REPUBLIC OF CROATIA

Ministry of Science and Education

(MSE)

TOWARDS SUSTAINABLE, EQUITABLE AND EFFICIENT EDUCATION PROJECT
(P170178)

Ministarstvo znanosti i obrazovanja

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

MINISTRY OF SCIENCE AND EDUCATION

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LIST OF ABBREVIATIONS & ACRONYMS

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
CNCEEE	Croatian National Centre for External Evaluation of Education
COVID-19	Coronavirus Disease 2019
Cr	Chromium
CSR	Country Specific Recommendations
Cu	Copper
DBD	Danube River Basin District
ECEC	Early Childhood Education and Care
EGD	European Green Deal
EIA	Environmental Impact Assessment
ENIA	Ecological Network Impact Assessment
EPEEF	Environmental Protection and Energy Efficiency Fund
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESP	Education Sector Plan
ESSQ	Environmental and Social Screening Questionnaire
ESSs	Environmental and Social Standards
FGM	Feedback and Grievance Mechanism
GBV	Gender-based Violence
GIIP	Good International Industry Practice
GRM	Grievance Redress Mechanisms
GRS	Grievance Redress Service
GV	Daily Limit Values
GVA	Gross Value Added
H2S	Hydrogen Sulphide
HCB	Hexachlorobenzene
Hg	Mercury
IFC	International Finance Corporation
ILO	International Labor Organization
IPF	Investment Project Financing
LA	Labor Act
LMP	Labor management procedures
LSGUs,	Local Self Government Units
M&E	Monitoring and Evaluation
MCS	Mercalli–Cancani–Sieberg
MoESD	Ministry of Economy and Sustainable Development
MoH	Ministry of Health
MSE	Ministry of Science and Education
MSDS	Material Safety Data Sheets
Natura 2000	Ecological Network of the Republic of Croatia
NH3	Ammonia
Ni	Nickel
NMVOC	Non-methane volatile organic compounds
NO_2	Nitrogen Dioxide

NO_x	Nitrogen Oxides
NRRP	National Resilience and Recovery Plan
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
PIU	Project Implementation Unit
PM	Particulate Matter
PPE	Personal Protective Equipment
PSC	Project Steering Committee
RRF	Recovery and Resilience Facility
RSGUs	Regional Self-Government Units
Se	Selenium
SEP	Stakeholder Engagement Plan
SESA	Strategic Environmental and Social Assessment
SGBV	Sexual and Gender-based Violence
SO2	Sulphur Dioxide
TSP	Total Suspended Particles
UNESCO	United Nations Educational, Scientific and Cultural Organization
VOCs	Volatile Organic Compounds
WB	World Bank
WBG EHSGs	World Bank Group Environmental, Health and Safety Guidelines
WDS	Whole Day School
Zn	Zinc

EXECUTIVE SUMMARY

1. Background

The World Bank (WB) is providing support to the Government of Croatia (the Government) to implement the "Towards Sustainable, Equitable and Efficient Education Project".

The Project will support modernization of basic education quality and efficiency nationwide in Croatia through expansion of instruction time, improvements to the school network infrastructure and students learning outcomes thus contributing to a more agile and modern education system in Croatia. Project objectives are aligned with the on-going initiatives under the 2014 National Education, Science and Technology strategy such as curriculum reform, introducing modern learning equipment, and formative assessment.

2. The Project Development Objective

The Project Development Objective (PDO) is to improve equity and quality in Whole Day School demonstration schools and to increase the institutional capacity of the Ministry of Science and Education to implement education reforms.

The "Towards Sustainable, Equitable and Efficient Education Project" consists of following project components:

Component 1: Ensure that more hours translate into more learning (EUR 3.3 million, equivalent to US$3.98 million)

This component will foster the optimal use of expanded instructional time aligned to the curricular reform by helping the Croatian school system to improve the quality of classroom instructional practices through training, classroom observations, and formative and summative assessments.

Component 1 includes the following subcomponents:

- Subcomponent 1.1: Develop Whole Day School (WDS) model and refine model following experiences during initial years of reform
- Subcomponent 1.2: Help utilize the administrative and student performance data and establish a "peer-mentoring" program

Component 2: Design and demonstrate infrastructure solutions for Whole Day School (EUR 15.7 million, equivalent to US$18.93 million)

This component will support the design of new infrastructure standards for Croatian schools, which will encompass best practice Organisation of Economic Co-operation and Development – European Union (OECD-EU) climate, environment and energy efficient standards. The new standards will be applied to all school infrastructure financed through the RRF and other EU funding sources, significantly contributing to the European Green Deal (EGD) agenda. The component will also finance infrastructure investments (e.g. minor construction works, upgrading of the water supply, electricity, and the internet system, classroom redesign, including classroom layout, furniture selection, etc) in a select group of schools (approximately 50 schools) that will pioneer the implementation of WDS and serve as demonstration schools for the reform.

Component 2 includes the following subcomponents:

- Subcomponent 2.1: Prepare new/updated infrastructure standards for schools
- Subcomponent 2.2: Finance expenditures associated with creating "demonstration schools"

Component 3: Strengthen Ministry's capacity to implement reforms (EUR 6 million, equivalent to US$7.23 million)

This component will strengthen the Ministry of Science and Education (MSE) capacity and provide direct support to key aspects of implementing the reform, such as establishing a reform unit within the Ministry, project management, monitoring and evaluation, and communications. Technical assistance and capacity-building are at the center of this component's activities, which aim to strengthen the Croatian institutions responsible for leading the design and implementation of the WDS reform.

Component 3 includes the following subcomponents:

- Subcomponent 3.1: Support establishment of the reform unit within MSE to facilitate delivery, including communications (support WDS reform implementation)
- Subcomponent 3.2: Update costing of the reform and prepare local school network plans, including work on special needs students
- Subcomponent 3.3: Support the design of strategic educational reform initiatives
- Subcomponent 3.4: Fund research program to allow for adaptive implementation and document results

3. Objective of the Environmental and Social Management Framework

The Environmental and Social Management Framework (ESMF) document is the environmental and social due diligence instrument made to ensure that the proposed project is implemented in accordance with the World Bank operational policies and guidelines, including WB Environmental, Health and Safety Guidelines (EHSG), World Bank Environmental and Social Standards (ESS) and national legislation related to environmental and social protection, as well as, a mandatory practical tool to be used during design, implementation, and monitoring of the project activities. The ESMF also defines the implementation and institutional responsibilities of various stakeholders involved in the project implementation. The ESMF provides an overview of environmental and social policies, institutional and legal framework of the Croatia and Environmental and Social Standards (ESS) of the WB; presents the institutional and capacity assessment related to the environmental and social management of the Project; and describes the principles, objectives and approach to be followed while assessing the E&S risks and impacts of Project activities and designing environmental and social mitigation measures.

4. Application of the Environmental and Social Standards

Seven out of the ten Environmental and Social Standards (ESSs) of the WBs ESF have been assessed as relevant for the overall Project: ESS1 Assessment and Management of Environmental and Social Risks and Impacts, ESS2 Labor and Working Conditions, ESS3 Resource Efficiency and Pollution Prevention and Management, ESS4 Community Health and Safety, ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources, ESS8 Cultural Heritage, and ESS10 Stakeholder Engagement and Information Disclosure.

5. Environmental and social risk rating

The environmental and social risks for the overall Project are rated as Moderate mainly due to planned interventions related to rehabilitation and refurbishment of selected schools (e.g. removal of existing or construction of new walls, works related to re-purposing or existing space such as dining halls, classrooms, corridors, and other site-specific interventions in order to create conditions for implementation of WDS concept), activity supported under the sub-component 2.2. Under the same

sub-component construction of small annexes may be supported. Works will not include constructive elements of buildings or new construction. Planned activities carry risks typical for small-scale construction works: operational health and safety risks, community health and safety risks, risks from dust and noise emissions, traffic disruption, generation of small quantities of construction waste and small quantities of hazardous waste, etc. To address these risks, the ESMF containing set of prevention and mitigation measures, has been developed. Reconstruction and/or construction of new schools will not be financed by the Project; however, the project activities include development standard designs for new modern, resilient and energy-efficient (green) schools that could be funded under EU and World Bank funds. Therefore, design standards will be scrutinized against relevant ESSs.

6. National Legislation

As a member of the European Union, Republic of Croatia has harmonized its environmental regulations and standards with EU directives. Environmental regulations are generally in line with WB safeguards and policies with slight differences in regard to ESS1, ESS3, ESS6 and ESS10. Some of the differences are summarized in the paragraphs below.

According to national waste legislation the owner of hazardous waste is not obliged to obtain information on final destination of hazardous waste, his responsibility ceases when waste is handed over to the authorized company (e.g. to company collecting hazardous waste) while according to ESS3 waste owner must obtain documentation on handing waste to the final destination. In the case where significant risks and adverse impacts on biodiversity have been identified, according to the ESS6 it is necessary to develop and implement a Biodiversity Management Plan. National legislation does not define such obligation. Also, unlike ESS10, national environmental legislation does not define preparation of programme like Stakeholder Engagement Plan (SEP) for specific projects. Further, national legislation, unlike ESS1, does not require any type of E&S assessment other than EIA and SEIA.

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

7. Summary of Risks and Impacts

Environmental risk is rated moderate. Under Subcomponent 2.2 activities are minor rehabilitation and refurbishment of learning environments (e.g. removal of existing or construction of new walls, works related to re-purposing or existing space such as dining halls, classrooms, corridors, informal learning spaces and other site-specific interventions in order to create conditions for implementation of WDS concept) and construction of small annexes (also to ensure sufficient space to enable introduction of WDS concept to existing schools). These risks are typical for construction works: dust and noise emissions, accidental spillage of machine oil, lubricants, traffic disruption, generation of small quantities of construction waste (including hazardous), impacts on cultural heritage, cultural heritage chance finds, unsafe working conditions, poor occupational health and safety practices. Though very unlikely, it is possible that rehabilitation works would generate small quantities of asbestos waste (possibly present as insulator of installations) while -hardbound asbestos has been removed from most of educational facilities and the Project scope of works do not include roof rehabilitation (or of any other constructive element). Issues related to lead-based paint, lead water pipes, transformers, potable water, wastewater disposal, fire risk, indoor air quality, flooding and seismic are not expected in relations to this Project. In addition, these topics are strongly regulated and covered with strong institutional oversight.

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

Significant adverse environmental impacts under other Components / Subcomponents other that the one described for Subcomponent 2.2 are not expected as they are focused on support reform of educational system and its institutional and organizational strengthening. Positive environmental impacts include development of standardised design for new and existing schools (when rehabilitated/reconstructed) that integrate environmental and climate sustainability factors. ESF will be applied to other relevant Project activities under the sub-components 2.1 and 3.1 such as developing standard designs for new modern and energy-efficient (green) schools as well as developing an effective communication and outreach strategy to inform and engage with all stakeholders and the community-at-large about the comprehensive WDS reform, respectively.

Social risk is rated as moderate. Implementation of the activities will mainly have positive social impacts. An estimated 15,000 in the 50 targeted schools nationwide are expected to show improved literacy, numeracy and socio-emotional skills as a result of the introduction of Whole Day School model and improvement of learning environment. The project in particular targets high poverty areas in the bottom 40^{th} percentile and identifies the Roma as a focus group, among its beneficiaries. Teachers, principals and school founders from participating demonstrations schools will benefit from additional training received. Moreover, parents of children in WDS, especially women, are expected to gain additional productive hours which may improve their participation in the labour market and therefore improving their income. The project integrates a robust stakeholder engagement, including i) consultations on the project objectives, ii) engagement with stakeholders on reforms and adopting the WDS model, iii) independently organised consultations by schools applying for WDS in which they are expected to obtain consensus for participation as well as grievance redress mechanisms at multiple levels. This participatory approach is important as it will foster decentralised decision making in the educations sector and create multiple platforms for communication between key education stakeholders in the country. No major adverse social impacts are anticipated, including involuntary resettlement or land acquisition.

Summarised key environment and social potential risks

Potential risk	Caused by
Air pollution	Emissions of exhaust gases into the air (CO_2, NOx, SO_2 and CO) from combustion of machinery and vehicles fuels on construction site, emission of PM10 particles due to the movement of the vehicles and the work of the construction machinery
Noise pollution	Operation of machine and equipment at the construction site (mainly in the processes like transport, loading/unloading machinery, etc.)
Surface or ground water pollution (including accidental spillage of machine oil, lubricants etc.)	Uncontrolled spillage of fuels, oils, equipment lubricants, paints, varnishes and improper waste management during irregularly storage of fuels or some accidental situations.

Soil pollution or erosion	Fuels, lubricants and liquid materials used in civil works, which can infiltrate into ground and underground as a result of elemental disasters, accidents or mismanagement of the equipment, leakage and accidental spillage
Traffic disturbance and other OHS issues	Construction work activities: increased frequency of transport of materials and machinery, improper use of PPE and applying COVID 19 measures, risk related to working at hight, lifting heavy structure, etc
Waste generation (small quantities of construction and hazardous waste e.g. asbestos) and waste management	Improper management of waste primarily during the construction works
Cultural and historical heritage	Chance finds and impact on protected cultural and historical entity
Impact to nature	Construction works carried out in the protected area or Natura 2000
Temporary disruptions to nearby communities	Construction works (e.g. 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.
Stakeholder Engagement related risks including potential exclusion of the vulnerable and marginalised	Improper identification of students, agencies and communities who are vulnerable and marginalised as stakeholders project activities not tailored to vulnerable and marginalised stakeholders, e.g. communications and consultations, participation in demonstrations schools or contributions to the discourse on reforms
Labor related risks	Risks related to labour management such as unfair hiring and dismissal procedures, improper occupation health and safety procedures, sexual harassment, exploitation and abuse, unavailability of workers GRM or retaliation to those raising concerns

8. Mitigation measures

As rehabilitation, refurbishment and annex construction works are expected to have low to medium environmental and social impacts, thus an ESMP and ESMP Checklist (prepared for typical works with predictable impacts) will be prepared for each sub-project (there is no need for the full-scale EIA). Scope of activities do not indicate use of ESMP, however, as the details of rehabilitation design as well as exact locations of sub-projects are unknown, necessity for site-specific ESMP (and corresponding E&S due diligence) cannot be excluded at this point. In the case of works within Natura 2000 network, biodiversity protection plan will be integrated to ESMP or ESMP Checklists, whichever is applicable. Cultural heritage related risks are not anticipated. However, where applicable, they will be addressed through the development of a site-specific Cultural Heritage Management Plan (CHMP) annexed to ESMP Checklist.

In addition to environmental and nature protection measures and monitoring, ESMPs and ESMP Checklists prepared under the Project will include specific guidance on labor management, workers Occupational Health and Safety (OHS) measures and safety of students, teachers and visitors during the implementation of works, COVID19 related prevention and tracking measures. Environmental and Social Assessment documents (ESMPs, ESMP Checklists, CHMPs) will include mandatory update of existing operation and maintenance plan/procedures related to EHS aspects to reflect the newly rehabilitated areas while still addressing the other existing areas of school. This would include Emergency Preparedness and Response, maintenance plans, and similar. Maintenance plans for schools are prepared as a part of risk assessment plans based on the applicable legislation such as Law on Fire-protection, Law on OHS. The final version of ESMP, WB approved and publicly consulted, will be included to bidding and contracting documentation.

Non-material, soft Project activities, will include EHS aspects including the final products reviewed in any project technical assistance (ToRs, consultancies, studies, etc.).

The draft Stakeholder Engagement Plan (SEP) is prepared. It will be updated periodically as necessary. Schools applying to participate in the WDS are expected to organise consultations with their stakeholders including teachers, school founders, principals, students, parents and other interested parties and obtain consensus on their decision to apply. The PIU will provide support and guidance in this process, including a template to guide the discussions.

The Project will be implemented by the Project Implementation Unit (PIU) that will be established within the MSE. PIU will include qualified and experienced Environmental and Social Specialist and Communication Specialist who will be primarily responsible for implementation and supervision of the ESMF. PIU will be accountable for reporting to both the World Bank and will ensure that the Bank's environmental and social criteria are adequately applied on all project activities and progress. The PIU will also be responsible for project coordination, the preparation of consolidated reports. It will be responsible for overall implementation of its respective activities, including functions such as procurement, technical inputs, progress monitoring, quality control, and social and environmental safeguards.

9. Environmental and Social Review Summary

For projects involving multiple sub-projects the World Bank requires appropriate environmental and social screening and assessment of sub-projects is carried out. Given the overall moderate risk rating of the Project, only moderate risk and low risk subprojects will be supported, while substantial and high risk activities will be screened out. E&S Assessments will be conducted in accordance with national law and any requirement of the ESSs that the Bank deems relevant to sub-projects by developing, implementing avoidance and mitigation measures, and following monitoring and

reporting procedures, all in order to secure ESF and regulation compliant implementation. If necessary, the project may envisage measures to further strengthen Borrower's capacities. In addition to sub-component 2.2 where minor rehabilitation works and construction of annexes are envisaged, the ESF application extends to technical assistance planned under sub-components 2.1 and 3.1, in particular development of design standards for schools.

The Environmental and Social assessment will follow the 5 step Process to identify risks associated with specific sub-projects, screen out any ineligible, substantial and 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, as follows:

STEP 1: Sub-project screening and risk classification **-** Environmental and Social Screening Questionnaire (ESSQ) for each rehabilitated school is prepared by the PIU's Environmental and Social Specialist (ESS). Once the ESSQ has been satisfactorily completed, the ESS will submit the document and the E&S Screening report (in an agreed form) to the WB. Before the assessment, ESS prepares an E&S screening report, subject of the approval from WB Environmental and Social Specialists, who confirms the risk.

STEP 2: Sub-Project Preparation - The PIU prepares necessary documentation for sub-project implementation. ESS will review for ESMF and ESF compliance and approve designs of work form ESH perspective before bidding of works. All Technical Assistant documents and reports must be reviewed and approved by ESS before it can be considered finalized, including development of design standards.

STEP 3: Preparation and Disclosure of ESMP Checklist, CHMP and public consultations - ESMP and CHMP (the latter if applicable) must be prepared prior to bidding procedures, by the PIUs Environmental and Social Specialist, and shall be subject to review and approval of the WB.

ESS will be responsible for publishing the documents to the public and introducing the public in the whole process of project realization.

Disclosure package for Draft ESMP/ESMP Checklist/CHMP will include the following documents:
Public announcement for organization of the public disclosure containing the call for comments,
Draft version of ESMP Checklist and CHMP is applicable developed for each sub-project.
All comments and questions shall be processed and together with feedback incorporated in the final version of the ESMP Checklist/CHMP and captured in the minutes of the meeting.

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

STEP 4: Integration of ESMP/ESMP Checklist/CHMP in tender documentation - ESMP /ESMP Checklist/CHMP 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.

STEP 5: Implementation, project supervision, monitoring and reporting - The contractor (and consequently all its sub-contractors) is responsible for the implementation of ESMP Checklist/CHMP mitigation measures and monitoring plan as well as any subsequent corrective measures prescribed by PIU and WB. The contractor will develop a contractor's ESMP will outline all their obligations including OHS measures, labor management procedures including administering the code of conduct and workers GRM, community health and safety as well as any requirements as specified in the ESMP. The PIU will report on ESMF, ESMP and ESMP Checklist/CHMP implementation compliance to the WB in the regular semi-annual Progress reports and for sub-projects in line with the ESCP and in dynamics agreed in the ESMP or ESMP Checklists.

PIU will notify WB within 48 hours of any incident or accident related to the project or that has an impact on it, and that has or could have a significant adverse effect on the environment, the affected communities, the public, or the workers included. As per Bank's request, MSE will also prepare a report on the incident or accident with a detailed Root Cause Analysis (RCA) to be submitted within 30 business days of the incident to the Bank.

Separate procedures for environmental and social review for Technical Assistance (TA) are developed to guide E&S due diligence, as follows:

Step 1: PIU E&S Specialists screen ToR prepared for TA against ESF ESS end determine its potential E&S risk for the implementation phase. If the risk is low, no further action needs to be taken. If the future risk is moderate, E&S Specialists notify the PIU (and the WB in a regular Progress Report) that a particular TA needs further E&S assessment. TA with potential downstream significant and high risk will not be supported under this Project.

