicable collective labor dispute resolution.

The Act on Representativeness of Employers' Associations and Trade Unions (OG 93/14, 26/15) in Article 25 defines Parties to collective agreement. Parties to a collective agreement may be on the trade union side, one or more trade unions that have the representative status following this Act. Parties to a collective agreement may be on the trade union side, the unions that are represented in

[105] For further information on safety and health at work in the Republic of Croatia, see Occupational Health and Safety chapter.

the negotiating committee. Unions are free to operate at the workplace and, according to the Labor Act, they have “the right to promote the rights and interests of trade union members in respect of their relations with the employer.” This can be done either through external union officials or through union representatives who are also employees of the organization. In practice, as only ten individuals are required to set up a union and because there are a large number of unions, in many cases union representation will be through a union or unions, all of whose members work for the same employer. In other cases, the union members will belong to a larger union with members spread across several employers, or even the whole country. In companies and other organizations with at least 20 employees (bodies which are part of the state administration are an exception), the employees have the right to be represented through a works council. Its role is that it “protects and promotes the interests of employees.” In practice, unions, which have the right to nominate candidates, are vital in initiating the process of setting up a works council. If no works council has been set up, its rights and duties are taken on by a union representative working at the company. If there are several unions present in the workplace and they cannot reach agreement, as to which union representative should exercise these rights, the choice is made through an election, following the same rules as apply for the election of works council members.

Right for Grievance

The Labor Act includes provisions that allow workers to resolve disputes in cases where there is a disagreement between the employer and the employee over the essential terms of conditions of a labor agreement and other aspects of work. Such disagreement will be resolved in compliance with the procedures. Reference Collective Agreement for Construction (OG 115/15, 26/18) in the section on protection of workers (Article 70) stipulates that a worker who believes that an employer has violated his right from employment may, within 15 days from the delivery of the decision violating his right, or from the day of finding out about the violation of the right, demand the right to be consumed. Written decisions on the consummation of the rights and obligations of the worker are delivered directly to the worker or delivered by registered mail to the last address reported by the worker to the employer. The employee is obliged to inform the employer immediately in case of change of address. If the Employer's letter addressed to the worker at the address reported to the employer by the employee is returned undeliverable due to the refusal of receipt or the unknown or incorrectly reported address, it shall be posted in writing on the notice board at the premises of the employer, and the contracting parties agree that this is considered to be a proper delivery to the worker performed. Furthermore, notwithstanding the procedure for the protection of rights referred to in Article 70 of the Collective Agreement, an employee who considers that he or she has been unfairly treated by other worker, associate or management of the company may appeal on him or her to a superior employee or management of the company and may apply for mediation and the works council.

Role of the Labor Inspectorate

The Labor Inspectorate has a remit to monitor the compliance of labor laws and regulations for national and foreign workers, with the exception of certain categories of state officials, educational entities and air traffic employees. The inspectorate also has a remit to monitor the compliance with health and safety which includes monitoring compliance with health and safety standards at the workplace and the protection of the health and safety of workers. It is organized in five field offices in Zagreb, Osijek, Rijeka, Split and Varaždin, with 252 labor inspectors in 39 branch offices. The Labor Inspectors perform inspections at worksites to check the compliance with the provisions of the laws under their remit. These can either be scheduled inspections or responses to complaints. In reference

to migrant workers, the main focus of their inspection is the legality of employment, i.e. whether the worker has a regulated status in Croatia[106].

The law allows employees to sue employers for wage non-payment and provides a penalty of up to three years in prison for convicted employers, although the law exempts employers who fail to pay wages due to economic duress. Workers may sue employers who do not issue pay slips to their employees to bypass mandatory employer contributions to social insurance programs.

Following the introduction of the State Inspectorate Act in 2018, as of April 2019, the State Inspectorate has taken over the inspection tasks in the field of labor and occupational safety from the Ministry of Labor and Pension System (MoLPS)/Labor Inspectorate.

XIII -4. BRIEF OVERVIEW OF LABOR LEGISLATION: OCCUPATIONAL HEALTH AND SAFETY

Based on the screening, no differences have been identified in national labor legislation concerning occupational health and safety issues stipulated in ESS2.

The national policy, principles of prevention and occupational safety rules, obligations of the employer, rights and obligations of workers, including supervision and misdemeanour liability in the Republic of Croatia, are regulated by the Occupational Safety and Health Act (OG 71/14, 118/14, 94/18, 96/18).

The Act defines measures to protect workers from psychosocial risks (stress) and psychophysiological effort at work, with the aim of prevention and education of all stakeholders. The Act sets out the general principles of risk prevention at work and protection of health, rules to eliminate risk factors, procedures of training of workers and procedures of information and consultation of employees and their representative with employers and their authorized persons. The intention is to raise awareness and encourage preventive action not only by employers but also by employees.

The employer is obliged to implement occupational health and safety measures based on the general principles of prevention. These include: risk avoidance, risk assessment, prevention of risks at their source, adjustment of work to the employees in relation to the design of the workplace, the choice of work equipment and the mode of operation and work processes to relieve monotonous work. Employers must consider issues such as adaptation to technical progress, replacing hazardous substances or processes with the non-hazardous or less hazardous. They are also required to develop a consistent comprehensive prevention policy by connecting technology, organization of work, working conditions, human relationships and the influence of work environment. They must give preference to collective protective measures over individual ones, appropriately train and inform employees, and make all protective equipment available free of charge.