Step 2: PIU prepares TA documents. When TA documents are in high draft, they will be shared with PIU Environmental Specialist and PIU Social Specialist for E&S assessment against ESF ESSs. PIU E&S Specialists carry out assessment and make recommendations to mitigate identified E&S risks and make recommendations for further E&S performance of TA. Assessment results and recommendations are presented in the E&S Assessment Report.

Step 3: E&S Assessment Report is reviewed (also revised by PIU E&S Specialists if needed) and approved by the WB. Approved E&S Assessment Report is disclosed for 14 days at MSE web site with a call for comments. E&S Assessment Report is considered final when it addresses all relevant comments, feedback is provided to public, and consultation minutes are included (e.g. as an annex).

10. ESMF Disclosure and Public Consultations

ESMF final draft will be disclosed on MSE web-site before appraisal accompanied by a call for comments and details of the public consultation meeting. Hard copy of the document will be also available at MSE reception. Both electronic and hard copy will be available to public for at least 14 days. All relevant comments and questions will be addressed and documented in the EMSF. Feedback will also be provided to public. Final version of ESMF will include minutes of the public consultation meetings (including relevant comments received during the disclosure period). ESMF will be finalized, WB approved and re-disclosed within 30 days following Loan Agreement Effective date.

11. Outline of the ESMF

The Chapters of the Environmental and Social Management Framework document are following:

→ PROJECT BACKGROUND

This Chapter consist short description of Project purpose and importance, including expected benefits from implementation. It also gives short overview of ESMF purpose and relevance.

→ PROJECT DESCRIPTION

The Chapter gives project description in more details, explains project objectives and beneficiaries.

→ ENVIRONMENTAL AND SOCIAL BASELINE INFORMATION

This Section provides general information about relevant natural characteristics of the Republic of Croatia and project area in terms of environmental characteristic (air emissions and air quality, water quality, waste management, noise, nature protection, climate change), basic demographic, economic data, social protection and data on education system, administrative division of Croatia.

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

Description of relevant national environmental and social legislation and procedures, including overview of institutional framework is provided in this part of the document.

→ BASIC INFORMATION ON THE WORLD BANK ENVIRONMENTAL AND SOCIAL STANDARDS

This Chapter provides the brief overview of the World Bank Environmental and Social Standards, and results of preliminary screening (relevant ones that should be considered for the project to ensure prevention, mitigation and compensation in case of adverse impacts of project development to environmental and social conditions).

→ PRELIMINARY COMPARATIVE ANALYSIS OF NATIONAL LEGISLATION AND ESSs

Results of preliminary comparative analysis of WB ESS and national legislation are presented in this segment.

→ SCREENING OF POTENTIAL ENVIRONMENT AND SOCIAL IMPACTS

This Chapter provides description of possible environmental and social risks and impacts that may occur during implementation of project activities

→ MITIGATION OF POTENTIAL IMPACTS

Environmental and social due diligence instruments envisaged under the national legislation and World Bank ESS, including environmental and social screening results are discussed in the Chapter. In also provides overview of mechanisms, activities, and measures that will be implemented to meet standards relevant to the project.

→ PROJECT IMPLEMENTATION SETTING

This part contains a description of the organizational structure of the Project Implementation Unit (PIU) within the MSE as the one responsible for implementation of the project (including reporting arrangements and responsibilities).

→ FEEDBACK AND GRIEVANCE MECHANISM

This Chapter describes channels that will be available to stakeholders who would like to submit complaints, feedback, queries, suggestions, or compliments and the way project activities will be communicated with the public.

ANNEXES
ANNEX I - THE NATIONAL EIA PROCEDURE
ANNEX II - NATURA 2000 NETWORK AND PROTECTED PARTS OF NATURE – LEGAL PROTECTION PROCEDURE ACCORDING TO CROATIAN LEGISLATION
ANNEX III - PROCEDURE OF ISSUING LOCATION, BUILDING AND USE PERMIT ACCORDING TO CONSTRUCTION ACT (OG 153/13, 20/17, 39/19,125/19) AND THE PHYSICAL PLANNING ACT (OG 153/13, 65/17, 114/18, 39/19, 98/19)
ANNEX IV - PROCEDURES FOR ISSUING LOCATION, BUILDING AND USE PERMITS (regular procedure – no natural disaster proclaimed)
ANNEX V - 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)

1 PROJECT BACKGROUND

The Project will support modernization of basic education quality and efficiency in Croatia nationwide through expansion of instruction time, improvements to the school network infrastructure and students learning outcomes thus contributing to a more agile and modern education system in Croatia.

Project objectives are aligned with the on-going initiatives under the 2014 National Education, Science and Technology strategy such as curriculum reform, introducing modern learning equipment, and formative assessment. By implementing component activities and achieving set goals the Project will address some of the key issues of Croatian basic educational system:

(i) Quality of learning; According to the Human Capital Index, Croatia places 31st out of 174 countries, higher than average for the region and its income group. Croatia does exceptionally well in terms of enrolling children in school and keeping them in school: on average, a child can expect to complete 13.4 years of pre-primary, primary and secondary school by age 18. A key reason behind this is that Croatia has one of the lowest shares of early leavers from education and training in the EU, as well as a relatively small percentage of grade repeaters. However, what drags down Croatia's performance is the quality of the education provided during those years of schooling. When years of schooling are adjusted for quality of learning, the result is equivalent to only 10.4 years of education: a learning gap of 3 years.

(ii) Unequal access to school programs and support across income groups. Up to 27.3 percent of children aged 6 - 14 from households with the lowest income quintile attend less than five hours of school per day. Schools need to provide more learning opportunities for disadvantaged children especially in early grades as they do not have equal access to Early Childhood Education and Care (ECEC). In 2016, 75.1 percent of Croatian children 4 to 6 years of age attended ECEC programs, the lowest percentage in the EU, which has an average enrolment rate of 95.5 percent (European Commission 2018).

(iii) Effects of COVID-19 pandemic. It is likely that the ongoing pandemic will generate further learning losses and is pushing more students into functional illiteracy. Schools in Croatia have been closed for around four months a year on average during the pandemic. The effectiveness of remote teaching has still not been established. It is estimated that if remote teaching in the country is half as effective as face-to-face teaching, estimated learning in Croatia will drop by the equivalent of 8 PISA points or as much as 20%.

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

1.1 The Environmental and Social Management Framework objective

The 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 subprojects, and the risks and impacts cannot be determined until the program or sub-project details have been identified.

Since specific sub-projects under the Project will be determined during the project implementation, the ESMF was found to be the most appropriate environmental and social due diligence instrument.

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 subproject level environmental Assessments - ESMP Checklists and Cultural Heritage Management Plans (CHMPs).

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 will be used also in the identification, management and monitoring of occupational health and safety (OHS), management of labor as well as community health and safety issues associated with the Project interventions. The ESMF also details the Grievance Redress Mechanisms (GRM) under the project.

Therefore, developing the ESMF is also important to identify other specific environmental and social instruments and management tools required by the ESF, such as the Stakeholder Engagement Plan (SEP), Cultural Heritage Management Plan (CHMP), etc.

1.2 Public disclosure and consultation of ESMF

The electronic version of the ESMF will be disclosed prior to appraisal. Following this timeframe a paper copy of ESMF will be made available for public viewing at MSE reception. Public disclosure will remain for at least 14 days. The ESMF disclosure will be followed by participation of relevant stakeholders in organized virtual public consultations meetings, according to the SEP. The ESMP will be finalized, consulted, WB approved and redisclosed on the MSE website not later than 30 days of loan agreement effectiveness date. The Public Consultation meeting of the ESMF is scheduled to take place on _____.

Feedback will be provided for all relevant comments and questions.

The objectives of the public consultations are:

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

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

3. To amend the project and ESMF accordingly in order to achieve sustainability objectives.

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

The ESMF will be considered final when the relevant comments and provided feedback, submitted during the consultation period, will be: (i) addressed in the ESMF and (ii) incorporated as minutes of the public consultations in a separate chapter or annex. Once finalized, ESMF will be re-disclosed on the MSE web site.

2 PROJECT DESCRIPTION

2.1 Project development objective and project components

The Project Development Objective (PDO) is to improve equity and quality in Whole Day School demonstration schools and to increase the institutional capacity of the Ministry of Science and Education to implement education reforms.

The Project have three (3) components and eight (8) subcomponents shown in Table 1.

Table 1. Overview of project components

Component 1: Ensure that more hours translate into more learning
• Subcomponent 1.1: Develop Whole Day School (WDS) model and refine model following experiences during initial years of reform
• Subcomponent 1.2: Help utilize the administrative and student performance data and establish a "peer-mentoring" program
Component 2: Design and demonstrate infrastructure solutions for WDS
• Subcomponent 2.1: Prepare new/updated infrastructure standards for schools
• Subcomponent 2.2: Finance expenditures associated with creating "demonstration schools"
Component 3: Strengthen Ministry's capacity to implement reforms
• Subcomponent 3.1: Support establishment of the reform unit to facilitate delivery, including communications
• Subcomponent 3.2: Update costing of the reform and prepare local school network plans, including work on special needs students
• Subcomponent 3.3: Support the design of other educational strategic reform initiatives
• Subcomponent 3.4: Fund research program to allow for adaptive implementation and document results

Summary of the components / subcomponents:

Component 1: Ensure that more hours translate into more learning (EUR 3.3 million, equivalent to USD 3.98 million)

To ensure that more hours translate into more learning, this component will finance activities that will help MSE implement the WDS model while learning from the roll out.

Subcomponent 1.1: Develop WDS model and refine model following experiences during initial years of reform (EUR 2 million, equivalent to USD 2.41 million). The objective of this subcomponent is to support the MSE on the iterative process of: i) designing the WDS model, which entails operational and pedagogical aspects for basic education (grades 1-8), and (ii) refine the model in the following years based on the indicators and feedback from stakeholders (teachers, parents, school principals, etc.). This subcomponent is key to complementing the ongoing efforts to support the implementation of the new curriculum (including adopting resilience and climate change terminology in the new curriculum), while increasing learning time for all students and incorporating additional extracurricular activities -all of which will especially benefit students from the bottom 40 percent and Roma. The WDS model will be rolled out in grades 1-8 simultaneously in demonstration schools. Furthermore, this subcomponent would support the further development of counselors from the Education and Teaching Training Agency, which has branches in different regions across the country. These consultants will be experts in teaching and learning available centrally to support teachers, schools

and school founders in their school and system improvement efforts. Consultants/mentors will be recruited from the education sector and, after a period of time, return to their respective institutions. These activities will have a strong emphasis on equity as students from vulnerable backgrounds will be the ones expanding and benefitting (in terms of learning) more from the access to longer instruction time, extracurriculars, and better trained teachers. Therefore, a central – albeit intangible – outcome of this subcomponent will be the lessons learned by the MSE and its partners, about what works and what needs improvement in the WDS reform, which will be reflected in revised approaches and tools for next phases of the reform and which will help guarantee its success.

Subcomponent 1.2: Help utilize the administrative and student performance data and establish a "peer-mentoring" program (EUR 1.3 million, equivalent to USD 1.6 million). The project will support the deployment of an advanced education data set, currently planned by the Ministry. In particular, the project will tap into key areas of the education data policies that will be used by all education stakeholders, including teachers, parents, principals and students. For example, existing administrative and student performance data should be prioritized to improve student learning, teacher professional development, and school improvement. This will include, among others, mapping out existing data and how it is currently used, and prioritizing inter-operability and user-friendly targets, as well as provide targeted support to help improve data usage by various education stakeholders for decision making through dashboards and platforms. In parallel, the Croatian National Centre for External Evaluation of Education will be implementing national external evaluation exams that will be well integrated into the usage of data. Finally, this subcomponent will support establishing an equity-focused "peer-mentoring program ". The program will pair school principals with poor academic performance with principals from top-performing schools and provides a small grant to both. As an incentive for active participation, a second disbursement of the grant will be provided to both schools, conditional on the subsequent improvement of the low-performing school in standardized exams.

Component 2: Design and demonstrate infrastructure solutions for Whole Day School (EUR 15.7 million, equivalent to USD 18.93 million)

This component will support the design of new infrastructure standards for Croatian schools, which will address climate vulnerabilities, incorporate seismic resilience into building upgrades, and encompass best practice OECD-EU climate, environment, and energy efficient standards, significantly contributing to the EGD agenda. The component will also finance minor infrastructure investments in a select group of schools (approximately 50 schools) that will pioneer the implementation of WDS and serve as demonstration schools for the reform. No new schools will be built under this project.

Subcomponent 2.1: Prepare new/updated infrastructure standards for schools (EUR 0.3 million, equivalent to USD 0.4 million). This subcomponent will support developing standard designs for new modern, resilient and energy-efficient (green) schools that could be funded under EU and Bank funds (especially where school demolishment is the recommended solution or where new school buildings are needed to reduce double-shift schooling). The new standard designs will also include for example, outdoor green spaces, proposed green transport solutions, efficient solutions for kitchen and dining spaces, and adjustments for students with special needs. Furthermore, the subcomponent will support developing terms of references to accelerate preparation of technical documentation for infrastructure modernization and guidelines supporting national and subnational authorities in procurement, permitting, and supervision. Developing high-quality data on school infrastructure to inform prioritization of capital investments and funding implementation of initial analytical studies, such as technical surveys and energy audits will also be financed. Finally, financing and guidance to local governments to help them prepare project documentation for school infrastructure as well as

mechanism to exchange best practices and foster peer-to-peer learning around novel ways of using learning spaces will be supported.

Subcomponent 2.2: Finance expenditures associated with creating "demonstration schools" (EUR 15.4 million, equivalent to USD 18.57 million). This subcomponent will finance (i) preparing and launching a call for proposals for "demonstration schools, through which the eligible schools (those meeting the criteria outlined in the call) will apply to receive resources for implementation of the WDS"; ii) supporting infrastructure investments (e.g., minor rehabilitation and refurbishment of learning environments, informal learning spaces, dining facilities) that will allow an initial group of schools to adopt the WDS model, and (iii) necessary school furniture and equipment. The "demonstration schools" (approximately 50 schools) will serve to inform future design and implementation of the reform across the country. The Demonstration Schools will be selected by the MSE through a competitive 'open call' process. The selection criteria will be based on their ability to meet the pre-conditions necessary to quickly and more easily implement the WDS model (e.g., already operate in a single-shift and have the infrastructure to accommodate the activities of the longer school day with minimum enhancements, and have adequate outdoor spaces for break time/play), as well as equity criteria (targeting schools in high poverty areas) Detailed criteria will be outlined in the Operations Manual.

Construction of new schools, expansion of school property, and other activities that would expand the existing ecological footprint of schools will not be supported under the Project.

The demonstration schools will be selected by the MSE through a competitive "open call" process. The selection criteria will be based on their ability to meet the preconditions necessary to quickly and more easily implement the WDS model (for example, already operate in a single shift and have the infrastructure to accommodate the activities of the longer school day with minimum enhancements, and have adequate outdoor spaces for break time/play), as well as equity criteria (targeting schools in high poverty areas).

Component 3: Strengthen Ministry's capacity to implement reforms (EUR 6 million, equivalent to USD 7.23 million)

Component 3 will strengthen the MSE's capacity and provide direct support to key aspects of implementing the reform, such as establishing a Reform Working Group within the Ministry, project management, monitoring and evaluation, and communications. Technical assistance and capacity-building are at the center of this component's activities, which aim to strengthen the Croatian institutions responsible for leading the design and implementation of the WDS reform.

Subcomponent 3.1: Support establishment of the Reform Working Group to facilitate delivery, including communications (EUR 2.7 million, equivalent to USD 3.26 million). This subcomponent will finance establishing a Reform Working Group which will serve as PIU within MSE, and hiring a core group of experts to support WDS reform implementation:

- Project director
- Coordinators for each of the main activities of the reform
- Education experts for each of the main reform areas
- FM/procurement expert
- Communications (Community outreach/consultations) expert
- Infrastructure expert

- Environmental Specialist and Social Specialist

This unit will also support the design and implementation of other strategic reform initiatives of the Ministry, thus strengthening the internal capacities of MSE. Furthermore, this subcomponent will support the MSE in developing an effective communication and outreach strategy to inform and engage with all stakeholders and the community-at-large about the comprehensive WDS reform. Given the expected changes in policy and service delivery that will affect the personal and professional lives of a substantial portion of the Croatian population, pro-active, strategic communication efforts by the MSE will be crucial to reform success and sustainability. To this end, the project will finance technical assistance and the production and distribution of communications materials associated with the WDS.

Subcomponent 3.2: Update costing of the reform, revise national regulation on students with special needs, and prepare local school network plans (EUR 0.8 million, equivalent to USD 1 million). This subcomponent will support analyzing and revising national regulation on students with special needs, as the number of students with special needs allowed per classroom is an important consideration in the process of optimization of the class size. Next, it will support revising the costing of the WDS reform, considering the revised approach to special needs students (which will also outline the extra support provided to these students) as an important input; degree of optimization of the school network; and updated data on teacher salaries, infrastructure costs and other inputs. The costing simulation will produce costing estimates with different scenarios, depending on the inputs for each scenario. Furthermore, this subcomponent will finance the needs assessments of school founders; engage school founders in doing more detailed analysis of their school networks; conduct regional workshops on school management; offer an option to each school founder to conduct founder-level analyses and simulations; build ownership of WDS model implemented in their schools and strengthen the quality of teaching and learning l; and prepare local school network plans. he simulations and revisions of the costing models will be available as just-in-time support throughout reform, or as annual updates.

Subcomponent 3.3: Support the design of other educational strategic reform initiatives (EUR 0.7 million, equivalent to USD 0.84 million). The objective of this subcomponent is to support the MSE in designing comprehensive educational reforms beyond the WDS, outlined in NRRP. In addition to designing and implementing WDS, this project will provide technical and advisory services to help the Croatian government design a select number of reforms related to some of the other reform areas mentioned in NRRP (e.g. early childhood and care and pre-school education (e.g. new financing model for early childhood development, building capacity and competences of pre-school teachers), general and vocational secondary education (e.g. optimizing secondary school network improving general secondary education – including raising participation rates in general education), and effective and relevant higher education (e.g. restructuring of financing model for higher education and science, including performance-based agreements, raising digital competencies of tertiary education professors).

Subcomponent 3.4: Fund research program to allow for adaptive implementation and document results (EUR 1.8 million, equivalent to USD 2.17 million). The objective of this subcomponent is to establish a research program to monitor and analyze the impact of the WDS reform, to inform future reform activities on a timely and evidence-based manner, and to leverage the expertise of other Croatian institutions for the benefit of students and teachers. This activity will bring together the different relevant MSE units and universities to collaborate and help the Croatian government to design a broad research program like other EU countries, such as in Denmark. The project will finance an impact evaluation comparing outcomes in the “demonstration schools” supported by this project

with an appropriately selected group of "control schools" to compare the between school differences of quality (all students) and equity (low-SES students). External assessments in selected "demonstration schools" and "control group" schools will be implemented every year for various grades and based on the current curricula covered in basic literacy and numeracy skills, as well as measurement of socio-emotional skills.

Among other variables, the comparison of outcomes will also include teacher practices and use of time. Furthermore, an in-depth review of the current governance and financing structures of basic education, with a focus on areas for improvements and recommendations for options forward will help the Croatian government initiate a public dialogue on these topics, based on evidence and lessons learned from other EU members that have adopted similar measures. Finally, this subcomponent will support the MSE in adjusting the legislations required for the scaling up of the WDS reform and further optimization of the school network, including research on principal, teacher and other staff norms, regulation on different types of activities to be offered during the extended school day (e.g. elective subjects and extracurricular activities) and legislation giving more autonomy to school founders and other local officials.

2.2 Project beneficiaries

Direct beneficiaries include an estimated 15,000 students from 50 schools that will gain from the successful implementation of the WDS: students (including students from vulnerable backgrounds who will benefit from subsidized school meals, extended instruction time and extracurricular activities, and timely assessments). Other beneficiaries are grade 1–8 teachers and principals who will benefit from enhanced professional development trainings that emphasize the use of effective teaching practices and formative assessment strategies . Direct beneficiaries also include the Government stakeholders - the MSE, CNCEEE,LSGUs, RSGUs.

Indirect beneficiaries include: the parents and household members of students as well as Croatian society in whole as adequate education is fundamental to development and growth of both an individual and county.

2.3 Risk Classification

The Project supports activities with small and moderate E&S risk while activities which have substantial and/or high risk (as defined in ESF and WB E&S Directive for IPF) are excluded through the project design and E&S screening procedures.

WB risk classification (as defined in the WB E&S Directive for IPF) with key is available in the table that follows:

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 (e.g. protected and internationally recognized areas)
– high value, sensitive lands or rights of Indigenous Peoples and other vulnerable minorities
– intensive or complex involuntary resettlement or 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.

Environmental and social risk for this project is set to moderate. While Civil works will be supported, they include only minor rehabilitation, and refurbishment within the existing footprint of the selected schools and construction of small annexes to the existing schools, mostly in urbanised areas. Construction of new schools, annexes and any type of expansion will not be supported. Many of the expected impacts, if not all, typical for light civil works, are successfully and sufficiently addressed by well-developed national regulatory and institutional framework in the areas of labour, OHS, safety, environmental management, health, nature protection, cultural heritage, etc.

No activities listed on the IFC Exclusion List (available in the Annex XIII) will be supported under the Project.

3 ENVIRONMENTAL AND SOCIAL BASELINE INFORMATION

3.1 Environmental baseline and relevant potential issues

Croatian education system consists of the following levels: early childhood and pre-school education, elementary education, high school education and higher education[1]. and education on environment and sustainable development is recognised as an important topic.

At the end of the 2019/2020 school year, there were 2,103 active basic schools, self-contained and belonging satellite schools and departments and 738 active upper secondary schools[2].

In Croatia there are network of Eco-schools which is part of the international network Eko-schools. International network Eco-schools is a program designed to implement environmental education guidelines at all levels of educational institutions (kindergartens, primary and secondary schools, schools for children with disabilities, colleges etc). It was developed by the Foundation for Environmental Education (FEE) in response to the 1992 UN Conference. The program has officially started in 1994 in Denmark, Germany, Greece and the United Kingdom. National coordinator of the Eco-Schools in Croatia is association Udruga Lijepa Naša.

Today, Eco-Schools are implemented in more than 70 countries around the world, connecting more than 60,000 schools. Currently in Croatia 342 educational institutions have active status, and those are 94 kindergartens, 200 primary schools, 6 schools for children with disabilities, 38 secondary schools, 2 student dormitories and 2 higher education institutions.

Activities related to environmental aspects, in educational institutions are still mainly implemented through project activities conducted by various "green" associations, whose work emphasizes the importance of educating all generations about the need to protect and preserve the environment and nature and the principles of sustainable development. These projects include educational programs for kindergarten ages, pupils and students.

Also, the MSE has recognized environmental aspects as an important topic, and from 2019/2020 school year in all grades of all primary and secondary schools, the interconnection of educational areas and teaching topics of all subjects through seven cross-curricular themes including Sustainable Development theme is obligatory[3]. Thus, the competencies acquired during compulsory education are not related to a specific subject, but refer to broader interdisciplinary goals and represent a link between teaching and lifelong learning.

The cross-curricular theme Sustainable Development prepares students for appropriate action in society in order to achieve personal and general well-being through three dimensions of sustainability - environmental, social and economic.

Regarding organization of mixed municipal waste collection in educational institutions, it is the same as for the general population and carried out through the public waste collection service (utility companies), while for the separate collection of municipal waste fractions like paper, plastic, glass etc., other authorized companies can be contracted.

[1] https://www.azoo.hr/images/AZOO/Ravnatelji/RM/Hrvatski_obrazovni_sustav.pdf
[2] CBS, https://www.dzs.hr/
[3] https://skolazazivot.hr/medupredmetne-teme/

3.1.1 Air emissions and air quality

Emissions of almost all pollutants in Croatia show a general declining trend between 1990 and 2019 NOx emissions decreased by 51.5%, SO2 by 95.2%, NH3 by 34.6%, NMVOC by 55.8%, CO by 60.5%, $PM_{2.5}$ by 26.2%, PM_{10} by 19.1 %, BC by 31.8%, heavy metals: Pb by 99%, Cd by 31%, Hg by 65.5%, As by 93.1%, Cr by 63.8%, Ni by 83.6%, Se by 18.8% and Zn by 17.2% while TSP and Cu emissions increased by 11.6% and 38.2%, PCDD / PCDF emissions decreased by 45.1%, PCBs by 15.1%, HCBs by 91.5% and PAHs by 38.8%.[4]

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 2019 are below, and NH_3 emissions are above the prescribed emission quotas set for 2010 and for years after, in accordance with the Gothenburg Protocol[5].

Table 2. Trend of total emissions of the Republic of Croatia by pollutant

Pollutant	Unit	1990	1995	2000	2005	2010	2015	2016	2017	2018	2019	Share of change in period 1990 – 2019	Share of change in period 2018 - 2019	Emission quota in period 2010 - 2020
NOx	kt	111.3	82.6	90.9	89.2	72.3	58.4	57.7	58.0	53.9	53.9	-51.5%	0.00%	87
NMVOC	kt	170.2	119.7	102.8	113.8	91.9	71.3	73.0	70.2	71.1	75.2	-55.8%	5.8%	90
SO_2	kt	168.5	77.4	60.4	58.5	35.1	15.8	14.8	12.7	10.2	8.2	-95.2%	-19.7%	70
NH_3	kt	56.2	42.7	44.1	46.3	42.3	37.5	35.7	38.8	38.8	36.8	-34.6%	-5.3%	30
$PM_{2,5}$	kt	38.8	36.4	35.3	44.1	38.2	32.9	31.6	30.4	29.3	28.6	-26.2%	-2.3%	-
PM_{10}	kt	50.5	45.7	44.5	59.4	49.5	44.0	42.7	41.5	41.2	40.8	-19.1%	-0.8%	-
TSP	kt	65.0	60.4	65.3	102.9	77.8	71.4	70.3	68.7	71.9	72.5	11.6%	0.8%	-
BC	kt	5.4	5.0	5.2	6.1	5.2	4.3	4.2	4.1	3.8	3.7	-31.8%	-3.4%	-
CO	kt	547.8	441.3	463.0	413.6	325.3	266.2	257.0	251.3	230.8	216.5	-60.5%	-6.2%	-
Pb	t	515.6	260.2	143.4	13.6	8.0	7.9	7.9	8.0	8.1	5.2	-99.0%	-36.3%	-
Cd	t	1.1	0.8	0.9	1.0	0.9	0.9	0.8	0.8	0.8	0.8	-31.0%	-5.3%	-
Hg	t	1.1	0.3	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.4	-65.5%	-8.5%	-
As	t	8.6	1.2	1.1	1.1	0.8	0.5	0.4	0.5	0.6	0.6	-93.1%	4.7%	-
Cr	t	5.3	3.7	3.2	3.7	2.5	2.2	2.0	2.1	2.0	1.9	-63.8%	-2.8%	-
Cu	t	7.3	6.1	7.4	9.3	8.1	8.3	8.5	9.3	9.2	10.1	38.2%	9.2%	-
Ni	t	17.0	13.8	12.6	13.7	7.7	4.5	4.2	4.3	3.5	2.8	-83.6%	-19.7%	-
Se	t	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	-18.8%	-0.9%	-
Zn	t	36.6	30.3	28.3	34.6	33.6	32.1	31.0	31.0	30.8	30.3	-17.2%	-1.5%	-
PCDD/ PCDF	g I-Teq	49.2	43.5	41.9	49.8	40.5	34.6	33.1	29.2	27.9	27.0	-45.1%	-3.1%	-
PAH	t	21.9	16.7	15.0	18.7	17.7	15.9	15.2	14.7	13.9	13.4	-38.8%	-3.3%	-
HCB	kg	7.09	6.4	2.0	0.5	0.9	0.4	0.5	0.5	0.6	0.6	-91.5%	8.7%	-
PCB	kg	482.8	468.2	441.4	435.7	433.7	424.9	422.1	415.3	411.8	409.7	-15.1%	-0.5%	-

Source: MoESD[6]

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 2019, 97.7% come from the energy sector; 25.9% from power plants, 24.7% from industry and construction, 32.7% from fugitive emissions and 9.8% from small combustion

[4] Emissions of air pollutants in the Republic of Croatia for 2019 (http://www.haop.hr/sites/default/files/uploads/dokumenti/011_zrak/Izvjesca/Informatino%20izvje%C5%A1%C4%87e%20o%20inventaru%20emisija%20one%C4%8Di%C5%A1%C4%87uju%C4%87ih%20tvari%20u%20zrak%201990-2019.pdf)

[5] 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone to the Convention on Long-range Transboundary Air Pollution

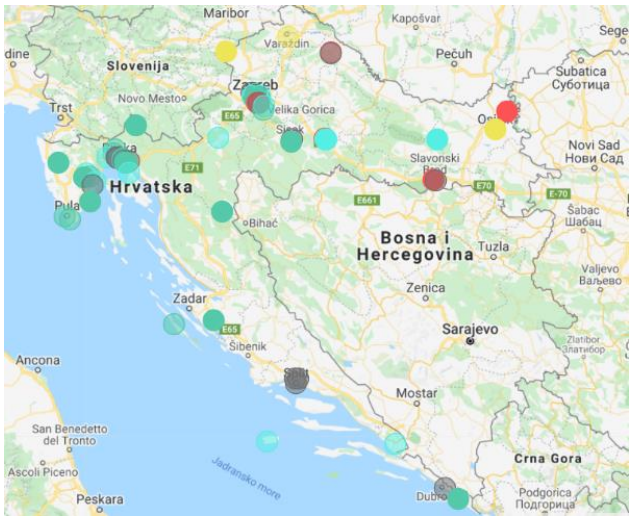
[6] Emissions of air pollutants in the Republic of Croatia for 2019 (http://www.haop.hr/sites/default/files/uploads/dokumenti/011_zrak/Izvjesca/Informatino%20izvje%C5%A1%C4%87e%20o%20inventaru%20emisija%20one%C4%8Di%C5%A1%C4%87uju%C4%87ih%20tvari%20u%20zrak%201990-2019.pdf)

plants (fixed and mobile sources). NOx emissions from the energy sector in 2019 amounted to 84.9% of total national NOx emissions. The Energy sector contributes with 99.6% to the total CO emissions in 2019, of which 74.1% comes from the combustion of fuel in small combustion plants (dominated by households), 11.4% from transport (dominated by road transport), 7.1% from refining / storage, and 5.5% 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 2019 these sectors contribute to the total NMVOC emissions with the following: 48.1 %, 25.6 %, 12.4 %, 6.1 % and 4 %. A total of 86% of NH_3 emissions in Croatia in 2019 come from the Agriculture sector. [7]

In Croatia, air quality is constantly monitored through monitoring stations, state (25) and local (56). The state network is under the jurisdiction of the Ministry of Economy and Sustainable Development (MoESD), 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[8], prepared every year by the MoESD, and in real time by each monitor stations are available on the MoESD web page: http://iszz.azo.hr/iskzl/.

Figure 1. Locations of monitoring stations in the territory of the Republic of Croatia[9]



Source: Ministry of Economy and Sustainable Development, Republic of Croatia (RoC)

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),

[7](http://www.haop.hr/sites/default/files/uploads/dokumenti/011_zrak/Izvjesca/Informatino%20izvje%C5%A1%C4%87e%20o%20inventaru%20emisija%20one%C4%8Di%C5%A1%C4%87uju%C4%87ih%20tvari%20u%20zrak%201990-2019.pdf)
[8] http://www.haop.hr/hr/godisnja-izvjesca-o-pracenju-kvalitete-zraka-na-podrucju-republike-hrvatske/godisnja-izvjesca-o
[9] MoESD, http://iszz.azo.hr/iskzl/, 27.3.2021.

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 $PM_{2.5}$[10]

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 and in 2019, annual values of nitrogen dioxide concentrations exceeded the limit value in Zagreb at the monitoring station 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 (e.g. 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.

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.

Indoor air quality is not perceived as an environmental or health issue in Croatia, potentially due to the fact that use and management of possible emitters of indoors pollutants are well controlled under the Croatian and EU regulatory and institutional framework – laws related to control of combustion devices, fire-protection, use of chemicals, etc.

[10] Report on air quality monitoring in the Republic of Croatia for 2019 (http://www.haop.hr/sites/default/files/uploads/dokumenti/011_zrak/Izvjesca/Izvje%C5%A1%C4%87e%20o%20pra%C4%87enju%20kvalitete%20zraka%20na%20teritoriju%20Republike%20Hrvatske%20za%202019.%20godinu.pdf)

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[11] 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. [12]

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 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. [13]

Figure 2. Water districts and sub-basin areas with significant watercourses [14]

[11] OG 66/19

[12] 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).

[13] https://www.voda.hr/sites/default/files/plan_upravljanja_vodnim_podrucjima_2016._-_2021.pdf

[14] https://www.voda.hr/sites/default/files/plan_upravljanja_vodnim_podrucjima_2016._-_2021.pdf

Source: Hrvatske vode

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%.[15]

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 2019, there were 131 public water service providers and 219 local water service providers were also registered.

The share of population connected to public sewerage systems is growing. Approximately 91.5% of the population was connected to public water supply, and approximately 1.45% to local water supply. [16]

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, 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). 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[17], 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.

A total of 156 water service providers are responsible for organizing public water supply and sewerage services, of which 140 for public water supply, or water supply and wastewater management services, and 16 for public wastewater management services. Spacious coverage reaches 95% of the land territory of the country where 99% of the population lives, and is interpreted as an area of to which the water service provider provides services.

Water quality is carried out at the state level, by National Institute for Public Health. Independently of state monitoring of water for human consumption carried out by County Institutes for Public Health,

[15] https://www.voda.hr/sites/default/files/pdf_clanka/hv_99_2017_17-26_vouk-et-al.pdf

[16] https://www.hzjz.hr/wp-content/uploads/2020/09/IZVJE%C5%A0TAJ-O-ZDRAVSTVENOJ-ISPRAVNOSTI-VODE-ZA-LJUDSKU-POTRO%C5%A0NJU-U-REPUBLICI-HRVATSKOJ-ZA-2019_v1.pdf

[17] 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)

and official ones controls carried out by Ministry of Health, local communities, and water supply companies though internal quality control of water for human consumption on one of the following methods: i) in the internal laboratory of a particular water supply company; ii) in the laboratory of the Institute for Public Health; iii) in an external (private) laboratory or iv) in an internal laboratory and a laboratory Institute of Public Health. Potable water quality in schools is tested at least 2 times a year by county/local Institutes of Public Health in accordance with the Ordinance on compliance parameters, methods of analysis, monitoring and water safety plans for human consumption and the manner of keeping the register of legal entities performing the activity of public water supply (OG 125/17, 39/20).

Progress has been made in the area of municipal wastewater treatment, but not at a satisfactory pace. In 2016, about 150[18] wastewater treatment plants 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. Nevertheless, law on Waters (OG 66/19) and stemming by-laws prohibit release of wastewaters directly into recepient.

The Monitoring program for the quality of the sea and inland surface bathing waters[19] 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 MoESD[20].

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. [21]

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 Transformers with PCBs

As of 2006 Croatia is a signatory to Stockholm Convention and implements approved activities accordingly. The activity plan is defined in the Law on The Promulgation of The Law on The Approval of The Stockholm Convention on Permanent Organic Pollutants (OG 11/06). Removed oil is considered hazardous waste and must be registered, managed and processed as such in accordance with the Sustainable Management of Waste Law (OG 94/13, 73/17, 14/19, 98/19) and Ordinance on Waste

[18] 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)

[19] It is implemented in accordance with the Bathing Sea Quality Regulation (OG 73/08), which transposed the EU Bathing Water Quality Management Directive. (Directive of the European Parliament and of the Council concerning the management of bathing water quality 2006/7/EC)

[20] http://baltazar.izor.hr/plazekpub/kakvoca

[21] https://www.eea.europa.eu/themes/water/europes-seas-and-coasts/assessments/state-of-bathing-water/european-bathing-water-quality-in-2019

management (OG 81/20). Electricity network and distribution, including transformers in Croatia are under strict control and management of Croatian Electricity Company. While some schools, that carry out activities requiring larger electricity feeds (e.g. in workshops), own transformers, these transformers are managed by Croatian Electricity Company in line with the national regulation, including the Law on Law on The Promulgation of The Law on The Approval of The Stockholm Convention on Permanent Organic Pollutants, Law on Health and Safety When Working with Electricity (OG 88/2012) and Rulebook On Technical Requirements for electric Power Plant of Nominal AC Voltages above 1kV (OG 105/2010).

3.1.4 Lead paint

EU REACH restricts the addition of certain specific lead compounds to paints intended for supply to the general public, based on risk management assessments. Lead paint is banned form use in the European Union by the 2003 Restriction of Hazardous Substances Directive (RoHS), which forbids hazardous substances in consumer goods, including paint. The ban was further expanded by Directive 2011/65/EU, from January 2013.

Lead paint issues are not expected as they are banned from general use (other are defined in REACH Directive) for almost two decades while no works that would produce lead-based paint debris are planned. Emissions of radon may be an issue to OHS and community (students and) safety at certain micro-locations in Croatia.

3.1.5 Waste management

The total amount of waste (production and municipal) in the Republic of Croatia is estimated at 5.5 million tons[22]. 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, e.g. 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%.

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 of those waste was disposed in 6 cassettes

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

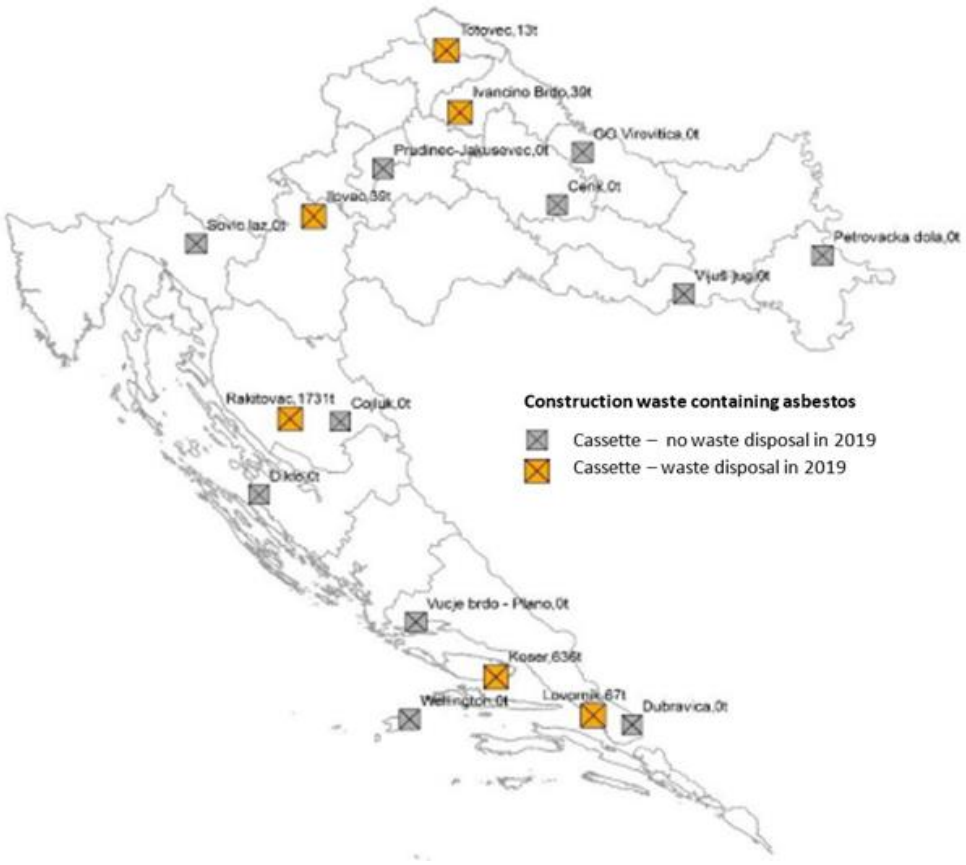
built at certain landfills. On the remaining 11 cassettes disposal of asbestos construction waste wasn't recorded.