The Ministry of Labor and Pension System of the Republic of Croatia is the central administrative body for labor, safety, and health at work in the Republic of Croatia. Since this is a multidisciplinary topic, in addition to these institutions and regulations deriving from the Occupational Safety and Health Act,

[106] Records are kept of each inspection. These investigations are carried out in close collaboration with the police. The police often notify the Inspectorate if they have suspicions about the irregular status of workers on a worksite, which as a rule results in joint visits. Also, if labor inspectors identify irregular workers at a site, they invite the police to collaborate, as only the police have the authority to carry out some of the mandated steps in those cases (e.g. taking the worker into the station for an interview).

other competent authorities, such as the Ministry of Health, participate in preparation, implementation and supervision of the occupational health and safety policy.

The Ordinance on the Occupational Health and Safety on Temporary Construction sites (OG 48/18) defines measures and activities for the protection of workers on temporary construction sites[107]. For example, requirements for evacuation roads and emergency exits, fire detection, sanitary equipment and first aid, etc. are defined by this Ordinance.

The occupational safety rules apply to all project phases from design to implementation. The investor is the first of the stakeholders of the occupational safety and health system when it comes to the design, construction and use of constructions. Because of that he is obliged to apply general principles of prevention and occupational safety rules at all stages of project design and preparation. Accordingly, during the design preparation, study on safety at work should be prepared. This study should elaborate the manner of applying the occupational safety rules when using buildings intended for work. When preparing the main project and during the construction works responsible person for occupational health and safety has to be appointed (by investor, building owner, concessionaire ...).

Pursuant to Article 74, paragraph 3 of the Occupational Safety and Health Act, the contractor of works on a temporary construction site is obliged to submit a site registration to body competent for labor inspection (State Inspectorate), at the latest one day prior to the commencement of the works (for especially dangerous works defined in Annex II of the Ordinance and if the duration of works is longer than 10 days). The content of site registration is defined in Annex III of the Ordinance. Copy of the site's registration must be available at the construction site in a visible place. Registration of the construction site, where the works will be carried out by two or more contractors, is the obligation of the investor, concession holder or other person for which the construction works are performed.

The contractor who performs the construction works is obliged to arrange the site and to ensure that the works are carried out in accordance with the occupational health and safety regulations. It is therefore necessary to prepare Construction Work Plan. The content of Plan is defined in Annex IV of the Ordinance. The Construction Work Plan contains detail elaboration of instructions and protocols among other regarding: persons responsible for safety at work, list of telephone numbers and emergency services and competent institutions, method of determining and marking construction site boundaries, list of activities indicating hazardous works, measures and instructions for safety at work (e.g. earthworks, uncontrolled demolition of earthworks, carpentry etc.), instructions on how to act in case of fires, earthquakes, burying workers in the trench, etc. Furthermore, this Plan contains how to storage materials at construction site, how to provide first aid in a case of accident at construction site, personal protective equipment, etc. The Construction Work Plan must be available at the construction site, and its preparation is obligation of the investor, concessionaire or other person for whom the construction works are performed.

If only one contractor performs construction works, then he is not obligated to prepare Construction Work Plan, and only has to send notification to the State Inspectorate, yet all requirements defined by Occupational Safety and Health Act must be met and is obliged to plan, prepare and implement work procedures and to develop and apply work technology so as not to endanger the safety and health of workers, while respecting the highest possible level of protection against risks at work and in connection with work.

[107] Temporary construction site is any work place where construction and other works are performed and whose incomplete list is given in Annex I. of this Ordinance

XIII - 4.1 Working with asbestos waste

During the intervention, rehabilitation and reconstruction of public hospitals and schools certain quantities of asbestos waste can occur, therefore in this chapter asbestos management is presented in more detail.

Before starting intervention, reconstruction and rehabilitation works, the contractor must determine whether there is a possibility that materials containing asbestos are present. Information on the presence of material containing asbestos employer must obtained from the building owner.

Legal framework

Croatian national legislation strictly controls exposure to asbestos and handling asbestos waste by following laws and by-laws:

- Occupational health and safety act (OG 71/14, 118/14, 154/14, 94/18, 96/18),
- Ordinance on the protection of workers from risk related to exposure to asbestos (OG 40/07),
- Ordinance on the protection of workers from the risk of exposure to hazardous chemicals at work, limit values of exposure and biological limit values (OG 91/2018),
- Ordinance on the use of personal protective equipment (OG 39/06),
- Ordinance on placing personal protective equipment on the market (OG 89/10)
- Act on mandatory health monitoring of workers occupationally exposed to asbestos (OG 79/07, 139/10),
- Ordinance on jobs in special work conditions (OG 5/84),
- Ordinance on risk assessment (OG 112/2014),
- Act on Sustainable Waste Management (OG 94/13, 73/17, 14/19, 98/19),
- Ordinance on construction waste and waste containing asbestos (OG 69/16),
- Instructions for handling waste containing asbestos (OG 89/08).

Contractors obligations regarding documentation and licencing

To perform works with materials containing asbestos, contractor must meet the requirements regarding licensing for handling asbestos materials.