The public service of collecting mixed municipal waste is performed by 217 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.

Mixed municipal waste still accounts for the largest share in municipal waste (63%), thus the rate of separate collection in 2019 was 37%, which is 6% more than in the previous year.

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.

Figure *3*. Locations of cassettes for asbestos waste disposal in Croatia[23]



Source: MoESD

In 2019, each citizen of RC generated 444 kg municipal waste (1,811,617 t), which ranks Croatia among the countries with the lowest waste generation in the EU (the EU average is 502 kg per capita in 2019[24]).

In 2019, the municipal waste recovery rate increased by 5% compared to 2018, and it amounted to 30%. According to the Waste Framework Directive (2008/98/EU) target recycling rate for municipal waste for 2020 is 50%.

[23] Source: MoESD, 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)
[24] http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=env_wasmun

Table 3. Municipal waste management in Croatia in 2019

Generated	Separately collected	Recycled	Composted /anaerobic digestion	Energy recovery (R1)	Incineration (D10)	Landfilling
1,811,617t	670,769t	547,072t	62,803t	712t	22 t	1,072,727t
	37%	30%	3.5%	0.04%	0.001%	59%

Source: MoESD[25]

In 2019, municipal waste disposal was recorded for 116 landfills.

Also, in 2018, two Waste Management Centers (in Istria County and Primorje-Gorski Kotar County) started operating, applying mechanical-biological waste treatment technology. During 2019, these centers received about 150.000 tons of municipal waste.[26]The construction of 9 more waste management centers is planned. [27]

Target for reduction of biodegradable municipal waste disposal still is not being achieved. Disposed quantities of biodegradable municipal waste in 2019 exceed by 300,992 t the target for 2016[28] stipulated by the Landfill Directive.

Asbestos waste is currently being collected at 17 location in Croatia, distributed throughout the country, including islands. There are about 13 companies authorised by Fond for Energy Efficiency and Environmental Protection (FEEEP) for collecting asbestos.

3.1.6 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 MoH. 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[29] and the Ordinance on the preparation and content of noise maps and action plans and on the calculation of permissible noise indicators[30] 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 MoESD.

[25] National Report on Municipal Waste 2019 (http://www.haop.hr/sites/default/files/uploads/inline-files/OTP_Izvje%C5%A1%C4%87e%20o%20komunalnom%20otpadu%20za%202019_1.pdf)
[26] National Report on Municipal Waste 2019 http://www.haop.hr/sites/default/files/uploads/inline-files/OTP_Izvje%C5%A1%C4%87e%20o%20komunalnom%20otpadu%20za%202019_1.pdf
[27] Implementing Decision of the Waste Management Plan of the Republic of Croatia (https://mzoe.gov.hr/UserDocsImages/UPRAVA-ZA-PROCJENU-UTJECAJA-NA-OKOLIS-ODRZIVO-GOSPODARENJE-OTPADOM/Sektor%20za%20odr%C5%BEivo%20gospodarenje%20otpadom/Ostalo/Odluka%20o%20implementaciji%20PGO%20RH%20%202017_2022%20prilog.pdf)
[28] 378.088 tons
[29] OG 30/09, 55/13, 153/13, 41/16 i 114/18
[30] OG 75/09, 60/16, 117/18

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 [31], one of the main sources of noise is road traffic. The share of exposed population to noise greater than 55 dB (A) varies 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).

3.1.7 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 MoESD. 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

[31] 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)

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 main centers of endemic flora are the mountains Velebit and Biokovo, while the endemic fauna is most present in underground habitats (cave invertebrates, human fish), on islands (lizards, snails) and in karst rivers of the Adriatic basin (gulls and little heads).

The Nature Protection Act[32] defines 9 national categories of protection. According to the Register of Protected Areas in the Republic of Croatia, a total of 410 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 MoESD[33].

Today, protected areas cover 9.32% of the total area of the Republic of Croatia, i.e. 14.49% of the land territory and 1.94% of the territorial sea. The largest part of the protected area are nature parks (5.61% of the total state territory).

Table 4. Categories of protected areas according to the Nature Protection Act

Category	Number of protected areas	Surface (km²)	% of national surface	Management level	Declaration
Strict Reserve	2	24.14	0.03	State and county	Government
National Park	8	979.59	1.10	State	Croatian Parliament
Special Reserve	79	407.80	0.45	State, county, municipality, city	Government
Nature Park	12	4,949.93	5.61	State	Croatian Parliament
Regional Park	2	1,025.56	1.16	County	Representative body of the competent regional self-government unit
Monument of nature	79	2.04	0.002	County and municipality	Representative body of the competent regional self-government unit
Significant Landscape	83	1,378.82	1.35	County and municipality	Representative body of the competent regional self-government unit
Park - Forest	27	29.66	0.03	County, municipality and city	Representative body of the competent regional self-government unit
Monument of park architecture	120	9.99	0.01	County	Representative body of the competent regional self-government unit
Area of protected areas within other protected areas [34]*		593.23			
Total	**410**	**8,213.3**	**9.32**		

3.1.8 Climate change

The climate of Croatia is determined by its geographical position, water abundance, land-use, cover and landscape of the area. The most important climate modifiers in Croatia are the Adriatic and the Mediterranean Sea, the Dinarides, the openness of the northeastern parts to the Pannonian plain, and the diversity of vegetation. The space arrangement and interations of these elements result in three different climatic areas that prevail in relativelly small, but intensly different surface that makes Croatia: continental, mountain and coastal climate.

[32] OG 80/13, 15/18, 14/19, 127/19

[33] http://www.bioportal.hr/gis/

[34] Refers to protected areas that are within another, larger protected area, and their surfaces overlap

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.

In Croatia, the increase of mean annual air temperature in the 20th century varied between 0.02°C and 0.07°C per 10 years. As on a global level, the trend of rising air temperature has been particularly recorded in the last 50 and 25 years, respectively.[35]

Weather changes in dry and rainy periods in the Republic of Croatia are shown using the annual and seasonal trend of their maximum durations. According to the results of the trend, the changes are most pronounced drought periods in the autumn months when it was observed statistically significant throughout the Republic of Croatia negative trend. In other seasons, the trend of dry periods for both categories is less pronounced than autumn.[36]

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 ice breaks 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. [37]

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 (69.1%). It is followed by Agriculture with 11.4%, Industrial processes and product use with about 10.9% and Waste with about 8.6%.

The most common greenhouse gas is carbon dioxide (CO_2) with a share of about 74.5% of total emissions. It is followed by methane (CH_4) with a share of about 16.3%, nitrous oxide (N_2O) with a share of about 7.1% and fluorocarbons, perfluorocarbons and sulphur hexafluoride with about 2.1% share in greenhouse gas emissions[38].

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. Furthermore, in accordance with the amendments to the Kyoto Protocol from Doha, at the European Union level additional target to reduce emissions by 20% by 2020 compared to 1990 is stipulated.

[35] https://meteo.hr/klima.php?section=klima_modeli&param=klima_promjene#sec2

[36] http://www.haop.hr/sites/default/files/uploads/dokumenti/012_klima/dostava_podataka/Izvjesca/NIR_2020_hrv.pdf

[37] 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)

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

3.1.9 Seismicity

Croatia is a seismically active area that stretches in the northwest of the Country as well as along the coastal area where occasionally moderate earthquakes occur. All faults are known and mapped while seismic activity is measures and recorded. The most devastating earthquakes occurred in Zagreb in 1880 (6.3 on Richter scale) and Dubrovnik in 1667 (estimated at 6.3 on Richter scale). In the past 2 years there were 3 significant earthquakes that took place with human casualties and enormous material damage – March 23, 2020 Zagreb earthquake (5.3 on the Richter scale) and December 28 and December 29, 2020 Petrinja earthquakes registered by Croatia's Seismological Service, of 5 and 6.2 magnitude on Richter scale respectively.

3.1.10 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.

3.1.11 Cultural heritage

Croatia is the country with the among largest number of protected cultural phenomena in Europe with 14 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[39].

3.1.12 Fire protection in Croatia

The oldest regulations on fire protection were laid down in the statute of the city of Dubrovnik in 1272. Much later (1741) Samobor Town issued an order on fire prevention and fire care, and the statute of the city of Varaždin from 1748 included the first city fire regulation.

Today in Croatia, firefighting is performed by fire brigades, voluntary fire brigades and fire communities. Fire protection and firefighting are regulated by the Fire Protection Act and the Firefighting Act and their bylaws, and as the local government is responsible for carrying out this activity, and the relevant decisions of municipalities, cities and counties. At the state level, the Croatian Fire Brigade, the umbrella organization that unites all fire organizations and units in Croatia, and the Fire Service within the State Administration for Protection and Rescue, which monitors the state of organization and operational readiness of the fire brigade, monitors law enforcement, manages and coordinates activities in more complex firefighting interventions, etc. In Dubrovnik, Šibenik, Zadar and Divulje Air Base near Split, there are state intervention protection and rescue units, which are additionally replenished during the fire season with firefighters from units of the continental part of Croatia. Firefighting Plan for Croatia is promulgated by the Government while Croatian Fire Brigade reports yearly on its implementation. Reports are regularly publicly disclosed. In 2019 there were 65 professional public fire brigades (municipal or city) with 2.351 firefighters in Croatia. In addition to all other equipment such as firefighting vehicles, in 2018 Croatia also owned 6 Canadair CL-415 and CL-215 aircraft, 6 reconnaissance and assault aircraft Air Tractor AT-802 and AT-802F operated within the Air Force. Croatian firefighting defence also has 6 or more helicopters of the Ministry of Defense of the Republic of Croatia (MOD) at disposal, allocated for needs fire protection, facilitates extinguishing larger outdoor fires. The Ministry of Defense also includes a formation that manages a system of unmanned aerial vehicles that can be used for fire surveillance and preventive monitoring of fire-endangered areas. During the same year (2019), there were 1,788 voluntary fire brigades in Croatia with over 40,000 professionally trained volunteer firefighters.

3.2 Social baseline and relevant potential issues

Overall, Croatia is facing a demographic decline and inadequate availability and quality of the infrastructure (such as roads, rail, energy supply, access to internet). There is also a challenge in the quality services such as education and healthcare. The following sections provide an overview of the basis of improving and reforming the education system in Croatia.

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]

[39] https://www.insightcruises.com/itinerary_g/ny01_images/Split/Croatian-Cultural-Heritage-2011.pdf
[40] http://croatia.eu/index.php?view=article&lang=2&id=6

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 4). [41]

Figure 4. County division of Croatia[42]
(Titles available in the link[43]*)*

Source: Croatia.eu

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.

[41] 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 and 110/15)
[42] http://croatia.eu/index.php?view=article&lang=2&id=6
[43] http://croatia.eu/index.php?view=article&lang=2&id=30

Figure 5. NUTS 2 division which will go into force on 1 January 2023[44]

Source: Institute for Development and International Relations

Regarding Nomenclature of Territorial Units for Statistics (NUTS 2) which are used for collecting statistical data in EU and also for implementation of Cohesion policy, in 2019 the government launched changes to the, dividing Croatia into four statistical non-administrative units which will improve regional aid allocation and ensure better terms for the absorption of European Union cohesion funds**.** The government's decision, under which the country is divided into Pannonian Croatia, North Croatia, Adriatic Croatia and the City of Zagreb, will go into force on 1 January 2023.[45]

Until then the NUTS2 division into two regions is valid, Adriatic Croatia, which includes seven coastal counties, and Continental Croatia, which includes the City of Zagreb and thirteen remaining counties.

3.2.2 Population

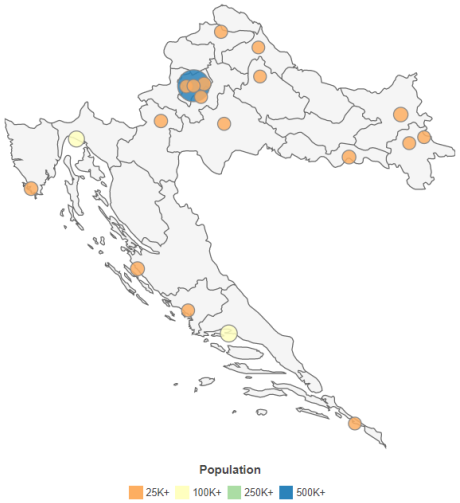
With 4.065.253 million inhabitants in 2019[46], Croatia is 20th among the members of the European Union. Population density amounts to 72 per km² which makes it as one of the more sparsely populated European countries, along with Norway, Finland, Sweden, Estonia, Latvia, Lithuania, Ireland and Bulgaria.

[44] Source: Izrada prijedloga nove NUTS 2 klasifikacije u RH, Institut za razvoj i međunarodne odnose, 2018, https://razvoj.gov.hr/UserDocsImages/Vijesti%20-%20dokumenti/Izrada%20prijedloga%20nove%20NUTS%20klasifikacije%20u%20RH%20012019.pdf

[45] https://vlada.gov.hr/news/gov-t-launches-changes-to-country-s-statistical-subdivision/25178

[46] https://www.dzs.hr/Hrv_Eng/publication/2020/07-01-03_01_2020.htm

Figure 6. Croatia population density map[47]



Source: Crotia.eu

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 Zadar County, City of Zagreb, Istria county and Dubrovnik – Neretva County, in which, compared to the previous year's estimate, there was a relative increase of 0.04% and 0.5%. The largest relative decline in population was recorded in Požega - Slavonia County (2.37%).

About 52% of the population lives in only five counties, mostly in the City of Zagreb (807,254; 19.9%) and in the Split-Dalmatia County (447,747; 11.0%), while Požega-Slavonia County had the least population (66,256; 1,6%) and Lika-Senj County (44,625; 1.1%).

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 43.6 in 2019 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 19.3%.

The share of women in the total population is 51.5%, and the share of men 48.5%. Such a ratio is present in most counties. The smallest share of the female population was in Lika-Senj County (49.9%), while the largest share was in the City of Zagreb (52.9%).

The share of the fertile contingent in the total female population continued to decrease. Therefore, in 2019, it amounted to 41.1%. Average number of children per woman of fertile age is 1.47, it is below average for the EU-27 which in accounted 1.53.[49]

[47] https://worldpopulationreview.com/countries/croatia-population
[48] http://croatia.eu/index.php?view=article&lang=2&id=14
[49] Eurostat, database

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%.[50] In 2019, the most important sectors of Croatia's economy is wholesale and retail trade, transport, accommodation and food services (23.9%), industry (19.6%) and public administration, defence, education, human health and social work activities (15.7%).[51]

The service sector in total represented about 59% of the country's GDP, employing almost 70% of the workforce. According to the data 2018, international tourists' expenditure in Croatia amounted to almost 20% of GDP – by far the largest share in the EU. [52]

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— contribute to an even stronger economic recession.

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 and city of Petrinja and its surroundings on December 29, 2020. The economic impacts are very severe and reconstruction may take several years.

According to CBS[53] data, the quarterly GDP in real terms decreased by 7.0% in the fourth quarter of 2020, as compared to the same quarter of 2019. The first estimate shows that GDP in real terms decreased by 8.4% in 2020, as compared to 2019.

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.[54]

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[55].[56]

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 center in the form of decision, according to the applicant's place of residence.

[50] https://www.hnb.hr/statistika/glavni-makroekonomski-indikatori
[51] 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
[52] https://ec.europa.eu/info/sites/info/files/economy-finance/eb036_en.pdf
[53] https://www.dzs.hr/Hrv/publication/StatisticsInLine.htm
[54] https://www.worldbank.org/en/country/croatia/overview
[55] OG 157/13, 152/14,99/15, 52/16,16/17, 130/17 and 98/19
[56] https://gov.hr/moja-uprava/obitelj-i-zivot/socijalna-skrb/sustav-socijalne-skrbi/367

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 2019, the share of social protection in the GDP of the Republic of Croatia amounted to 21.8%, which represents an increase of 0.2 percentage points compared to 2018. Total social protection expenditures increased by approximately 4.3 billion kuna compared to the previous year.

Concerning receipts, social contributions were the most frequent ones (60.1% of all social protection receipts in 2019). General government contributions followed with 31.5%.

Social protection benefits accounted for 98.2% of total social protection expenditures in 2019. By type of social benefits, those in cash were the most frequent ones (64.2%). By characteristics, non-means-tested social protection benefits (both in cash and in kind) were the most frequent ones (95 %).

Viewed by social protection functions, the largest share of social benefits was spent on relieving the financial burden related to the Old-age risk (34.5% of all social protection benefits), followed by the Sickness/Health care function (33.8%). The least resources were spent on the Housing function (0.1%).

Table 5. Share of each function in total amount of social protection benefits over years, Croatia

	2015	2016[1)]	2017	2018	2019
Total expenditures on social protection benefits, by function (%)	100.0	100.0	100.0	100.0	100.0
Sickness/Health care (%)	33.0	32.6	33.2	33.5	33.8
Disability (%)	11.8	10.8	10.5	10.4	10.0
Old age (%)	33.3	33.5	33.6	34.0	34.5
Survivors (%)	9.3	8.9	8.7	8.5	8.2
Family/Children (%)	8.7	8.7	8.8	9.1	9.1
Unemployment (%)	2.6	3.7	3.4	3.0	2.8
Housing (%)	0.1	0.1	0.1	0.1	0.1
Social exclusion not elsewhere classified (%)	1.2	1.6	1.6	1.5	1.5

Source: CBS/2020

3.2.5 Education

Croatian education system consists of the following levels: early childhood and pre-school education, elementary education, high school education and higher education.[57]

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

[57] https://www.azoo.hr/images/AZOO/Ravnatelji/RM/Hrvatski_obrazovni_sustav.pdf

are guaranteed autonomy and they can independently decide on their structure, organisation and operation[58].

Croatian education system is centrally managed by the MSE. Besides MSE, 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.

The Ministry is the relevant implementation body which, through its structure, activities and capacities ensures the basic conditions for sustainable development of the human potential in the education system. As part of its regular activity, the Ministry provides all the necessary support, professionally, materially and financially, to the system users and stakeholders. The development, monitoring and assessment of education system was assigned to specialized institutions in order to professionalize system management and to clearly distribute responsibilities between the ministry, as a state body charged primarily with system development strategy, and independent institutions, whose task is to professionally and administratively support the implementation of the adopted education policies.[59]

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%).[60]

Table 6. 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.*

Source: MSE[61]

[58] Articles 66 and 67 of the Croatian Constitution

[59] https://eacea.ec.europa.eu/national-policies/eurydice/content/organisation-education-system-and-its-structure-14_en

[60] https://eacea.ec.europa.eu/national-policies/eurydice/content/organisation-education-system-and-its-structure-14_en

[61]https://mzo.gov.hr/istaknute-teme/odgoj-i-obrazovanje/djelatnost-odgoja-i-obrazovanja/osnivaci-odgojno-obrazovnih-ustanova/135

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 regional self-government unit are provided in the budget of local self-government units and regional self-government units.[62]

[62] 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)

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

4.1 National environmental legislation

4.1.1 Overview of 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),
- Act on Sustainable Waste Management (OG 94/13, 73/17, 14/19, 98/19)
- Air Protection Act (OG 127/19)
- Water Act (OG 66/19)
- Energy Efficiency Act (OG 127/14, 116/18, 25/20)
- Noise Protection Act (OG 30/09, 55/13, 153/13, 41/16, 114/18)

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[63], 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 environmental impact assessment study and elaborate (preparation of elaborate is part of the screening process); the manner of participation of persons authorized to prepare the environmental impact assessment study/elaborate; public participation process, the manner of work of the commission participating in the environmental impact assessment procedure, development of guidelines for the preparation of environmental impact studies, etc. Regulation determines the list of interventions/projects that are within the competence of the MoESD and the competent administrative body in the counties and City of Zagreb for which it is necessary to conduct EIA procedure 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,

[63] 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.

Act on Sustainable Waste Management lays down measures for the prevention or reduction of adverse impacts of waste on human health and the environment by reducing amounts of waste generated and/or produced, and regulates the management of waste which includes no operations posing a risk to human health and the environment and involves the use of valuable properties of waste. The provisions of this Act define the system of waste management, including the waste management priority order, waste management principles, targets and methods, strategic and programming waste management documents, waste management responsibilities and obligations, types of waste management sites and facilities, waste management operations, transboundary movement of waste, the waste management information system, and administrative supervision and inspections of waste management. Important by-laws include Ordinance on Construction Waste and Asbestos Waste (OG 69/16) and Ordinance on Waste Management (OP 117/17).

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.

Amongst other things, Water Act stipulates that legal and natural persons are obliged to discharge wastewater through public drainage buildings, urban stormwater drainage buildings and individual drainage systems (e.g. cesspools) in accordance with the decision (issued by Croatian Waters) on wastewater drainage. Decision (and measures it prescribes) of Croatian Waters is mandatory.

Ordinance on compliance parameters, methods of analysis, monitoring and water safety plans for human consumption and the manner of keeping the register of legal entities performing the activity

of public water supply (OG 125/17, 39/20) prescribes minimal frequency of monitoring, reporting and parameters.

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. The resulting Rulebook on the highest levels of noise in the environment in which people work and stay (OG 145/04) does not define the noise levels for schools, but it does for areas where schools can be located: areas where people live and stay (at 55dB during day and 40dB during night) and areas with a mixed, mostly residential use (at 55dB during day and 45dB during night).

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.

Other the most important 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 87/15);
- Regulation on the ecological network and the competencies of public institutions for the management of ecological network areas (OG 80/19);
- Ordinance on waste catalogue (OG 90/15);
- Ordinance on waste management (OG 81/20);
- Ordinance on medical waste management (OG 50/15);
- Regulation on municipal waste management (OG 50/17, 84/19);
- Ordinance on the monitoring of emissions of pollutants into the air from stationary sources (OG 129/12, 97/13);
- Regulation on limit values of emissions of pollutants into the air from immovable sources (OG 87/17);

- Ordinance on air quality monitoring (OG 72/20);
- Ordinance on issuance of water law acts (OG 9/20);
- Ordinance on limit values of wastewater emissions (OG 26/20);
- Ordinance on energy audit of buildings and energy certification (OG 88/17, 90/20);
- 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).

Detailed information on primary laws and sub-legislation is available at web site of MoESD: 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
- 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) 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.

In Chapter 4.1.4 and Chapter 4.1.5 application of environment impact assessment and location and building permitting process are given in more details.

Action Plan for Radon for the Period of 2019 – 2024 (OG 118/18)

Pursuant to 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) 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 (Official Gazette 38/18).

All buildings built after year 1965 were built according to seismic resistance code that was applied in Yugoslavia, while Eurocode 8 (EN 1998) applies to the design and construction of buildings and other civil engineering works in seismic regions is in Croatia applied from 2013.

Presence of radon emissions are possible (monitoring was carried out at schools in 8 counties, and at some micro locations showed high emission levels). Impacts related to quality of water supply and wastewaters are not expected due to high coverage of territory with utility services[64] and strong institutional and regulatory framework[65] [66]. Fire issues are not expected.[67]

4.1.1 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 and 110/18), Law on OHS (OG 71/14, 118/14, 154/14 , 94/18, 96/18).

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).

Law on Construction stipulates that each building, independently of its purpose, must be designed and built in a way that during its lifetime it meets the basic requirements for construction and other requirements, including conditions prescribed by this Act and special regulations that affect the fulfilment of the basic requirements for a construction/building or otherwise condition the construction of structures or affect construction and other products that are built into the building.

Basic requirements for a construction/building include:

1. mechanical resistance and stability

2. fire safety

3. hygiene, health and the environment

4. safety and accessibility during use

[64] A total of 156 water service providers are responsible for organizing public water supply and sewerage services, of which 140 for public water supply, or water supply and wastewater management services, and 16 for public wastewater management services. Spacious coverage reaches 95% of the land territory of the country where 99% of the population lives, and is interpreted as an area of to which the water service provider provides services.

[65] Ordinance on compliance parameters, methods of analysis, monitoring and water safety plans for human consumption and the manner of keeping the register of legal entities performing the activity of public water supply (OG 125/17, 39/20) prescribes minimal frequency of monitoring, reporting and parameters.

[66] Law on Waters (OG 66/19) stipulates that legal and natural persons are obliged to discharge wastewater through public drainage buildings, urban stormwater drainage buildings and individual drainage systems (e.g. sesspools) in accordance with the decision (issued by Croatian Waters) on wastewater drainage. Decision (and measures it prescribes) of Croatian Waters is mandatory.

[67] Law on Construction (OG 153/13, 20/17, 39/19, 125/19) stipulates that fire safety is a basic requirement for buildings. Firesafety and fire protection requirements are further elaborated in the aforementioned as well as in the Fire Protection Law (OG 92/10)

5. noise protection

6. energy management and heat conservation

7. sustainable use of natural resources.

Further, Law on OHS (NN 71/14, 118/14, 154/14 , 94/18, 96/18) defines following basic rules of safety at work that contain the requirements that the means of work must meet, when in use:

1) protection against mechanical hazards

2) protection against electric shock

3) fire and explosion prevention

4) ensuring the mechanical resistance and stability of the building

5) providing the necessary work surface and work-space

6) providing the necessary routes for the passage, transport and evacuation of workers and other persons

7) ensuring cleanliness

8) ensuring the prescribed temperature and humidity of air and limiting the speed of air flow

9) ensuring the prescribed lighting

10) protection against noise and vibration

11) protection from harmful atmospheric and climatic influences

12) protection against physical, chemical and biological harmful effects

13) protection against excessive exertion

14) protection against electromagnetic and other radiation

15) provision of premises and devices for personal hygiene.

(2) The basic rules of occupational safety have priority in application over the special rules of occupational safety.

Law on Communal Economy defines chimney sweeping includes cleaning and control of chimneys, chimneys and heating devices in buildings. Fire Protection Law determines that users of buildings, construction parts and other real estate and premises, i.e. building managers are obliged in accordance with regulations, technical norms, norms and instructions of the manufacturer to maintain in good condition plants, devices and installations of electrical, gas, ventilation and other purposes, chimneys and fireplaces , as well as other devices and installations, which can cause the occurrence and spread of fire and must have documentation on maintenance. Condition of chimneys, gases and heating devices have to be regularly checked by certified chimney sweepers.

4.1.2 Fire Protection Law (OG 92/10)

This Law is an umbrella regulatory act on prevention, protection and safety form fire. Covenants of the act define stakeholders, responsibilities and responsible persons, rules and procedures that organize the fire-prevention system in Croatia including education, certification, organisational units and requirements, etc. Amongst other things, the Law defines that (i) every natural and legal person, state authority and local and regional self-government unit is obliged to act in a manner that cannot

cause a fire; (ii) every natural and legal person, state authorities and local and regional self-government units is responsible for implementation of fire protection measures determined by the provisions of this Law and its by-laws adopted on the basis of care, plans and fire risk assessments, decisions of local and regional self-government units and other general acts in the field of fire protection.

The Law also defines repercussions and responsibility for non-implementation of fire protection measures, causing fires, as well as for the consequences arising from it in accordance with the provisions of the law and decisions of local and regional self-government units.

In addition to covenants described in the previous section (3.1.2) defining responsibility for maintaining plants, devices and installations of electrical, gas, ventilation and other purposes, chimneys and fireplaces , as well as other devices and installations, which can cause the occurrence and spread of fire and must have documentation on maintenance, Law on fire Protection requires Owners, users of buildings, construction parts and other real estate and premises, e.g. building managers are obliged to own devices, equipment and means for extinguishing fires. Further, according to the Law, each building or its part, depending on its purpose, must be maintained during its duration in such a way as to meet the essential requirement of fire protection. Each space or its part, depending on its purpose, must be maintained in a way that meets the prescribed fire protection measures.

Firefighting is further organised under the Law on Firefighting (OG 125/19).

4.1.3 Safety of toys and equipment standards

Children's school supplies and stationary are subject to various safety standards, testing, and labelling requirements in the European Union. The key standards are Toy Safety Directive (2009/48/EC), CE marking, REACH, General Product Safety Directive (GPSD) (2001/95/EC), European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization CENELEC standards, EN standards such as EN1176 Playground equipment standard that apply to children's school equipment, supplies and stationary.

GPSD applies to all consumer products that are placed in the EU market, including school furniture, equipment and stationary. It provides a general provision on product safety and labelling requirements. In short, the GPSD requires that all products sold in the EU are safe to use.

4.1.4 Environment Impact Assessment (EIA) national regulation

The main regulations governing environmental impact assessment procedure and the possible environmental impacts resulting from adoption of different strategic and planning documents are:

- 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),
- Regulation on environmental impact assessment (OG 61/14, 3/17),
- Regulation on the strategic environmental assessment of strategy, plan and programme (OG 3/17),
- Regulation on the ecological network and the competencies of public institutions for ecological network management (OG 80/19),
- Ordinance on conservation objectives and conservation measures for target bird species in ecological network areas (OG 25/20, 38/20).

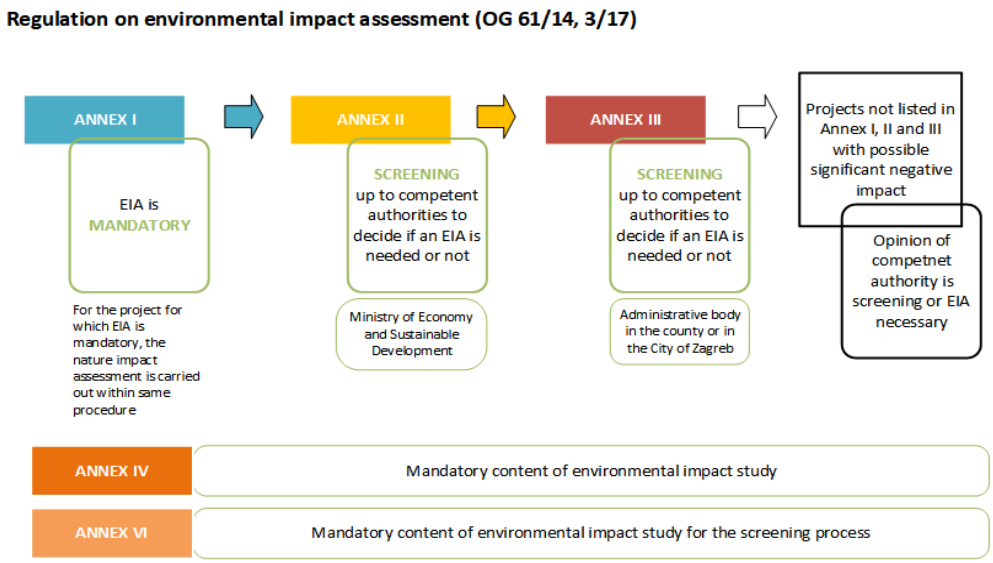
The Environmental Protection Act defines environmental protection objectives and principles, key stakeholders and their responsibilities and environmental impact assessment procedure (Articles No. 76 to 94). In addition to assessing the environmental impact of a particular intervention/project

according to Act, it is mandatory to implement strategic environmental impact assessment by which environmental impacts that may arise from the implementation of different strategic and planning documents are evaluated (Articles No. 62-75). This is additional safeguard mechanism. For example, national physical plan (with which plans of the counties, cities and municipalities have to be aligned) must undergo procedure of environmental impact assessment.

Detail provisions of environmental impact assessment procedure are defined by Regulation on environmental impact assessment. Environmental impact assessment is obligatory for interventions defined in Annex I of the Regulation. In Annex II and Annex III interventions for which screening procedure has to be carried are given. Ministry of Economy and Sustainable Development 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. Criteria for defining environmental impact assessment necessary are defined in Annex V.

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, screening and opinion, of the competent authority has to be obtain[68].

Figure 7. Obligations defined by Regulation on environmental impact assessment (OG 61/14, 3/17)

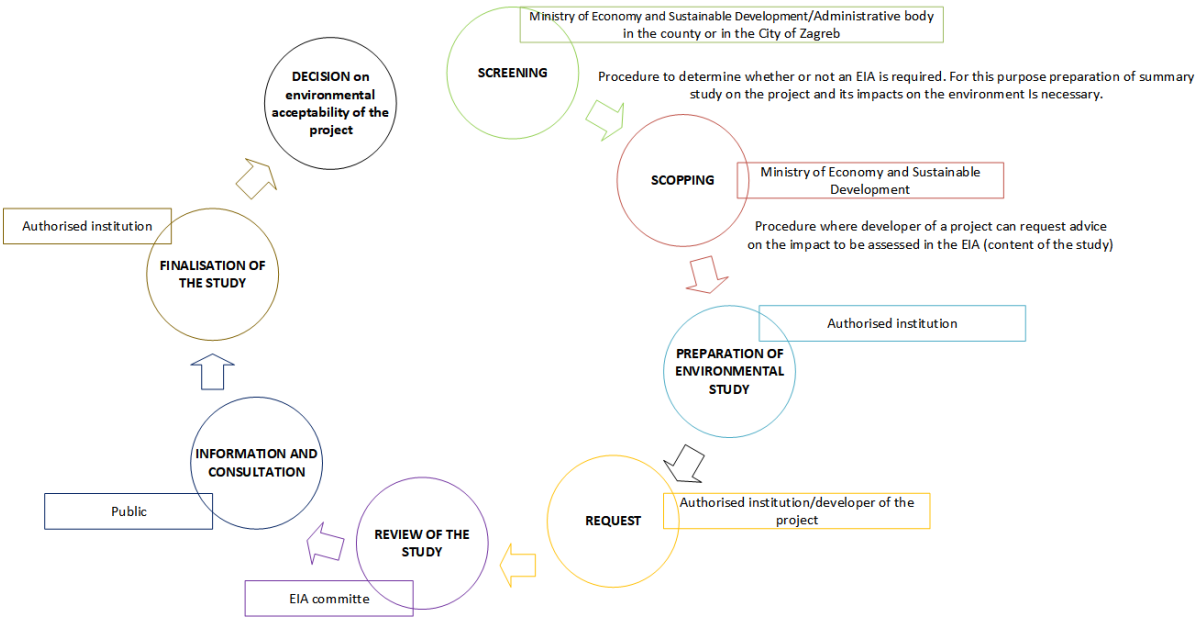


Source: Author

The EIA procedure comprises following steps:

Figure 8. Environmental impact assessment procedure

[68] For interventions/projects listed in Annex II and III, which do not meet the criteria set out in these annexes, and which could have a significant negative impact on the environment competent administrative body is the county/City of Zagreb. MoESD for interventions/projects for which it is necessary to obtain an environmental permit according to a special regulation, and which are not listed in Annex I.



Source: Author

Screening

Screening is conducted for the interventions defined by Annex II and Annex III of the Regulation on environmental impact assessment. Case-by-case analysis based on criteria defined in Annex V of the Regulation. As a result of this analysis decision is made: EIA needs to be carried out or EIA does not need to be carried out. Request for screening includes: information on the project developer (applicant), description of the location, description projects characteristics (considered alternatives), description of the likely significant effects of the project on the environment, proposal of environmental protection measures (if considered). Whether it is it possible to exclude the negative impact of the project on the ecological network is also estimated during the screening process.

Scoping

Article 86 of the Environmental Protection Act grants the right to the developer of the project to request, from competed authority, the instructions on the content of the EIA study prior to its preparation. Competent authority carries out the consultation procedure with the relevant authorities and the public on the topic of the EIA study content. Following the procedure's completion, the competent authority is required to issue an instruction (scoping opinion) on the content of the EIA study. This instruction does not prevent the competent authority from asking for additional things to be included in the further stages of the EIA procedure. Scoping is not mandatory process.

Environmental study

In case the EIA procedure is necessary environmental impact study must be prepared. For interventions for which EIA is not mandatory but instead screening has to be carried out, more simplified document has to be prepared. For both documents mandatory content is defined in Annex IV and VII of the Regulation on environmental impact assessment. Documents has to be prepared by companies authorized for professional environmental protection activities.

Advisory expert committee/competent authority

During the EIA process special advisory expert committee is appointed by competent authority (Ministry/county offices/environmental experts) which gives its opinion on the acceptability of the

project, proposes environmental protection measures and environmental monitoring programme. When project is not subject EIA procedure acceptability of the project is assessed by competent authority.

Informing the public

Competent authority has to inform the public of:

- screening: the request, the decision,
- scoping: the request, the instruction on content of environmental study
- EIA procedure: the request, the decision on submitting environmental study for public debate, the decision on environmental acceptability of the project

The information is published on web pages of Ministry/county office and other appropriate way (public notices in the press, public notices on relevant notice boards, electronic media, written publications, etc.). For the EIA public participation, including public debate, has to be organised for a minimum of 30 days.

Decision

As a result of EIA process decision on environmental acceptability is issued.

By the Regulation on the ecological network and the competencies of public institutions for ecological network management (OG 80/19) the ecological network of the Republic of Croatia is defined (Natura 2000 network[69]). According to the Nature Protection Act, public institutions for the management of a national parks or nature parks and public institutions for the management of other protected areas and / or other protected parts of nature are responsible for management of NATURA 2000 areas. From the legal perspective, the Ecological Network Impact Assessment (ENIA) procedure can be carried out in two ways. Either it can be an independent procedure, or it is incorporated into the EIA procedure. For those projects for which EIA is necessary it is carried within the EIA procedure and for the other projects as an independent procedure.

MoESD carries out ENIA for projects for which it is also competent authority within the EIA procedure and for project located at the territory of National Parks, Nature Parks or Special Reserves.

Administrative body in the county or in the City of Zagreb carries out ENIA for projects for which they are competent authorities within the screening procedure and for projects located at the territory of Regional Park, Significant Landscape, Park Forest, Nature Monument and Park Architecture Monument and those carried out in an area that is not at the same time protected area, except for projects for which MoESD is competent authority. Competent authorities deliver their outcomes in a form of binding decision.

Detailed overview of national procedure regarding EIA and protection of Natura 2000 network and protected parts of nature is given in ANNEX I and ANNEX II of this ESMF.

Works and other activities envisaged under the Project are not subjects to ESIA procedure in Republic of Croatia.

4.1.5 Location and Building permitting process

In the Republic of Croatia designing, construction and construction works supervision is regulated by the Construction Act (OG 153/13, 20/17, 39/19, 125/19) and the Physical Planning Act (OG 153/13,

[69] The ecological network of the Republic of Croatia (Natura 2000 network) according to Article 5 of the Regulation consists of conservation areas important for birds - POP, conservation areas important for species and habitat types - POVS, probable conservation areas important for species and habitat types (vPOVS) and special areas of conservation important for species and habitat types (PPOVS).

65/17, 114/18, 39/19, 98/19), by-laws based on these acts and technical regulations (detail list of legislation is available at: https://mgipu.gov.hr/pristup-informacijama/zakoni-i-ostali-propisi/88).

According to Physical Planning Act, the implementation document for interventions/projects defined in physical plans is a location permit, while under the Construction Act it is a construction permit. Ministry of Physical Planning, Construction and State Assets is competent authority for issuing: location permit for interventions planned by the national physical plan (except in nature park for which the permit is issued by the competent administrative body in the county), interventions defined by the special Regulation[70] and interventions that take place in the area of two or more counties and the City of Zagreb. For issuing location permits for other interventions, the county administrative body is responsible.

The Construction Act regulates the designing, construction, use and maintenance of construction works and the procedure and conditions for obtaining construction and use permit. By this Act essential requirements for health and occupational safety, environment protection and energy efficiency for construction works are defined. All construction works must be performed in such way to comply with these requirements.

Construction and use permits are issued by the MoPPCSA, the administrative bodies of large cities (over 35.000 inhabitants), the City of Zagreb and the county. The MoPPCSA may delegate the authority to issue an individual permit to the administrative body of the big city, the City of Zagreb or the county.

Without the construction permit, the removal of the building or its part can be carried out (Article 153 of the Construction Act), but it is necessary to have a project for the removal of the building. This applies only to buildings and works for which it is not necessary to obtain a building permit, as defined by the Ordinance on simple and other construction works and works (OG 112/17, 334/18, 36/19, 98/19, 31/20). This Ordinance defines simple and other buildings and works that can be built without a building permit in accordance with the main project and without main project, buildings that can be removed without a removal project. Also, this Ordinance defines the obligation to report the start of construction works and professional supervision of these buildings.