Before starting works contractor has following obligations:

- must assess the risk according to the provisions defined in the Ordinance on risk assessment (OG 112/2014). Risk assessment must be regularly revised and supplemented in accordance with the changes that could affect worker exposure.
- in the case that exposure is continuous and high intensity, and results of risk assessment show that the exposure limit value in the workplace airspace will be exceeded:
    - must at least eight days before the start of work, submit to the competent state inspectorate a report on asbestos works. The content of the report is prescribed by the article 5. of the Ordinance on the protection of workers from risk related to exposure to asbestos (OG 40/07),
    - in accordance with the provisions of the Ordinance on jobs in special work conditions (OG 5/84), before start of work must each employee who performs work must send to the medical examination in the health institution which covers occupational medicine in order to determine whether he or she fulfils requirements for working on these jobs,

In the case that exposure is periodic and low intensity, and results of risk assessment show that the exposure limit value in the workplace airspace will not be exceeded above mentioned actions are not required. But it is necessary after consultation with occupational medicine specialists, to established practical guidelines for determination of periodic exposure and the low intensity exposure.

- must make working plan defined by article 14 of the Ordinance on the protection of workers from risk related to exposure to asbestos (OG 40/07). Drafted plan must deliver to the state inspectorate on their request,
- in the case of waste collection, must obtain waste management permit issued by competent authority according to the Act on Sustainable Waste Management (Ministry of Environmental Protection and Green Transition (MoEPGT) for collection hazardous waste, county offices and City of Zagreb for collection of non-hazardous)[108]
- in the case of waste transport, must entered into the Register of Waste Carriers kept in the MoEPGT according to the Act on Sustainable Waste Management,
- in the case of transport hazardous waste, must meet the requirements according to the Dangerous goods transport act (OG 79/07 i 70/17). During handling asbestos waste (e.g. reloading), it is necessary to stick to prescribed occupational safety requirements. Workers must have adequate protective equipment, protective masks and must undergo appropriate training for handling asbestos waste.

During the conducting work contractor has following obligations:

- shall keep a record of workers performing the activities with asbestos materials, which shall include information on the type and duration of the activity and degree of worker exposure. Every worker has the right to see data from the records referred to him personally and anonymous aggregate data.
- shall keep those records from point forty years from the date of termination of asbestos exposure. If the employer ceases to perform the activity, those records must submit to the Croatian Medical Bureau,
- depending on the results of the risk assessment and to ensure the maximum permissible limit value, the measurement of the concentration of asbestos fibres in the workplace environment must carry out on a regular basis. When determining the concentration of asbestos fibres in the working environment, only fibres with a length greater than 5 µm, a diameter of less than 3 µm and a length ratio of> 3: 1 should be taken into account,

When it comes to informing workers, contractor has following obligations:

- must with written instructions and notices, ensure that the workers and their representatives are informed about:
    - possible health risk due to exposure to asbestos dust or asbestos materials and the risk of tobacco use,
    - maximum limit values and the way of air monitoring in the working environment,
    - hygiene measures, including positive health effects due to smoking cessation,

[108] According to the Ordinance on waste catalogue (OG 90/15) azbestos waste can be classified as hazardous and non-hazardous waste depended on the form in which appears

- proper use and wearing of work or protective clothes and personal protective equipment,
- special preventive measures to reduce and prevent the exposure to asbestos dust or asbestos materials dust.

Those instructions and notices must be placed in clearly visible places in the working rooms and have to be clear and easily understood.

- must provide to the workers and/or their representatives access to the results of measuring asbestos concentrations in the working environment and explanations of the results
- acquainting the workers and/or their representatives with the exceedances of the maximum permissible concentrations in case of exceeding, as soon as possible, counselling workers and/or their representatives on measures to be taken or acquainted the workers and/or their representatives on measures taken in emergency situations.

General conditions regarding workers health protection which contractor have to meet in the case of workers exposure to the asbestos

Ordinance on the protection of workers from risk related to exposure to asbestos (OG 40/7) stipulates some general conditions regarding workers health protection in the case of exposure to the asbestos.

Those conditions are given below:

- the contractor should not distribute young workers, pregnant women or women nursing their infants to workplaces where they can be exposed to asbestos dust or dust from asbestos materials,
- it is forbidden to use asbestos spraying technology as well as working procedures involving low density materials (less than 1 g / cm3) for insulation and sound insulation which contain asbestos,
- activities where workers are exposed to asbestos fibres when removing asbestos or the production and processing of asbestos products or the production and processing of products containing deliberately added asbestos are forbidden, with the exception of the treatment and disposal of products resulting from the destruction or removal of asbestos,
- in carrying out activities, the contractor shall reduce exposure of workers to asbestos dust or asbestos-containing materials at the lowest possible level and to ensure that the concentration of asbestos fibres in the air does not exceed the limit values. in that purpose, the contractor must take the following measures:
  a) the number of workers exposed or might be exposed, contractor must limit to the minimum extent possible,
  b) the working process must be designed on the way that no asbestos dust is produced and, if this is not possible, does not result in the release of asbestos dust into the air,
  c) all areas and equipment for asbestos processing must be such that it is possible their regularly and effectively cleaning and maintaining rooms and equipment,
  d) asbestos or materials containing asbestos which create dust should be kept and packed in packaging that are closed, sealed and marked,
  e) asbestos waste must be collected and disposed of as early as possible and in accordance with the environmental regulations.
- the contractor must ensure that in an eight-hour time-adjusted average no worker is exposed to asbestos concentrations in the air of more than 0,1 fibres per cm3,