The Ordinance on building maintenance (OG 122/14, 98/19) regulates the maintenance of buildings. This Ordinance prescribes the conditions for maintaining and improving the fulfilment of basic requirements for construction, energy performance of buildings and unimpeded access and movement in construction, as well as the manner of fulfilling and documenting the fulfilment of these requirements and properties. This Ordinance does not apply to the performance of construction and other works on an existing building which affect the fulfilment of basic requirements for that building or which change the compliance of that building with the location conditions in accordance with which it was built (extension, upgrade, removal of external part of the building, execution of works for the purpose of changing the purpose of the building or technological process, etc.), e.g. execution of construction and other works on the ruins of the existing building for the purpose of its restoration.

Procedure of issuing location, building and use permit according to Construction Act (OG 153/13, 20/17, 39/19) and the Physical Planning Act (OG 153/13, 65/17, 114/18, 39/19, 98/19) is given in **Error! Reference source not found.** and **Error! Reference source not found.**.

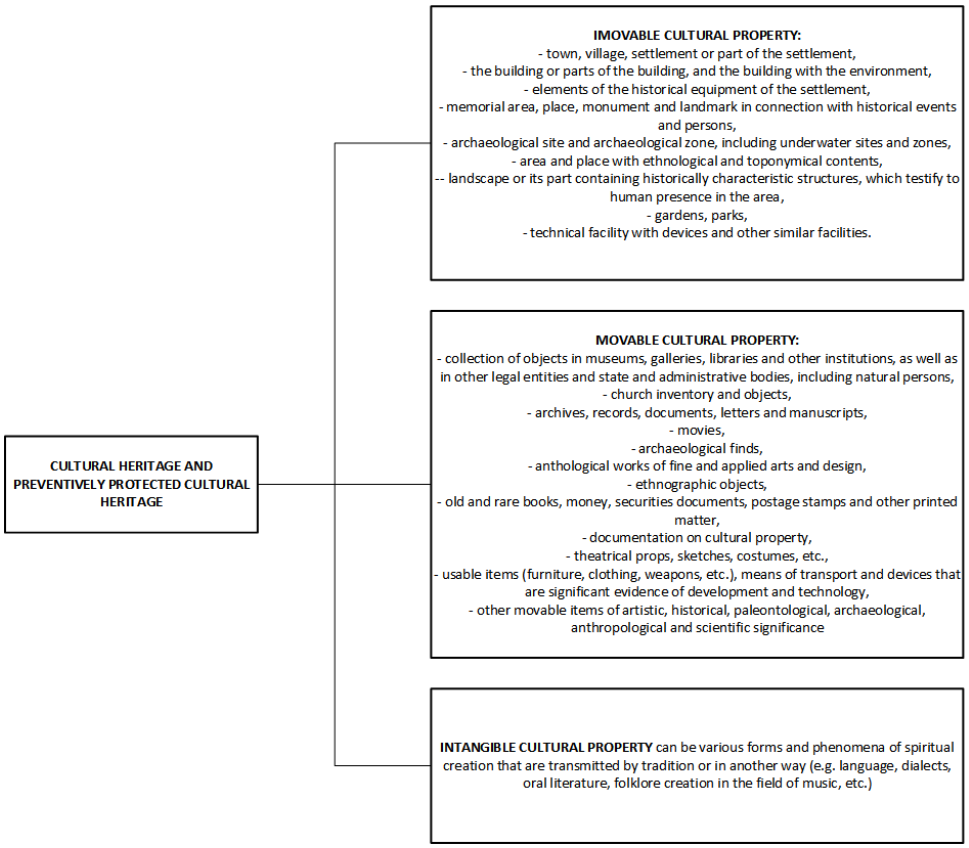
[70] Regulation on the definition of construction works, other projects and surfaces of state and regional significance (OG 37/14, 154/14)

4.1.6 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) – 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 9. 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)



Source: Author.

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[71] , along with a set of

[71] 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

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[72], it is obligatory to prepare conservation base, which also includes the area of the contact zone.

According to Act on Cultural Heritage for work performance on cultural heritage, it is necessary to obtain prior approval from the competed body[73]. 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 (see Footnote 73), 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[74] 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[75] 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

[72] 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

[73] 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

[74] 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.

[75] Simple and other construction works and works defined by Ordinance on simple and other construction works and works (OG 112/17, 34/18, 36/19, 98/19, 31/20). 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 (see ANNEX V of this ESMF)

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.

More details regarding cultural heritage protection within building permitting process, as defined by Act on Cultural Heritage, is given in ANNEX V.

According 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 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.

4.1.7 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),
- 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),
- 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).

Three Ministries: Ministry of Economy and Sustainable Development, Ministry of Culture and Media and the Ministry of Physical Planning, Construction and State Assets are responsible for landscape care.

The spatial planning system is the main tool for landscape conservation. Spatial planning documentation includes landscape issues.

4.2 National social legislation overview

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 155/02, 47/10, 80/10, 93/11, 93/11), the Labor Act (OG 93/14, 127/17, 98/19), 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) and Occupational Safety and Health Act (OG 71/14, 118/14, 94/18, 96/18).

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.

Fundamental obligations and rights arising from employment relationships are stipulated by the Article 7 of the Labor Act. 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.

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.

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 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[76]. 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

[76] 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

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 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.

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 the specific procedures they will use to verify the ages of job applicants.

According to Article 7 of the Labor Act (OG 93/14, 127/17, 98/19) employer is 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 is 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).

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.

Other relevant laws and by-laws are:

Act on Representativeness of Employers' Associations and Trade Unions (OG 93/14, 26/15)

Pension Insurance Act (OG 157/13, 151/14, 33/15, 93/15, 120/16, 18/18, 62/18, 115/18, 102/19);

Act on the List of Occupational Diseases (NN 162/98, 107/07);

Ordinance on the use of personal protective equipment (OG 18/17);

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 testing the working environment (OG 16/16);

Ordinance on inspection and testing of work equipment (OG 16/16);

Ordinance on jobs where a minor may not be employed (OG 89/15, 109/19);

Ordinance on safety signs (OG 91/15, 102/15, 61/16);

Ordinance on safety at work for workplaces (OG 29/13);

Ordinance on the protection of workers from the risk of exposure to vibration at work (OG 155/08);

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 46/08);

Ordinance on the use of personal protective equipment (OG 39/06);

Ordinance on placing personal protective equipment on the market (OG 89/10);

Ordinance on jobs in special work conditions (OG 5/84);

Ordinance on risk assessment (OG 112/2014);

4.3 Overview of the institutional framework

Croatian education system is centrally managed by the Ministry of Science and Education. Besides MSE, 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.

The main central government stakeholders regarding environmental and social issues are following:

Ministry of Economy and Sustainable Development 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. The

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)**.**

Ministry of Labour, Pension System, Family and Social Policy is responsible for preparation and adoption of labor and employment policy and performs administrative and other tasks related to employment policy, regulation of labor relations, labor market and active employment policy, system and policy of pension insurance and relations with trade unions and employers associations in the area of employment relations. Since this is a multidisciplinary topic, in addition to this 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 Demographics, Family, Youth and Social Policy performs administrative and professional tasks related to the social welfare institutions, the care and protection of people and families, youth, and persons with disabilities.

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

Supervision of law implementation is centralized. Amongst other things, 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. Also, **Labour Inspectorate,** as a part of State Inspectorate conducts supervision of the following fields: employment relations and occupational health and safety; obligations on registration, deregistration, modifications in the employee's insurance status during the compulsory pension and compulsory health insurance; relations between employers and individuals who have no employment contract with the employer 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 Croatian Conservation Institute. The main activity of the Croatian Conservation Institute is conservation and restoration of immovable cultural goods (architectural heritage, wall paintings and mosaics, stone sculptures and stucco), movable cultural goods (easel paintings, wooden polychrome

sculptures, furniture, art on paper, artworks of leather, items of textile or metal), archaeological heritage, and other objects of cultural, historical or technical significance.

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 MoESD are responsible for monitoring activities of waste management, nature protection and biodiversity, air quality. **Other monitoring activities are carried by Ministry of Agriculture, Croatian Waters, Croatian Meteorological and Hydrological Service, and other public bodies.**

5 BASIC INFORMATION ON 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 the mandatory 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 ten (10) WB 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[77] and the objectives of ESS1.

Not all of these ten ESS are relevant for this project, but ESS1, ESS2, ESS3, ESS4, ESS6, ESS8 and ESS10 are. The summary of the Environmental and Social Standards are described below.

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).

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 8.1.3, while risk classification of activities that standards apply to in the Chapter 2.3.

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 project, 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:

[77] (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.

- 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, ESCP is a part of. 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). ESA 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 ESA is required.

According to the World Bank criteria Project "Towards Sustainable, Equitable and Efficient Education" falls into the category of projects with moderate environmental and social risk.
This Standard is relevant to the overall Project, subject of this ESMF.

Although the long-term impacts of the Project are likely to be positive, its activities also carry certain risks. Planned interventions include minor rehabilitation and refurbishment of learning environments, informal learning spaces, dining facilities which carry risks typical for small scale civil works: operational health and safety and community safety risks, dust and noise emissions, radon emissions, traffic disruption, generation of construction waste and small qualities of hazardous waste, except in the case where asbestos is found, exposure of workers and building occupants to hazard materials (e.g. waste paint and varnishes); unsafe working conditions; and poor occupational health and safety practices. In cases where works will take place during school-operating hours, risks for students and

staff include risks from noise and dust emissions and related disturbance, risks from injuries if works are not properly secluded. Expected impacts from these activities will be typical for construction works, therefore mostly predictable and readily mitigated.

No major adverse social impacts are expected under the Project. Overall, the project is expected to have positive social impacts since the prime focus of the project is to improve quality and efficiency of primary and secondary education in Croatia nationwide. Based on the content of its components focused on introduction of whole day school model, improvement of learning environment and optimization of school network, strengthening MSE capacities, positive social outcomes are expected. The key potential social risks associated with project activities that finance school rehabilitation, relate to community health and safety (e.g., impact of construction works on staff, who continue to occupy building rehabilitation sites); exposure of workers and building occupants to hazard materials (e.g., asbestos containing materials) before and during rehabilitation activities; unsafe working conditions; and poor occupational health and safety practices, including those that do not prevent COVID-19.

No involuntary resettlement impacts are anticipated as all civil works will be carried out within their existing footprints and no resettlement, land acquisition, or permanent restrictions to access are expected.

Within this standard the Borrower will prepare appropriate instruments to be used for specific sub-projects (most likely ESMP Checklists - template available in the ANNEX IX). Measures shall be implemented within specified timeframe and the status of implementation will be reviewed as part of project monitoring and reporting. EHS aspects will be included to work bids and contracts.

ESMF and site-specific environmental and social assessment documents (ESMP checklists) will be timely and appropriately disclosed and discussed with public. ESMF includes a template for Cultural Heritage Management Plan (CHMP).

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 8.1.3.

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

EHSG application to all Project activities is mandatory under the ESS1. For this project the following guidelines will be consulted:

1. Environmental

1.1 Air Emissions and Ambient Air Quality
1.2 Energy Conservation
1.3 Wastewater and Ambient Water Quality
1.4 Water Conservation
1.5 Hazardous Materials Management
1.6 Waste Management
1.7 Noise

2. Occupational Health and Safety

2.1 General Facility Design and Operation
2.3 Physical Hazards
2.4 Chemical Hazards
2.7 Personal Protective Equipment (PPE)
2.9 Monitoring

3. Community Health and Safety

3.1 Water Quality and Availability
3.3 Life and Fire Safety (L&FS)
3.4 Traffic Safety
3.5 Transport of Hazardous Materials
3.6 Disease Prevention
3.7 Emergency Preparedness and Response

5.3 ESS2 Labor and Working Conditions

Labor and working conditions or **ESS2** recognizes 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 (including spreading of COVID19), 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 will be 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 Project.

The project footprint is relatively small and does not entail a significant amount of labor as the project construction works will be small scale. Project workers will include MSE staff, consultants and contracted /subcontracted workers.

Project activities will not require hiring of community workers. Most of the labor will be locally hired so there will be no labor camps or foreign labor.

5.4 ESS3 Resource Efficiency and Pollution Prevention and Management

ESS3 recognizes that economic activity and urbanization often generate pollution[78] 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 Project.

It is expected that Project activities will contribute to better resource efficiency as the Subcomponent 2.1: Prepare new/updated infrastructure standards for schools will support developing standard designs for new modern and energy-efficient (green) schools.

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 aren't expected. Also, proper waste management will ensure that waste is safely and correctly collected, stored, transported, and disposed.

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

[78] 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.

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 Project.

Civil works will be undertaken in schools, and maintaining the health and safety of employees, pupils and visitors, and nearby communities, throughout the construction phase is critical, especially if the schools will be open during works. Movement of heavy goods vehicles can lead to accidents. Possible risks are from low quality furniture and equipment is diminished by extensive product control in place in EU and Croatia e.g. Toy Safety Directive (2009/48/EC), CE marking, REACH, General Product Safety Directive (GPSD) (2001/95/EC), EN1176 Playground equipment standard that apply to children's school equipment, supplies and stationary. Preparation of Emergency Preparedness and Response Plan and procedures is mandatory for schools and working sites under the law (Law on OHS, OG 71/14, 118/14, 154/14 , 94/18, 96/18 and Ordinance on safety at work on temporary construction sites, OG 48/18). Given the small to medium scale nature of civil works primarily focused on rehabilitation and refurbishment activities, the impact and risk on community's health and safety is expected to be minor and manageable. No risks related to labor influx, gender-based violence (GBV) or security forces are expected under the project activities because the scale of civil works is small and most workers will be hired locally.

Significant environmental and social risks are not expected and by application of environmental and social measures impacts will be eliminated and/or mitigated.

The project will ensure safety of staff, pupils and other visitors during the construction works by measures defined in site-specific ESMPs/Checklists and application of labour management procedures.

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

This Standard is not recognized as relevant for the Project. Any construction activities that might cause land acquisition or involuntary resettlement will not be eligible for financing. All project activities will be within existing footprints (rehabilitation and refurbishment of existing schools within existing boundaries). There will be no temporary resettlement impacts from the project as all civil works will be conducted in public buildings.

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 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 Project.

This Standard is relevant to the overall project, and Subcomponent 2.2: Finance expenditures associated with creating "demonstration schools" subject of this ESMF.
Though most of works will be carried out within the urbanized areas, some may be located on borders to or within Protected Natural Areas (PAs) or within Natura 2000 Network.
All works will be carried out within the limited intervention scope (rehabilitation 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 ESMP Checklists and reflect specific natural protected measures defined in existing management plans for these areas.

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 the Project.**

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[79].

The requirements of ESS 8 apply to cultural heritage regardless of whether or not it has been legally protected or previously identified or disturbed.

This Standard is relevant to the Project.
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.

Also, the buildings designated and protected as cultural heritage will be eligible for financing, as well as certain sub-projects which are in the area of protected cultural and historical entity. Cultural heritage related risks will be addressed through this ESMF and the development of Cultural Heritage Management Plan (CHMP) as a part of ESMP Checklist.

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

[79] 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.

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 Project.
The Initial Stakeholder Engagement Plan (SEP) is prepared for the Project. **It will be updated periodically as necessary.**

The purpose of the SEP document is to define the stakeholder engagement strategy, explain how stakeholder engagement will be implemented throughout the course of the project and which methods will be used as part of the process; as well as to outline the responsibilities of the MSE and other actors in project implementation. The SEP will allow to assess the level of stakeholder interest and support to the Project and enable stakeholders' views to be heard and taken into account.

The SEP objectives are to:

- Identify stakeholders who are directly or indirectly affected by and/or interested in the Project;
- Outline modalities for information dissemination and stakeholder engagement activities including their purpose, frequency and location during project preparation and implementation;
- Promote and provide means for effective and inclusive engagement with project-affected parties throughout the project life on issues that could potentially create an impact;
- Define the roles and responsibilities of different actors to implement and monitor these activities;
- Ensure functional grievance redress/beneficiary feedback mechanism to raise issues;
- Ensure that appropriate project information on environmental and social risks and impacts is disclosed in a timely, understandable, accessible format; and
- Promote and maintain effective and inclusive stakeholder engagement throughout project life.

The SEP will be published, with a call for public consultation, and remain available to public on MSE's web-site for 14 days.

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. The grievance mechanism will also cater to the interests and concerns of direct and contracted workers.

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

Table 7. 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

Environmental and Social Standards (ESS)	Relevant to the Project Yes	No	Preliminary assessment
			eliminate or offset adverse environmental and social impacts, or to reduce them to acceptable levels; and the actions needed to implement these measures the templates for ESMP and ESMP Checklists were provided (Annexes IX and X respectively).
ESS2 Labor and Working Conditions	✓		Occupational Health and Safety (OHS) measures to ensure the health and safety of workers will be given adequate attention in ESMPs and ESMPs Checklists, in line with the ESMF. A Grievance Redress Mechanism for workers and the roles and responsibilities for monitoring such workers shall be established.
ESS3 Resource Efficiency and Pollution Prevention and Management	✓		Site ESMP Checklists will be required for rehabilitation activities by contractors. Given the project scope, ESMPs are unlikely, but cannot be excluded as sub-project locations are unknown. ESMP/ESMP Checklist will include that the Standard's requirements e.g. those related to energy and water use, climate and natural disasters and man-made risks are included.
ESS4: Community Health and Safety	✓		To ensure safety of staff and students during works, mitigation measures to address environmental impacts will be prepared. Templates for site-specific ESMPs and ESMP Checklist were provided in this ESMF.
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement		✓	All construction activities will be within footprints of the existing buildings. There will be no temporary resettlement impacts from the project as all civil works will be conducted in public buildings.
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	✓		Since the Project may produce low to moderate, however temporary, adverse effects to Natura 2000 and protected areas, to protect and conserve biodiversity and habitats, mitigation measures to address potential impacts to nature will be prepared. Templates for site-specific ESMPs and ESMP Checklist were provided in this ESMF.
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	✓		Cultural heritage related risks will be addressed through this ESMF and the development of Cultural Heritage Management Plan (CHMP) as a part of ESMP or ESMP Checklist or stand-alone document.
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) is prepared. The SEP will be updated in parallel with the development of ESMF. Grievance Mechanism shall be made publicly available to receive and facilitate resolution of concerns and grievances in relation to the Project, consistent with ESS10.

6 PRELIMINARY COMPARATIVE ANALYSIS OF NATIONAL LEGISLATION AND RELEVANT ESS

As a member of the European Union, the 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 relation between ESSs and national legislation are given below, Table 8.

Table 8. 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), - 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), - Gender Equality Act (OG 82/08, 69/17), - Anti-discrimination act (OG 85/08, 112/12),	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). However, instruments such as ESMP and ESMP Checklists are not required under the national E&S system. 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), - 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)	**There is no gap on the policy level.**
ESS3 Resource Efficiency and Pollution Prevention and Management	- Act on Sustainable Waste Management (OG 94/13, 73/17, 14/19, 98/19) - Ordinance on waste management (OG 81/20)	**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,

Environmental and Social Standards (ESS)	National environmental and social framework	Gaps
		which is a common case, and if waste owner does not request this information, the final destination will be unknown. **There may also be differences in requirements of WB EHS Guidelines and national and supranational (e.g. EU BREFS) emission and E&S management requirements. Therefore, all these WB and national system relevant guidelines must be consulted while stricter one applied.**
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) - 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), - Act on Sustainable Waste Management (OG 94/13, 73/17, 14/19, 98/19)	**There is no gap on the policy level** **There may be differences in requirements of WB EHS Guidelines and national and supranational (e.g. EU BREFS) emission and E&S management requirements. Therefore, all these WB and national system relevant guidelines must be consulted while stricter one applied.**
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not applicable	**This Standard is not currently relevant.** All construction activities will be within footprints of the existing buildings. There will be no temporary resettlement impacts from the project.
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), - Regulation on environmental impact assessment (OG 61/14, 3/17)	**According national legislation, preparation of Biodiversity Management Plan (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 typically includes key biodiversity 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)

Environmental and Social Standards (ESS)	National environmental and social framework	Gaps
		which is mandatory part of the EIA procedure. The obligatory content of the Program is not legally prescribed and, in most cases, do not contain financial information as it is required by ESS6 BMP. Croatian E&S system does not recognise offsets as a relevant option for nature or biodiversity management.
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)	**There is no gap on the policy level**
ESS9: Financial Intermediaries	Not applicable	**This Standard is not 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 is not 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, 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. Public consultations of other E&S instruments (except ESIA and SESA) are not regulated o required.