- where the limit value is exceed, work must not continue in the affected area until appropriate measures are taken to protect the exposed workers,
- where exposure can not be reduced in any other way and where personal protective equipment for breathing is necessary to comply with the limit values, this must not be permanent and should be minimized for every worker. During the period of work when the use of such equipment is necessary, it is mandatory to ensure the breaks in accordance with physical and climatic conditions. also related to the breaks, when relevant, consultations with workers and / or workers' representatives must be conducted,
- where workers' safety can not be provided in a different way, the contractor shall provide workers with personal protective equipment for the protection of respiratory system in accordance with the provisions of the Ordinance on the use of personal protective equipment (OG 39/06)
- personal protective equipment for the protection of respiratory organs prior to giving to workers on use shall be tested in accordance with the provisions of the Ordinance on placing personal protective equipment on the market (OG 89/10),
- personal protective equipment for the protection of respiratory system may be put and removed only outside the area where asbestos dust is released,
- the contractor must ensure the proper cleaning, maintenance and storage of personal protective equipment for respiratory protection,
- in carrying out certain activities such as demolition, removal, repair and maintenance where it is possible to foresee that despite of the application of preventive measures the limit value will be exceeded, the contractor shall determine and implement the following measures for the protection of workers who perform such works:

    a) equip workers with appropriate personal protective equipment for respiratory protection and other personal protective equipment, which workers must continually use,
    b) provide the necessary warning signs that alert the expected exceedance of the limit values,
    c) prevent the spread of asbestos dust or dust from material containing asbestos outside the premises or work site.

- contractor must not allow a worker to work on jobs where he or she can be exposed to asbestos dust or asbestos materials as long as the worker is not trained for safe working,
- training program for workers must enable workers to acquire the necessary skills and knowledge regarding:

    a) asbestos and its effects on health and the synergistic effect of asbestos and smoking on health,
    b) types of products or materials that could contain asbestos,
    c) procedures where exposure to asbestos dust or asbestos materials can occur and the meaning of preventive measures to minimize exposure as much as possible,
    d) safe mode of operation, protective measures and personal protective equipment,
    e) procedures for dealing with accidental situations,
    f) the meanings of medical examinations.

The program specified in points a) and f) is carried out by the occupational medicine specialists.

- contractor must also ensure for workers:
    a) suitable working or protective clothes,
    b) that workers can replace asbestos-contaminated clothes with clean one and that workers contaminated clothes do not take outside the company. Also, the contractor

must ensure the washing and cleaning of contaminated clothes in the companies authorized for that type of job if the contractor does not wash and clean himself. In that case, transport of contaminated clothing should be carried out in closed containers,

c) separate wardrobe areas for working or protective clothes and civilian clothes,
d) appropriate washrooms, showers and toilet facilities,
e) disposal of the protective equipment at a specific location and checking and cleaning the protective equipment after each use. Prior to further use, the contractor must provide repair or replacement of inoperative equipment.

XIII - 4.2 Special measures related to COVID 19

Given the concentrated number of workers, there is a great potential for the spread of infectious disease in projects involving construction, as are the implications of such a spread.

Contractor must ensure mitigation of these risks by adhering to WHO guidelines as well as Environmental Health and Safety (EHS) Guidelines of the World Bank Group and other good international industry practice (GIIP), and national guidance and procedures.

Waste management

For now, Croatia has stricter conditions for managing with waste protective equipment (gloves, masks, paper towel etc.) and other types of waste from households and similar closed spaces, then those prescribed by WHO and EU guidelines.

The Civil Protection Headquarters of the Republic of Croatia[109] issued recommendation for the waste management in the households and similar enclosed spaces. These recommendations should be applied for waste generated from usage of PEE at the construction site.

Waste (eg paper towels, masks, gloves etc.) and disposable cleaning cloths can be disposed in single-use bags for waste. Such a bag should then be placed in another bag, tied tightly and kept separate from other waste. This waste should be set aside for at least 72 hours before disposing in container for mixed municipal waste.

Given that the epidemiological situation is of a changing nature, it is necessary to continuously monitor the WHO guidelines[110] and the guidelines on the official government website for accurate and verified information on Coronavirus and apply them at the site of the subproject[111].

Protecting workers

The contractor has to ensure: to take all necessary precautions to maintain the health and safety of the contractor's personnel:

- to appoint a health and safety officer at site, who will have the authority to issue directives for the purpose of maintaining the health and safety of all personnel authorized to enter and or work on the site and to take protective measures to prevent accidents;
- to ensure suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics (regular delivery PPEs, ensure protocols for regular

[109] https://civilna-zastita.gov.hr/vijesti/preporuke-za-kucanstva-i-ostale-zatvorene-prostore/2289
[110] https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public
[111] https://koronavirus.hr/en

disinfection of rooms, equipment, tools, are in place and followed, ensure handwashing and other sanitary stations are always supplied with clean water, soap, and disinfectant, etc)

Ministry of Labor and Pension System developed guidance for the implementation of safety and health protection measures at work during the execution of construction works on the rehabilitation of facilities and instructions and implementation of safety and health measures in circumstances of risk of infectious disease Covide-19.

Contractors will develop specific procedures so that adequate precautions are in place to prevent or minimize an outbreak of COVID-19, and it is clear what should be done if a worker gets sick. These will as minimum include:

- Entry/exit to site or the workplace will be minimized, and measures will be put in place to limit contact between workers and the community/general public,
- Trainings for workers on hygiene and other preventative measures will be carried out,
- Adequate supplies of PPE (medical masks, gloves, hand washing soap and sanitizer; and effective cleaning equipment), will be put in place,
- Instruction in case worker gets ill.

While preparing the site-specific procedures guidance materials provided in Annex I must be used and during implementation of the sub-projects updated regularly.

XIII -5. RESPONSIBLE STAFF

Croatia Earthquake Recovery and Public Health Preparedness Project – Component (1) - Earthquake Recovery and Reconstruction will be implemented by the Project Implementation Unit (PIU) that will be established within the MoPPCSA.

- prepare site-specific ESMPs/ESMP Checklist/CHMP,
- supervise the implementation of the ESMPs/ESMP Checklist/CHMP and report on the same,
- supervise the work performed by engineering/design companies, supervisors and contractors to ensure that they are applying adequate standards and are following agreed procedures,
- advise the contractors on the mitigation of environmental and social impacts at the sub-project level and preparation of monitoring reports,
- project workers trainings regarding: Occupational Health and Safety, Codes of conduct, Unacceptability of Gender-Based Violence, Sexual Exploitation and Abuse and Sexual Harassment, Workplace Grievance Redress Mechanism, Waste management precautions
- manage the Feedback and Grievance Redress Mechanism (FGRM)
- organize tendering procedures, review tender evaluation performed by the architectural/engineering firms, and arrange for the contracts to be signed in accordance with agreed procedures,
- Conduct on-the-spot checks in all stages of the project implementation.

According to the Construction Act (OG 153/13, 20/17, 39/19, 125/19), the MoPPCSA is obliged to contract supervision of works to ensure technical and professional control of the project for the whole time of the execution of all planned infrastructure works.

Either Project Manager of the PIU or environmental/social specialist of the PIU will participate in regular monthly meetings of Contractor, supervising engineer, designer, representatives of the

beneficiary (representatives of the City of Zagreb, Zagreb County, Krapina-Zagorje County, Sisak-Moslavina County and Karlovac County) during which progress of the works in the past month will be monitored, potential difficulties in implementation and any deviations from the timetables discussed (in reference to the planned works in the future).

During the implementation of the contract, it is possible to hold additional ad hoc meetings (regardless of the party organizing it) at which the MoPPCSAs PIU is required to participate depending on the assessment, to monitor the implementation and to resolve possible difficulties related to the implementation of the contract.

The supervising engineer has a contractual obligation to submit reports informing the MoPPCSAs PIU of the status and all elements of the implementation of the works contract, including potential difficulties. The reports to which the Supervising Engineer directly provides information on the implementation of public works contracts are initial report and monthly reports.

The initial report shall be submitted to the MoPPCSAs PIU within one month after the start of the implementation of the professional supervision contract and shall include analysis and comments on the project documentation and the public works contract, identification of possible problems, assessment and proposal of the organization of the professional supervision implementation and various other information as needed.

MoPPCSAs PIU has to submit quarterly progress reports on the stakeholder engagement activities for the World Bank, and contractors monthly monitoring reports. Also, upon completion of site visit PIUs Environmental/Social Specialist has to submit to WB monitoring report reflecting main issues and arrangements and timing for their solution.

PIU FGRM focal points, on semi-annual basis has to submit to WB summaries on complaints, feedback, queries, suggestions and compliments, together with the status of implementation of associated corrective / preventative actions.

XIII -6. POLICIES AND PROCEDURES

Most environmental and social impacts of subprojects resulting from activities directly under the control of contractors will be mitigated directly by the same contractors. As a consequence, ensuring that contractors effectively mitigate project activities related impacts is the core of the projects' approach. The MoPPCSA will incorporate standardized environmental and social clauses in the tender documentation and contract documents, for potential bidders to be aware of environmental and social performance requirements that shall be expected from them, are able to reflect that in their bids, and required to implement the clauses for the duration of the contract. The MoPPCSA will enforce compliance by contractors with these clauses. The contractual arrangements with each project worker will be clearly defined in accordance with Croatian and EU law aligned with ESS2 requirements. A full set of contractual requirements related to environmental and social risk and impact management will be provided in the sub-projects' ESMPs /ESMP check list/CHMP. All environmental and social conditions will be included in the bidding documents and contracts in addition to any additional clauses, which are contained in the projects' environmental and social instruments. The details will be provided in the Contractor's Labor Management Plan (C-LMP) which will be submitted to the MoPPCSA PIU for approval.

XIII -7. AGE OF EMPLOYMENT

The Republic of Croatia has ratified both the ILO Minimum of Age Convention (C138) and the ILO Worst Forms of Child Labour Convention (C182). The minimum age of employment for this project shall be 18 years and to ensure compliance, all employees will be required to produce Personal Identification Number (PIN) as proof of their identity and age, which is the national identification document required for employment. Contractors and subcontractors will include in their C-LMPs (to be approved by the MoPPCSA) the specific procedures they will use to verify the ages of job applicants.

XIII -8. GRIEVANCE MECHANISM

A grievance mechanism (GM) will be provided for all direct workers and contracted workers (and, where relevant, their organizations) to raise workplace concerns. Such workers will be informed of the grievance mechanism at the time of recruitment and the measures put in place to protect them against reprisal for its use. Measure will be put in place to make the grievance mechanism easily accessible to all such project workers. Project workers should be able to raise concerns regarding unsafe or unhealthy work situations through the grievance mechanism. As part of the C-LMP, the contractor will establish and describe the details of an appropriate workplace grievance mechanism consistent with the ESS2 requirements (including a written record, established responsibilities and response time, etc).

The workers GM will include:

- A channel to receive grievances such as comment/complaint form, suggestion boxes, email, a telephone hotline that might also be anonymous;
- Stipulated timeframes to respond to grievances;
- A register to record and track the timely resolution of grievances;
- A responsible person/section/committee to receive, record and track resolution of grievances.