7 SCREENING OF POTENTIAL ENVIRONMENT AND SOCIAL IMPACTS

According to the national legislation all civil works must be designed and built in such a way that it, throughout its life cycle, they: have no 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; allow no leakage of toxic gases, emissions of dangerous substances, volatile organic compounds, greenhouse gases or dangerous particles into the air, emission of dangerous radiation; allow no 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, discharge of untreated waste waters, emission of flue gases or faulty disposal of solid or liquid waste; allow no shortcomings 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 pollution, 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, civil 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.

Project has predominantly positive social impacts. It will support transformation of Croatia's educational sector (through the provision of both technical assistance and needed essential infrastructure for selected demonstration school). It will result in increased literacy, numeracy, and socio-emotional skills of students (and especially those of low socioeconomic status) joining the whole day school (WDS) and increased capacity of the ministry to design and implement complex reforms. Also, project will contribute to improving equity. Additional hours of instruction will be especially important to help the poorest students make up for lost learning due to the COVID-19 pandemic. Furthermore, the project will support the launch of a new equity-focused program which will provide funds to a pair of schools – one high performing and one low performing – to support the mentoring of the weaker-performing school located in the high poverty area and enrolling a large number of poor and Roma students and the project will support the revision of the national regulations on students with disabilities.

Furthermore, based on project demonstration schools exercise, the longer school day is expected to increase employment outcomes of women because more mothers will work, the gender income gap is expected to be reduced.

Potential negative social risk for this type of project is GBV during the construction works. However, due to a strong regulatory and institutional framework in force and many years of country experience in implementation of these regulatory provisions this risk is negligible. Additionally, organisation of construction site will be in such a way that construction site must be in such a way that access to anyone who is not part of the contractor's team is disabled and controlled.

7.1 Environmental impacts

Small scale environmental impacts of the project are expected in the Component 2 - Subcomponent 2.2 which includes civil works –rehabilitation works[80]. Environmental impacts under other Components / Subcomponents are not expected as they are aimed to support reform of educational system and its institutional and organizational strengthening. However, sub-components 2.1 and 3.1 do present potential EHS risks if the technical assistance (TA) and related actions do not properly include EHS aspects/considerations. Therefore, these activities (e.g. development of standards for schools, ToRs, reports and other products of TA) will be scrutinized under the ESF.

It is anticipated that for planned rehabilitation and refurbishment works environmental risks are typical for civil works and would be easily predictable and mitigated. Long term environmental impacts are expected to be generally neutral.

The environmental impacts of the project (Component 2 - Subcomponent 2.2) 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 (existing building and school area).

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) Traffic disturbance and other OHS issues (e.g. removal of soft-bound asbestos, improper use of PPE, and other) f) Waste generation (small quantities of construction and hazardous waste e.g. asbestos) and waste management, and may also include g) Cultural and historical heritage (chance finds and impact on protected cultural and historical entity); h) impact to nature.** There may be potential impacts that are not related to the Project activities, but setting such as emissions of radon that is present at some micro locations (about 3% of buildings). Neglectable risks are possible related to fires, lead based paint, potable water quality (from water pipes, and other contaminants) and water use efficiency, and wastewater discharge; However, these risks are further minimized by well-developed and effective regulatory and institutional framework. In addition to natural radon emissions, the operational phase risks relate to safety of equipment. This risk is minimized due to strict application of EU product standards such as Toy Safety Directive (2009/48/EC), CE marking, REACH, General Product Safety Directive (GPSD) (2001/95/EC), European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization CENELEC standards, EN standards such as EN1176 Playground equipment standard that apply to children's school equipment, supplies and stationary.

More detailed information on foreseen impacts of rehabilitation and refurbishment works are given below. Detailed overview of mitigation measures is given in the ANNEX IX.

7.1.1.1 Air pollution

During the rehabilitation and refurbishment 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 vehicles 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.
Rehabilitation and refurbishment works will take place during limited short-term period, so the

[80] Minor rehabilitation and refurbishment of learning environments, informal learning spaces, dining facilities.

impact on air quality will be short-term and negligible scale.
Works will be carried in separation form the rest of the school in a manner that prevents dust and other emissions to air, as well as other sources of indoor air quality degradation, thus significant impact is not expected. Monitoring will be prescribed in the case of complaints or negative supervision or inspection findings.

7.1.1.2 Noise

Noise is an unavoidable environment impact during 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 to maximum of 55dB. 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.
Works will be carried in separation form the rest of the school (which may be in use) in a manner that prevents significant noise emissions that would disturb or reduce abilities of students and staff to perform their tasks. Monitoring of noise and reduction to acceptable levels will be prescribed in the case of complaints from students or staff or negative supervision or inspection findings. Particularly noisy activities will be carried out outside of school's working hours.

In compliance with the prescribed limits and measures, 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 and refurbishment 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 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 earthworks, 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

Possible negative impacts on the soil can be caused by fuels, lubricants and liquid materials used in civil works, which can infiltrate into ground and underground as a result of elemental disasters, accidents or mismanagement of the equipment, leakage and accidental spillage. Contamination can come from transport vehicles and parts of machinery during performing the service when there is a risk of leakage of dangerous substances in the surroundings, or in the case of littering and inadequate waste management. No earthworks are planned.

7.1.1.5 Cultural and historical heritage

If the sub-project location of the planned rehabilitation and refurbishment includes or is located in the vicinity of the elements of cultural heritage, processes like, mechanization and vibration may cause physical damage of architectural heritage or destruction of the archaeological find. An education facility can also be under cultural heritage protection, or in the zone of such protection. In this case, environmental assessment will include assessment of impacts to cultural heritage and appropriate mitigation measures (in the form of Cultural Heritage Management Plan) in line with the WB policies and national legislation and requirements. The national competent authorities will be included in formation of measures and supervision of works.

The picture of the location during the execution of the work may be damaged by dust, mechanization and temporary disposed materials, causing temporary disruption of the cultural context.

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.

7.1.1.6 Biodiversity

Rehabilitation and refurbishment works can affect biodiversity or habitats as some sub-projects may be located in the protected area or Natura 2000; however, this is unlikely since all project activities are taking place in the existing physical footprint. If they occur, the impacts are expected to be short term and of limited scope. Variety of impacts that can affect biodiversity and habitats are limited by the Project design, but can include interruption of important ecological processes such as temporary degradation of habitat quality (from air/water pollution, light or noise pollution, destruction of habitat due to littering, inadequate working site housekeeping or waste management), vulnerability to fire, noise disturbance, or other stresses.

Since all works will be carried out within the limited intervention scope, within the existing footprint, in a space already in use for the same purposes and thus significant, 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. In the case works would take place in protected areas and Natura 2000 Network, biodiversity protection measures will be included to environmental assessment documents, compliant to ESS6 and Natural 2000 sites management plan.

7.1.1.7 Traffic disturbance

During the execution of the work, due to the increased frequency of transport of materials and machinery, temporary interruption in traffic may occur. Scope of works indicate that transport of workers will not pose a risk to uninterrupted traffic.
This is a short-term impact which will last only during the execution of the work. Certain quantities of building materials on the roads are possible and may cause: difficulties in traffic flow, accidental damage of roads and stops due to spilling of materials etc.

7.1.1.8 Waste generation and management

On the location of rehabilitation works waste generation will occur.
Waste classification in Croatia is stipulated by Ordinance on waste catalogue (OG 90/15). 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;
- group 20 - municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions (paper, plastics, glass, food waste etc).

Hazardous waste is expected in negligible amounts. It will include the residues of varnishes, paints, as well as oil wastes from equipment. Large amounts of asbestos are not expected as only minor rehabilitation is planned, thus it is likely that if asbestos would occur it will be soft-bound type used mostly for insulation of floors and pipes.
In case of occurrence of asbestos, in the ANNEX XII the general guidelines on asbestos handling are given based on the national legislation, EU harmonized.
Each type of generated waste on the location must be temporary stored in separate waste container which have to be labelled with waste type name and waste code. 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 also expected.

Waste arising from implementing COVID-19 protection measures on site (protective gloves, masks, etc.) is considered to be municipal waste and should be handled in line with the WHO guidelines[81] and the guidelines available on the official government (Croatian Institute for Public Health) website[82].

During and after finishing rehabilitation and refurbishment works all waste must be handed over to the companies authorized for the waste management while waste can be disposed only to licensed landfills or to licensed processing plants, so the potential of a negative impact on the environment is reduced to a minimum.

7.1.1.9 Occupational Health and Safety (OHS)

Injuries and accidents are possible at working sites in the case of negligence, failing in good housekeeping, failing to follow OHS good practices and set procedures, inadequate quality of personal protective equipment (PPE) and materials, faulty machinery and work equipment, inadequate training and experience of workers, etc. These shortcomings can result in injuries and even fatalities. OHS risks will be minimized by following national OHS regulation and rules, WB ESH Guidelines, and good international practice. Works will be strictly separated from the operating part of the school so no significant OHS issues are expected for the students and staff. In the case of working on the outside envelope and/or other common areas (e.g. entrance, corridors) safe passages must be ensured. If necessary, works will stop during lesson breaks. Numbers of COVID19 cases are decreasing in Croatia. This is probably a lasting trend as about third of grown population is vaccinated and vaccination program continues at increased speed. Nevertheless, the risk form disease may still be present by the implementation phase. Schools (pupils and staff) will apply mandatory measures defined by Croatian Civil Protection Directorate and County Civil Protection Directorate. Contractor's employees and PIUs will, in addition, consider WHO requirements.

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

7.2 Social impacts Social impacts

Social risk is rated as moderate. An estimated 15.000 in the 50 targeted schools nationwide are expected to show improved literacy, numeracy and socio-emotional skills as a result of the introduction of Whole Day School model and improvement of learning environment. The project in particular targets high poverty areas in the bottom 40th percentile and identifies the Roma as a focus group, among its beneficiaries. Teachers, principals and school founders from participating demonstrations schools will benefit from additional training received. Moreover, parents of children in WDS, especially women, are expected to gain additional productive hours which may improve their participation in the labor market and therefore improving their income. The project integrates a robust stakeholder engagement, including i) consultations on the project objectives, ii) engagement with stakeholders on reforms and adopting the WDS model, iii) independently organised consultations by schools applying for WDS in which they are expected to obtain consensus for participation as well as grievance redress mechanisms at multiple levels. This participatory approach is important as it will foster decentralised decision making in the educations sector and create multiple platforms for communication between key education stakeholders in the country. No major adverse social impacts are anticipated, including involuntary resettlement or land acquisition.

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. Interruption of classes will be minimized through workers code of conduct and organisation of works in a way that minimize disturbance (e.g. adjusting working hours, using noise and dust screens, limiting movement of workers/secluding work site, etc.). Works and impacts will be closely supervised and monitored, and corrective measures applied if needed.

With respect to GBV, the risk is low. The project will endeavour to prevent sexual exploitation and abuse as well as sexual harassment (SEA/SH) in the implementation of project activities by i) raising awareness on the SEA/SH risks associated with the project during project stakeholder engagement, ii) making availabile, a secure mechanism for lodging SEA/SH complaints, iii) inclusion of site-specific SEA/SH risks in the ESMPs and outlining the contractors obligations and requirements to prevent and mitigate against SEA/SH risks including workers signing a code of conduct (see attached sample code of conduct in ANNEX XIII). These requirements and expectations will be reflected as part of the bidding documents. Stakeholders will be informed about SEA/SH prevention mechanisms and the availability of an appropriate grievance mechanism to receive complaints.

No involuntary resettlement impacts are anticipated, and no resettlement and land acquisition will take place. Any activities that might cause land acquisition or involuntary resettlement will not be eligible for financing.

The project will be implemented in strict adherence to the principles of equality and non-discrimination as outlined in the i) a SEP which identifies, analyses and presents differentiated methods of communication and consultation to ensure inclusion of the marginalised and vulnerable ii) a GRM which is transparent, fair and with predictable timelines iii) a labor management plan which will guide recruitment and management of labour as well as the Croatian legislation and ESF requirements as outlined in this ESMF.

7.2.1 Labor Management Procedures

Categories of Workers

ESS2 categorizes the workers into: direct workers, contracted workers, community workers, migrant workers and primary supply workers, of which all the categories are relevant except the community workers. These procedures elaborate how the project workers will be managed, in accordance with the requirements of national law and ESS 2. The procedures will address the way in which this ESS will apply to different categories of project workers including direct workers, and sets out the requirements for third parties to manage their workers.

Direct Workers: include the MSE civil servants, staff as well as consultants at the PIU. The PIU will be established within the MSE. MSE staff who are working on the project will remain civil servants and therefore subject to the terms and conditions of their existing public sector employment agreements. Additional staff and consultants will be hired for institutional capacity strengthening to perform specialized tasks at the PIU. The PIU will comprise:

a. Project director
b. Coordinators for each of the main reform activities
c. Education experts for each of the main reform areas
d. Financial management/procurement expert
e. Community outreach/consultations expert
f. Infrastructure expert

PIU staff who are not civil servants will be subject to the terms of reference and their individual contracts of employment, including the duration of their contracts.

Contracted Workers: These are workers of third parties hired to deliver primary functions of the project. For this project, this will mainly constitute workers of the contractors hired in relation to the civil works. It is not known at this time whether subcontractors will be engaged to carry out some aspects of the work. Approximately 25 workers per day per site are expected. The number of workers is expected to vary depending on the works requirements and contractors discretion at each site. The contractor will be responsible for the performance and management of contracted workers, ensuring that appropriate skillsets are available, such as social and environmental expertise, masons, carpenters, tilers, plumbers, electricians as well as a construction site coordinator responsible for safety standards (among others) according to legal requirements and in line with the provisions of ESS 2 and the national legislation..

Primary supply workers are those that work for companies involved in the provision of construction materials for civil works. These will be engaged by third parties, such as the contractors or sub-contractors under the project. The contractor will be responsible to ensure that the principles of labor management, including prohibition of child labor and access to a grievance redress mechanism for these workers is in line with local legislation and the ESS 2. Where a GRM is not available, these workers may access the main project GRM.

Assessment of Labor Related Risks

Labor related risks typically associated with a large and diverse workforce such as child labor, labor influx and gender-based violence (GBV) issues are not likely to occur. All contractors and workers employed in construction activities are likely to be local. No major risks related to labor rights and contracting are envisaged.

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 and varnishes);
- COVID-19 risk.
- SEA/SH risks

Grievance Redress Mechanism

A grievance redress mechanism (GRM) 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 GRM at the time of recruitment and the measures put in place to protect them against reprisal for its use. Measures will be put in place to make the grievance mechanism easily accessible to project workers, including: workers being informed of the availability of a worker's GRM when they are hired, availability of a feedback box at the project site as well as multiple channels of lodging their grievances such as telephone, email, anonymously or as an organised group. Project workers should be able to raise concerns regarding unsafe or unhealthy work situations through the GRM. The GRM will ensure safe and confidential channels to lodge SEA/SH related complaints, as well as identify referral pathways for survivors to access services.

As described in chapter sub-chapter 4.2 and chapter 6 the Croatian legislation is in line with WB safeguards and requirements in terms of working conditions human health and safety, public consultation or provisions for addressing the relation and impact of the project to neighbouring properties and communities.

The Labor Act articles 133; 134; 135 and 136 stipulate grievance redress procedure in detail as described in ANNEX VII.

Responsible Staff

The contractor will be responsible for implementation of the LMP, including i) engagement and management of project workers, contractors/subcontractors, ii) executing OHS requirements, iii) training of workers on addressing worker grievances, including SEA/SH issues**,** and other relevant topics, iv) including reports on implementation of the LMP, OHS and workers GRM as part of the periodic reports submitted to the PIU. The PIU, through the environment and social specialist will be responsible for supervision of this LMP implementation, ensuring the LMP implementation reports are included in the periodic reports on social and environment submitted to the bank, as well as conducting any relevant trainings as outlined in the LMP.

8 MITIGATION OF POTENTIAL IMPACTS

Under the Component 2, Subcomponent 2.2. - *Finance expenditures associated with creating "demonstration schools"*, pose social and environmental risks since they include civil works – rehabilitation.

Rehabilitation of the demonstration schools carries risks typical for construction works: dust and noise emissions, accidental spillage of machine oil, lubricants, traffic disruption, generation of construction and small amounts of hazardous waste, unsafe working conditions, poor occupational health and safety practices.

The potential risks and impacts are (i) predictable and expected to be temporary (ii) low to medium in magnitude; (iii) site-specific, without likelihood of 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.

Possible impacts identified for Subcomponent 2.2. (civil works) works can be easily removed or mitigated by applying of good construction practice and proper organisation of the construction site. This ESMF provides general overview of measures (below), while site-specific measures will developed in ESMP/ESMP Checklists developed separately for each sub-project. ESMP and ESMP Checklist, as well as CHMP where applicable, will be an indispensable part of bidding and contracting documentation.

8.1 Mitigation of Impacts

8.1.1 Mitigation in Design Phase

Rehabilitation/adaptation/refurbishing sub-projects will to the extent of the intervention scope take into account the following environmental and social risks:

- energy efficiency – increasing energy efficiency of buildings in line with Technical regulation on rational use of energy and thermal protection in buildings (OG 128/15, 70/18, 73/18, 86/1, 102/20) and selection of energy efficient appliances (minimally category B in accordance with EU Directive 92/75/EC established an energy consumption labelling scheme);
- water use efficiency – increasing water efficiency in line with requirements of Decision of Croatian Waters, by e.g. use of tap aerators, sensors, dual flush, stormwater collection and use, etc.
- radon emissions – in the case monitoring shows increased levels of radon, introducing solid floor with exhaust pipes, natural underfloor ventilation, assisted underfloor ventilation, natural or assisted room ventilation,
- climate change – through choice of energy efficient and low carbon consumption heating and cooling systems,
- natural disasters – prior to design schools will be inspected for seismic stability and appropriate measures will be introduced to remove identified shortcomings (if any are detected)
- man-made risks – existing fire protection and fire safety will be harmonized with the requirements of national legislation on fire-protection and fire safety;
- Infrastructure and Equipment Design and Safety - Children's school supplies and stationary will be a subject to Toy Safety Directive (2009/48/EC), CE marking, REACH, General Product Safety Directive (GPSD) (2001/95/EC), and EN1176 Playground equipment standard that apply to children's school equipment, supplies and stationary.

- Emergency Preparedness and Response - Of the Occupational Safety and Health Act as well as fire protection act, schools (as well as other legal entities and employers) are obliged to identify and assess risks from occurrence of incidents, and prepare an evacuation and rescue plan in case of need. This plan is revised on yearly basis. The plan should identify internal (e.g. fire, construction collapse, failure of installations, explosions, and other) as well as external (floods, landslides, earthquakes, etc.) potential sources of emergency. The plan also determines training needs, identifies persons who will implement fire protection measures and rescue, and acquaint the workers with the adopted plan.

Sub-components 2.1 and 3.1 TA activities do present potential EHS risks if the technical assistance (TA) and related actions do not properly include EHS aspects/considerations. Though not considered associated facilities, these activities (e.g. development of standards for schools, ToRs, reports and other products of TA) will also be reviewed for ESF compliance.

The MSE will engage with stakeholders throughout the project life cycle, commencing such engagement as early as possible in the project development process and in a time frame that enables meaningful consultations with stakeholders on project design and implementation. The planned assessments of WDS pilot schools will include questions relevant to social inclusion beyond just respondents' economic background (for example, children with learning disabilities, students from Roma population).

Founders of schools and schools that will apply to participate in the project will have to collect consent of parents/guardians of the students, which means that they will also take an active role in engaging other stakeholders and ensuring that all parents/guardians have received the information about the Project.

8.1.2 Mitigation in Implementation Phase

Emissions to air can be reduced to minor levels or eliminated 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. Civil works in schools will be separated from the operating school areas, which will be protected from dusting by shields and other means. In the case of staff or students' complaints or negative inspection findings, monitoring of indoor air quality and additional emission reduction measures will be prescribed.