The mechanism will be based on the following principles:

- The process will be transparent and allow workers to express their concerns and file grievances,
- There will be no discrimination against those who express grievances, and any grievances will be treated confidentially,
- Anonymous grievances will be treated equally as other grievances, whose origin is known
- Management will treat grievances seriously and take timely and appropriate action in response. Information about the existence of the grievance mechanism will be readily available to all project workers (direct and contracted) through notice boards, the presence of “suggestion/complaint boxes”, and other means as needed.

The MoPPCSA PIU will review the records on a monthly basis and report on the grievances, response time and resolution status in a semi-annual report to the WB.

The grievance mechanism will not impede access to other judicial or administrative remedies that might be available under the law or through existing arbitration procedures, or substitute for grievance mechanisms provided through collective agreements. The Labor Act articles 133; 134; 135 and 136 stipulate grievance redress procedure in detail. These are provided in Annex 2 of the LMP.

XIII -9. CONTRACTOR MANAGEMENT

Contractor selection will follow the procedures consistent with the WB Procurement Policy. The MoPPCSA PIU will have the responsibility of monitoring contractors’ and subcontractors’ adherence to the approved C-LMPs, including adherence to provision of wages, working hours, non-discrimination and other ESS2 requirements which are aligned with national legislation.

The Public Procurement Act (OG 120/16) regulates procedures for the award of public contracts and framework agreements for the procurement of supplies, works or services, legal protection concerning those procedures, and the competences of the central state administration body competent for the public procurement system.

Contract management capability and capacity

The contract management business process already is and will be performed in a satisfactory manner and compliance with current Croatian regulations which meet ESS2 requirements. Since the Public Procurement Act doesn't define obligation to use standard Contract forms, procurement documentation must contain as much relevant information as possible, to be able to make Contracts compatible with procurement documentation.

Contractual relations in Croatia are regulated according to the Mandatory Relations Act.

Procurement Department within the MoPPCSA is familiar with changes that could take place in the contract's implementation, for example, with annexes regarding deadline prolongations, procurement of additional goods, services, or work, all according to Public Procurement Act articles 314.-321.

Procurement Department isn't authorized to deal with appeals incurred in the process of public procurement.

XIII -10. COMMUNITY WORKERS

Project activities will not require the hiring of community workers.

XIII -11. PRIMARY SUPPLY WORKERS

Primary suppliers are suppliers who provide goods or materials directly to the project. The project requires procurement of a substantial number of materials, equipment, and etc. It is not expected that primary supply workers will be relevant as the project will unlikely source goods or materials from a single supplier on an on-going basis.

The primary suppliers for the project will mainly be construction material (brick, cement, etc) suppliers and electrical and sanitary equipment suppliers.

The contractors shall be required to carry out due diligence procedure to identify if there are any risks that the suppliers would exploit child or forced labor or expose worker to serious safety issues.

The Labor Inspectorate is responsible for carrying out periodic inspections to verify that licensed suppliers/enterprises are in compliance with national legislation/regulations relating to OHS and the age of employment and prohibitions against forced labor.

Annex XIV-I – to LMP: COVID-19 Guidance

WHO Guidance

Advice for the public

- WHO advice for the public, including on social distancing, respiratory hygiene, self-quarantine, and seeking medical advice, can be consulted on this WHO website: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public

Technical guidance

- Getting your workplace ready for COVID-19, issued on March 19, 2020
- Water, sanitation, hygiene and waste management for COVID-19, issued on March 19, 2020

WORLD BANK GROUP GUIDANCE

- Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings, issued on March 20, 2020
- Technical Note: Use of Military Forces to Assist in COVID-19 Operations, issued on March 25, 2020
- ESF/Safeguards Interim Note: COVID-19 Considerations in Construction/Civil Works Projects, issued on April 7, 2020
- Technical Note on SEA/H for HNP COVID Response Operations, issued in March 2020
- Interim Advice for IFC Clients on Preventing and Managing Health Risks of COVID-19 in the Workplace, issued on April 6, 2020
- Interim Advice for IFC Clients on Supporting Workers in the Context of COVID-19, issued on April 6, 2020
- IFC Tip Sheet for Company Leadership on Crisis Response: Facing the COVID-19 Pandemic, issued on April 6, 2020

ILO GUIDANCE

- ILO Standards and COVID-19 FAQ, issued on March 23, 2020 (provides a compilation of answers to most frequently asked questions related to international labor standards and COVID-19)

CROATIAN GUIDANCES:

Croatian Institute for Public Health: https://www.hzjz.hr/sluzba-epidemiologija-zarazne-bolesti/koronavirus-najnovije-preporuke/

Civil Protection Headquarters of the Republic of Croatia: https://civilna-zastita.gov.hr/vijesti/preporuke-za-kucanstva-i-ostale-zatvorene-prostore/2289

Government of the Republic of Croatia: https://koronavirus.hr/en

Ministry of Labor and Pension System: INSTRUCTIONS for the implementation of safety and health protection measures at work during the execution of construction works on the rehabilitation of facilities : https://www.upz.hr/wp-content/uploads/2020/05/Uputa-za-gradili%C5%A1ta-.pdf

INSTRUCTIONS FOR EMPLOYERS AND WORKERS for conducting and implementation of safety and health measures in circumstances of risk of infectious disease Covide-19: https://mrms.gov.hr/UserDocsImages/dokumenti/Uprava%20za%20rad/UPUTA%20ZA%20POSLODAVCE%20I%20RADNIKE_COVID%2019_letak-travanj_2020.pdf

ANNEX XIV-II to LMP – Steps on handling the workers' disputes / complaints /grievances

Article 133

(1) The worker who considers that his employer has violated any of his rights arising from employment may require from the employer the exercise of this right within fifteen days following the receipt of a decision violating this right or following the day when he gained knowledge of such violation.
(2) If the employer does not meet the worker's request referred to in paragraph 1 of this Article within fifteen days, the worker may within another fifteen days seek judicial protection before the court having jurisdiction in respect of the right that has been violated.
(3) A worker who has failed to submit a request referred to in paragraph 1 of this Article, may not seek judicial protection before the competent court, except in the case of the worker's claim for indemnification for damages or another financial claim pertaining to the employment.
(4) When the laws, regulations or administrative provisions, collective agreement or working regulations provide for an amicable dispute resolution, the deadline of fifteen days for filing a request with the court starts as of the date when the procedure for such resolution ended.
(5) The provisions of this Article shall not apply to the procedure for the protection of workers' dignity referred to in Article 134 of this Act.
(6) Unless otherwise provided for by this Act or any other law, the competent court within the meaning of this Act shall be the court that has jurisdiction over labour disputes.

The protection of workers' dignity

Article 134

(1) The procedure and measures for the protection of workers' dignity from harassment or sexual harassment shall be regulated by special legislation, collective agreement, agreement between the works council and the employer or working regulations.
(2) The employer employing at least 20 workers shall be obliged to appoint a person who would, in addition to him, be authorised to receive and deal with complaints related to the protection of the workers' dignity.
(3) The employer or person referred to in paragraph 2 of this Article shall, within the time limit prescribed by the collective agreement, the agreement between the works council and the employer or working regulations, and within a maximum of eight days from the day of filing the complaint, examine the complaint and take all the necessary measures appropriate for a particular case, to stop the harassment or sexual harassment, if he has established that harassment has taken place.
(4) Where the employer fails to take measures for the prevention of harassment or sexual harassment within the time limit referred to in paragraph 3 of this Article, or if the measures taken are clearly inappropriate, the worker who is a victim of harassment or sexual harassment shall have the right to stop working until he is ensured protection, provided that he sought protection in the court that has jurisdiction, within the following eight days.
(5) If there are circumstances under which it is not reasonable to expect that the employer will protect a worker's dignity, the worker shall not be obliged to file a complaint with the employer and shall have the right to stop working, provided that he sought protection before the competent court and notified the employer thereof, within eight days of the date of work interruption.
(6) During the period of interruption of work referred to in paragraphs 4 and 5 of this Article, the worker shall be entitled to remuneration in the amount he would have earned if he had actually worked.
(7) In the event of a valid judicial decision ruling that the worker's dignity was not violated, the employer may request the refund of remuneration referred to in paragraph 6 of this Article.
(8) All information collected in the procedure for the protection of workers' dignity shall be confidential.

(9) The worker's behaviour constituting harassment or sexual harassment shall be regarded as the breach of obligations arising from employment.
(10) The worker's resistance to the behaviour constituting harassment or sexual harassment shall not be regarded as the breach of obligations arising from employment and must not be grounds for discrimination against the worker.

Burden of proof in labour disputes
Article 135
(1) In the event of an employment-related dispute, the burden of proof shall lie with the person claiming the violation of his rights arising from employment relationship or the person initiating the dispute, unless otherwise provided for by this Act or any other law.
(2) In the event of a dispute related to the discrimination of the worker on the grounds of the worker's approach to the competent persons or state authorities due to reasonable suspicion of corruption or his report in good faith on the said suspicion, which resulted in the violation of worker's rights arising from employment, and where the worker presents a reasonable case of him being discriminated and of violation of his rights arising from employment, the burden of proof shall lie with the employer, who must prove the non-discrimination of the worker and non-violation of his rights arising from employment.
(3) In the event of a dispute related to the employment contract termination, the burden of proving justified reasons for the termination shall lie with the employer, where the termination was effected by the employer; the burden of proof shall lie with the worker only where the termination of employment contract was effected by the worker by means of an extraordinary notice of termination.
(4) In the event of a dispute related to working time, the burden of proof shall lie with the employer, if he fails to keep records referred to in Article 5, paragraph 1 of this Act.

Arbitration and mediation
Article 136
(1) Parties to an employment contract may, for the purpose of resolving a labour dispute and subject to their mutual consent, use arbitration or mediation services.
(2) The composition, procedure and other issues relevant for the arbitration or mediation may be laid down by collective agreement.

ANNEX VII. MINUTES OF MEETING FOR THE ENVIRONMENTAL AND SOCIALMANAGEMENT FRAMEWORK

Public consultation process for ESMF for **Component 1: Earthquake Recovery and Reconstruction** started on January 5, 2021. The draft version of the ESMF was disclosed on Ministry of Physical Planning, Construction and State Assets web site, and also was available in hard copy at its premises (Ulica Republike Austrije 20, 10 000 Zagreb), until January 22, 2021.

Notification for public consultation process and public consultations meeting was published in Croatian language:

https://mgipu.gov.hr/pristup-informacijama/savjetovanje-s-javnoscu-8116/otvorena-savjetovanja/esmf-za-komponentu-1-i-esmf-za-komponentu-2/11355

https://mgipu.gov.hr/pristup-informacijama/financijski-dokumenti/5-1-2021-poziv-na-javno-savjetovanje-o-okviru-za-upravljanje-okolisnim-i-socijalnim-pitanjima-eng-environmental-and-social-management-framework/11356

In addition, via e-mail, Ministry of Physical Planning, Construction and State Assets informed and invited to participate in consultation process and public consultation meeting following institutions:

Name of the institution	E-mail
City of Zagreb	info-graditeljstvo-izgradnja@zagreb.hr; zastita.spomenika@zagreb.hr; gospodarstvo@zagreb.hr gospodarstvo@zagreb.hr
Croatian Chamber of Architects	arhitekti@arhitekti-hka.hr; info@arhitekti-hka.hr
Croatian Chamber Of Civil Engineers.	info@hkig.hr
Croatian Conservation Institute'	divic@hrz.hr
Directorate of civil protection	ured@civilna-zaštita.hr
Energy Efficiency and Environmental Protection Fund	kontakt@fzoeu.hr
Krapina-Zagorje County	ured.zupana@kzz.hr
Ministry of Culture and Media	pisarnica@min-kulture.hr; press@min-kulture.hr
Ministry of Economy and Sustainable Development	press@mingor.hr;
Ministry of Finance	kabinet@mfin.hr
Ministry of Interior	press@mup.hr; ured@civilna-zastita.hr
Ministry of Labour, Pension System, Family and Social Policy	kabinet@mrms.hr
Ministry of Regional Development and EU Funds	press@mrrfeu.hr
Ministry of Science and Education	kabinet@mzo.hr;
Nature Park Medvednica	info@pp-medvednica.hr
State Inspectorate	press@dirh.hr
Zagrebačka County	ppi@zagrebacka-zupanija.hr; uo-prostor@zagrebacka-zupanija.hr

Public consultation meeting was held on January 21, 2021.

The meeting started at 11 a.m.

Public consultation meeting was organised jointly for ESMF for Component 1: Earthquake Recovery and Reconstruction project and ESMF for Component 2: Public Health Surveillance and Preparedness.

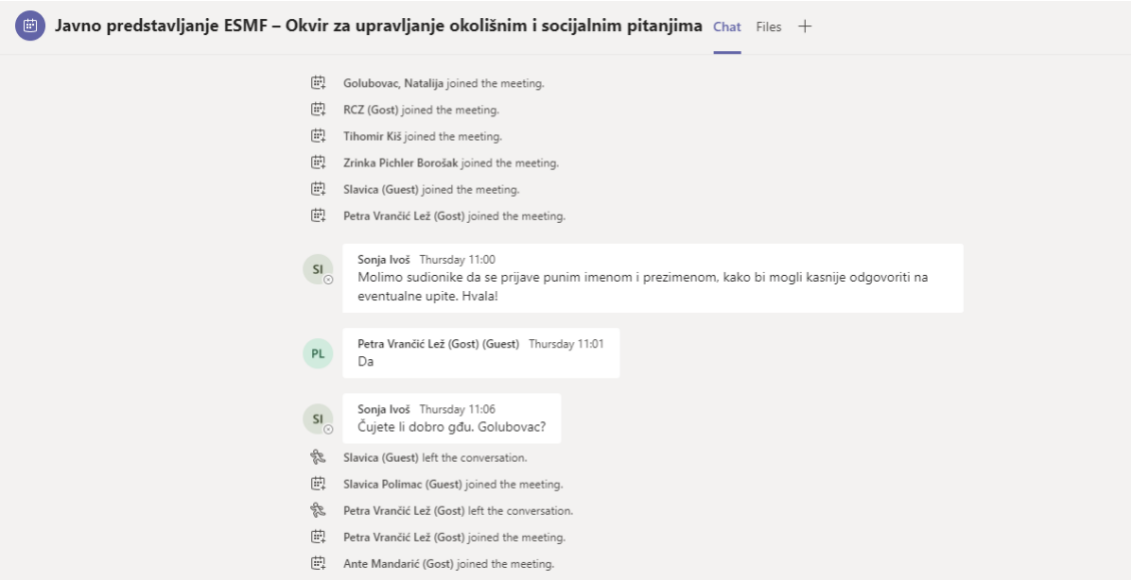
Due to COVID 19 situation and measures in force in Croatia regarding public gatherings public consultation meeting was virtual.

At the public consultation meeting following representatives from Ministry of Physical Planning, Construction and State Assets were present: Mr. Davorin Oršanić, Ms. Snežana Penović and Ms. Sonja Ivoš.

In front of Ministry of Health, Ms Slavica Polimac was present.

List of attendees that joined public consultation meeting via Microsoft Teams video conferencing platform:

- Tihomir Kiš;
- Zrinka Pichler Borošak
- RCZ (Guest)
- Branimir Bradičić
- Petra Vrančić Lež
- Ante Mandarić.



At the beginning of the meeting Mr Oršanić welcomed all participants and presented basic information about the project *Croatia Earthquake Recovery And Public Health Preparedness Project*. Then, Ms Natalija Golubovac, environmental and social specialist, presented the ESMF documents starting with

purpose, approach and importance of preparation of ESMF documents. Identified project environmental and social risks and potential impacts were presented, as well as instruments and measures for their mitigation and or/elimination. Also, project set up was presented and Project Grievance Redress Mechanism (FGRM) and the World Bank Grievance Redress Service (GRS).

After presentation attendees did not have any questions and comments.

During the consultation period no comments were received on ESMF nor electronically nor via hard copy.