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 have to be closed, and equipment placed as far away from residential areas as possible. Civil works in schools will be separated from the operating school areas, which will be protected from noise by shields and other means. In the case of staff or students' complaints or negative inspection findings, monitoring of noise imissions and additional emission reduction measures will be prescribed. Works will be organised in the way that works that are known to be noisy are carried outside of working hours of the school.

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. Measures for stormwater management will be defined in the ESMP/ESMP Checklist depending on the location and type of works envisaged (e.g. redirecting water from location of works, prevention of indoor flooding, etc.). As earthworks are not envisaged no significant impacts are envisaged. Notwithstanding, Emergency Response Plan will be developed for reach site, communicated to workers, available and implemented when needed. In addition to soil pollution issues, Emergency Response Plan will also address fire risk, water pollution risks, risks from earthquakes, severe OHS accidents, and other potentially incidental situations.

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 must be disposed exclusively in the licensed landfills. For management of PPE waste (protective gloves, masks, etc used for COVID-19 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. The Civil Protection Headquarters of the Republic of Croatia[83] issued recommendation for the waste management in the households and similar enclosed spaces (municipal waste). These recommendations should be applied for waste generated from usage of COVID-19 PEE at the construction site.

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 in the regulatory framework and supervised by competent authorities (Ministry of Culture and its regional and local departments, county and municipal offices) and must 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 appropriate measures have been taken as required by relevant authority and after it confirms that works may continue. In the case sub-project is carried out in the protected facility or culture protected zone, Cultural Heritage

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

Management Plan satisfactory to WB will be prepared as a part of environmental assessment document (ESMP or ESMP Checklist) or as a stand-alone document.

To protect **biodiversity,** at sensitive areas movement of heavy machinery and vehicles will 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.

Where possible, the area under rehabilitation has 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. Natural 2000 Network and PA management plans will be consulted and taken into account in environmental assessments and prescribing mitigation measures. Works will be designed to avoid breeding and other important periods of vulnerable and endangered wildlife, if any is present in the area. Biodiversity protection measures will address site-specific issues and be integrated to sub-project ESMPs and ESMP Checklist.

Traffic management must 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, safe pedestrian corridors will be ensured). Transport should be avoided on access roads during rush hours.

Labor Management: Mitigation of labor related risks will follow the labor management procedures outlined in 7.2.1, which will also be included in the contractor ESMP. Contractors will ensure that workers are hired, compensated and managed in adherence to national legislation and ESS2. This includes issues of contracts, labor rights, access to workers GRM without retaliation, prevention of SEA/SH including an accessible channel in the GRM to lodge related complaints, adherence to OHS and community health and safety measures.

OHS risks typical for minor civil works are expected and if properly managed (in accordance with the positive national legislation) they are not to produce significant risks. To minimize the risk of negative health impact and accidents, contractors should:

- ensure 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, etc.);
- ensure that workers receive worksite safety training,
- ensure that procedures for cases of emergency (including spills, accidents, etc.) are available at the site
- ensure that all workers, especially those operating dangerous machinery and equipment are properly trained and licensed
- ensure that construction equipment is inspected, attested and licensed;
- ensure that construction equipment is used strictly following its operation instructions;
- keep first aid medical kits and fire-fighting equipment on site;
- ensure suitable arrangements for all necessary welfare and hygiene requirements and for the prevention of COVID-19 epidemics (regular delivery of 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)
- ensure trainings for workers on hygiene and other preventative measures against COVID-19 are carried out.

Construction works, especially the operation of machinery, may cause a nuisance to nearby residents caused by noise, dust, and vibration. 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,
- works do not impede pedestrian access and motor traffic, or temporary alternative access is provided

Given the concentrated number of workers, there is a potential for the spread of infectious disease (COVID-19) at construction site, 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.

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 activities, then those prescribed by WHO and EU guidelines. Waste from PPE equipment for COVID-19 originating from construction site should be classified as municipal waste, unless differently prescribed by WHO or WB.

Given that the epidemiological situation is of a changing nature, it is necessary to continuously monitor the WHO guidelines and the guidelines on the official Government website for accurate and verified information on COVID-19 and apply them at the construction site

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 and implementation of safety and health measures in circumstances of risk of infectious disease COVID-19[84].

Contractors should develop specific procedures (in line with WB, WHO and national rules) 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;
- Tracking, keeping records and reporting to PIU.

Stakeholder engagement is a continuous process and should be implemented throughout the project, particularly ensuring that effective grievance redress mechanism remain accessible, transparent and responsive.

While preparing the site-specific procedures applicable guidance materials provided in ANNEX XII **have to be used and during implementation of the sub-projects updated regularly.**

[84] http://uznr.mrms.hr/uputa-za-provedbu-mjera-sigurnosti-i-zastite-zdravlja-na-radu-prilikom-izvodenja-gradevinskih-radova-na-sanaciji-objekata/
https://mrms.gov.hr/UserDocsImages/dokumenti/Uprava%20za%20rad/UPUTA%20ZA%20POSLODAVCE%20I%20RADNIKE_COVID%2019_letak-travanj_2020.pdf

8.1.3 Mitigation in use phase

Risks in the use phase stem mostly from use of purchased and installed equipment and furniture. Maintenance plans for schools are a part of risk assessment plans prepared based on the applicable legislation such as Law on Fire-protection, Law on OHS, and other. Responsibility for development and updating the Plans belongs to the final beneficiary (schools). These plans are prepared by authorised companies. Maintenance plan will be updated to meet ESF requirements for all schools that were funded under the Project before finalization of sub-project activities.

During the experimental phase, surveys and feedback will be collected and included in the refinement in the final WDS model that will be embedded in the education legislation. Legislation changes will follow the national public consultation process which has prescribes high level of stakeholders' involvement (stakeholders are members of the working group that proposes legislative changes, several interested ministries must provide their opinion on the draft legislation, draft legislation is published for public debate, and adoption procedure in the Parliament undergoes two readings).

9 ENVIRONMENTAL AND SOCIAL REVIEW PROCEDURES (FOR SUBPROJECTS)

9.1 Environmental and Social Review for sub-projects (civil works) planned under sub-project 2.2

For projects involving multiple sub-projects the World Bank requirements involve mandatory review of adequacy of local environmental and social requirements relevant for the subprojects, 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 is carried out, and appropriate preparation and implementation such sub-projects 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. In addition to sub-component 2.2 where minor rehabilitation works are envisaged, the ESF application extends to technical assistance under sub-components 2.1 and 3.1, in particular development of design standards for schools.

The PIU will ensure, that environmental and social screening, assessment and management is an integral part of sub-project planning, design, implementation, and operation and maintenance for all sub-projects under the sub-component 2.2. The PIUs will screen, monitor and report on the environmental and social performance, national legislation and ESF compliance under each sub-project to 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 will follow the 5 step Process to identify risks associated with specific sub-projects, screen out any substantial and 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: Sub-project screening and risk classification

The Environmental and Social Screening Questionnaire (ESSQ) provided in ANNEX X contains questions about the project (type of the proposed activities – repair/rehabilitation, use of hazardous or toxic materials, impacts on protected areas, etc.)

Environmental and Social Screening Questionnaire for each rehabilitated school is prepared by the PIUs Environmental and Social (E&S) Specialists. Once the ESSQ has been satisfactorily completed, the ESS will submit the document and the E&S Screening report (in an agreed form) to the WB.

The ESSQ helps the PIU E&S specialists to determine the sub - project risk based on screening criteria and preliminary impact assessment. Only low and moderate risk activities will be eligible for financing under the Project. Further, PIU E&S Specialist will, as a part of the screening process, define E&S de

diligence documents that are appropriate to address risks and ensure sound E&S management of activity. Development of ESSQ will take into account relevant risks and issues, such as the type, location, sensitivity, and scale of the project, etc.

The final decision on sub-project risk classification requires endorsement of the World Bank, therefore, before the assessment, PIU prepares an E&S screening report, subject of the approval from WB Environmental and Social Specialists, who confirms the risk.

STEP 2: Sub-Project Preparation

The PIU 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, permits and approvals issued by competent bodies related to the implementation of the sub-project as well as the time schedule of works. PIU (Environmental Expert and Social Expert) will review for ESMF and ESF compliance and approve designs of work form ESH perspective before bidding of works. All Technical Assistant documents and reports must be reviewed and approved by PIU E&S experts before it can be considered finalized, including development of design standards.

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

Rehabilitation and refurbishment works are expected to have low to moderate environmental and social impacts, thus development of ESMP or ESMP Checklists (ANNEX IX) will be developed (no need for the full-scale ESIA) for moderate-risk sub-projects. 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 can be developed as a stand-alone document or integrated/annex to ESMP or ESMP Checklist.

ESMP and CHMP (the latter if applicable) must be prepared prior to bidding procedures, by the PIU ESSs, and shall be subject to review and approval of the WB.

Full-time experienced environmental specialist (ES) and a full-time social development specialist (SS) will be hired in the MSE PIU for the period of project implementation which will be responsible for the implementation of this ESMF. PIU will also include communication specialist to support consultations and outreach activities.

The ESMP or ESMP checklists are to be prepared by the PIU E&S Specialists. The E&S Specialists will decide, on a case-by-case basis on required ESS documentation. When confident that the document meets WB quality and content requirements E&S Specialists submits the draft documents for the review by the World Bank. After the approval is obtained, the documents must be publicly disclosed. Documents reflecting relevant comments obtained in the public consultations will be considered finalized. ESMP or ESMP Checklists will constitute an integral part of bidding and contracting documentation for contractors. When satisfied with the quality of ESMP or ESMP Checklists, the Bank may decide to perform only post review of these documents.

Table 9. Specific responsibilities for the identification, assessment and addressing environmental and social aspects of the project activities, by implementing body

Responsibility	Implementing body/person
Preparation of site-specific ESMP/ESMP Checklists and CHMPs	MSE ES +SS
Review and approval of site-specific ESMP/ESMP Checklists and CHMPs	WB ES +SS

Responsibility	Implementing body/person
Disclosure, public consultations and finalization of ESMP/ ESMP Checklists and CHMPs	MSE ES +SS
Integration of site-specific ESMP/ESMP Checklists and CHMPs into Bidding Documents and respective Contracts	MSE ES +SS + Procurement + Project manager
Implementation of site-specific ESMPs /ESMP Checklists and CHMPs	Respective Contractor(s) and project beneficiaries, Municipal departments (as a part of technical examination if the works require construction permit or special conditions for construction), State inspections
Monitoring and reporting of compliance with ESMF and site-specific ESMPs/ESMP Checklists and CHMP	MSE ES +SS + Project Manager
Reporting compliance to WB	MSE PIU Project Manager

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 neighbours and local 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 addressed in the current document, under the provisions for Grievance Redress Mechanism, Public Consultation and Social Risk mitigation measures and also through SEP.

PIU E&S Specialists will be responsible for publishing the documents to the public and introducing the public in the whole process of project realization.

a) **Disclosure package for Draft ESMP/ESMP Checklist/CHMP** will include the following documents: Public announcement for organization of the public disclosure containing the call for comments, Draft version of ESMP Checklist and CHMP is applicable developed for each sub-project.

Form for submitting comments and suggestions, Grievance form will be ensured.

All relevant comments from the public will be addressed and if needed reflected in the final ESMPs Checklist.

Information about upcoming public consultations during the preparation of ESMPs/ESMPs Check list/CHMP for respective sites will be posted on the website of the MSE. The PIUs will also explore means to disseminate this information in accessible formats, both online and offline.

The design and organization of the consultation meeting will take into account the COVID19 national and WHO rules and recommendations.

All comments and questions shall be processed and together with feedback incorporated in the final version of the ESMP Checklist/CHMP and captured in the minutes of the meeting.

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

STEP 4: Integration of ESMP/ESMP Checklist/CHMP in tender documentation

ESMP /ESMP Checklist/CHMP 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 mitigation measures and monitoring plan as well as any subsequent corrective measures prescribed by PIU and WB. Implementation of particular community safety and OHS measures that relate to use period, safety of pupils and staff, emergency preparedness, Waste Management Plan, Traffic Management Plan and other defined in the ESCP is responsibility of project beneficiaries and PIU as will be defined in the ESMP/ESMP Checklist. PIU regularly supervises works through site visits, review of documentations and other available means. The PIU will report on ESMF, ESMP and ESMP Checklist/CHMP implementation compliance to the WB in the regular semi-annual Progress reports and for sub-projects in line with the ESCP and in dynamics agreed in the ESMP or ESMP Checklists.

PIU will notify WB within 48 hours of any incident or accident related to the project or that has an impact on it, and that has or could have a significant adverse effect on the environment, the affected communities, the public, or the workers included, for example, occupational accidents that could result in serious injury, minors, injuries, falls, vehicle accidents, larger spills of chemicals, oils, fuels, etc. The PIU will adhere to guidance in the World Bank's Environment and Social incident response toolkit (ESIRT) and sure that their own response procedures are in line with the ESIRT. The PIU will provide sufficient detail regarding the incident or accident, indicating immediate measures taken to address it and include any information provided by any Contractor/Subcontractor or supervising engineer. As per Bank’s request, MSE will also prepare a report on the incident or accident with a detailed Root Cause Analysis (RCA) to be submitted within 30 business days of the incident to the Bank.

9.2 Due diligence documents

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). In Annex II and Annex III of that Regulation interventions for which screening procedure must be carried out are defined.

Ministry of Economy and Sustainable Development 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. Criteria for defining is environmental impact assessment necessary or not are defined in Annex V.

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.

For activities under Subcomponent 2.2: Finance expenditures associated with creating "demonstration schools"– minor rehabilitation and refurbishment of learning environments, informal learning spaces, dining facilities, construction of small annexes national instruments should be applied:

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

If sub-project is located in the Natura 2000, according to the Nature protection act (80/13, 15/18, 14/19, 127/19) ***it is obligatory to submit Request for a preliminary assessment of the acceptability of the project to the ecological network*** to the competent authority (County or City of Zagreb) depending on the location of sub-project.

In addition, if the sub-project is located in the nature protected area i***t is obligatory to obtain permission from competent authority depending on the type of protected area***[85]*.*

For minor repairs, application of this instrument may not be necessary but after the consultation with competent authority.[86]

[85] For interventions and research in the area of strict reserve, national park, special reserve and nature park permission is issued by MoESD,
For interventions and research in the area of natural monuments, regional parks, significant landscapes, forest parks and monuments of park architecture permission is issued by administrative body (county and City of Zagreb)

[86] http://www.haop.hr/sites/default/files/uploads/publications/2017-12/PRIRUCNIK%20ZA%20OPEM.pdf

Table 10. National due diligence documents and decisions by Project activities

Activiti No.	Subcomponent	Type of activity	Description	Screening/EIA (Yes/No)	Procedure according to the Nature protection act
2	**Subcomponent 2.2.**	Rehabilitation	Minor rehabilitation and refurbishment of learning environments, informal learning spaces, dining facilities (including annexes (additional classrooms)	**No**	If a sub-project is located in NATURA 2000 area or nature protected area: - Request for a preliminary assessment of the acceptability of the project to the ecological network - Permission regarding interventions in the nature protected areas (for interventions and research in the area of strict reserve, national park, special reserve and nature park permission is issued by MoESD. For interventions and research in the area of natural monuments, regional parks, significant landscapes, forest parks and monuments of park architecture permission is issued by administrative body, counties and City of Zagreb). *For minor repairs, application of this instrument may not be necessary but after the consultation with competent authority.*

For Civil works under the Subcomponent 2.2 regular building permitting procedure must be followed (see ANNEX IV and ANNEX V). As these are activities of rehabilitation and refurbishment it is expected that all works will be carried out in line with conditions defined by existing location and building permits. Also, for the types of E&S relevant activities environmental considerations are made through construction permit conditions.

The Project will finance small to medium scale rehabilitation works and will have certain social and environmental impacts. Works associated with rehabilitation and refurbishment of schools are not expected to have significant and irreversible negative impact on the environment. **Rehabilitation and refurbishment works are expected to have small to medium environmental and social impacts, thus development of ESMP Checklists (ANNEX IX) should be sufficient (no need for the full-scale ESIA). However, as locations of sub-projects are not known nor the detailed scope of works, it is possible that ESMP will be required under the Project to provide adequate response to site-specific risks.**

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 annex to ESMP or ESMP Checklist or a stand-alone document.

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** must be part of it.

The Stakeholder Engagement Plan is prepared, and it will be updated periodically as necessary.

9.3 Environmental and Social Review of TA under the Project

Although TA activities carry a low E&S risk in the Project implementation phase and does not fulfil criteria for the associated facility, they can have significant E&S impacts further downstream, some that can be avoided or mitigated in the TA design. Therefore, TA envisaged under this project, including design of new infrastructure educational standards for Croatian schools, is a subject to environmental and social due diligence (compliant to ESF) under this Project. Specific steps to be taken include:

Step 1: PIU E&S Specialists screen ToR prepared for TA against ESF ESS end determine its potential E&S risk for the implementation phase. If the risk is low, no further action needs to be taken. If the future risk is moderate, E&S Specialists notify the PIU (and the WB in a regular Progress Report) that a particular TA needs further E&S assessment. TA with potential downstream significant and high risk will not be supported under this Project.

Step 2: PIU prepares TA documents. When TA documents are in high draft, they will be shared with PIU Environmental Specialist and PIU Social Specialist for E&S assessment against ESF ESSs. PIU E&S Specialists carry out assessment and make recommendations to mitigate identified E&S risks and make recommendations for further E&S performance of TA. Assessment results and recommendations are presented in the E&S Assessment Report.

Step 3: E&S Assessment Report is reviewed (also revised by PIU E&S Specialists if needed) and approved by the WB. Approved E&S Assessment Report is disclosed for 14 days at MSE web site with a call for comments. E&S Assessment Report is considered final when it addresses all relevant comments, feedback is provided to public, and consultation minutes are included (e.g. as an annex).

10 PROJECT IMPLEMENTATION SETTING

10.1 Implementation

Ministry of Science and Education (MSE), as the Project Implementing Unit, will lead and coordinate project activities and will be responsible for an overall implementation of environmental and social standards.

An experienced full-time environmental and full-time social specialists will be hired for the period of project implementation. Further, as MSE is experienced in Safeguards, but not in ESF, institutional capacity will be built to meet the requirements of the ESSs through capacity building measures, that will be organized on an ongoing basis including recurring Relevant Ministry Staff and PIU training on:

- SEP
- ESMP/ESMP Checklist preparation, disclosure and oversight
- LMP oversight
- CHMP preparation, disclosure and oversight,

and other Project and ESF relevant topics.

The MSE will ensure that the Bank's environmental and social criteria are adequately applied especially for sub-projects related to schools' rehabilitation and refurbishment works as these will undergo environmental and social screening for eligibility from ESF perspective and proper implementation of the ESMP/ESMP checklist requirements. The MSE will also perform a social due diligence tasks in addressing complaints and feedback from various stakeholders and the public, including grievances regarding the environmental and social impacts of subprojects (this will be further elaborated prior during project preparation).

Main Responsibilities of PIUs 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) Complete the screening questionnaire and prepare screening report for each subproject in comp 2.2;
c) Ensures proper inclusion of EHS aspects in project bids and contracts;
d) Ensures ESF compliance of Technical Assistance results and documents produced under the Project;
e) Coordinates with schools related to EHS mitigation and monitoring;
f) 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 the this ESSs and this ESMF including consultations on the results of environmental and social impact assessments and draft ESMPs Checklists/CHMP, timely disclosure of draft and final ESMPs/ESMP Checklists/CHMP and screening for gender based violence (GBV);
g) Prepare and ensure technical coordination of activities related to implementation of ESMPs/ESMP Checklists/CHMP;
h) Demonstrates, in the manner acceptable to the Bank, compliance of finalized works with the ESF;
i) Ensures that the execution of construction works is in accordance with the ESMF and site-specific mitigation measures; Manages the GM to monitor, respond and report on feedback provided by the public on the project's activities

j) 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.);
k) Explores opportunities to consult and engage with project beneficiaries and members of the general public;
l) 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 and social issues on sites;
m) Monitors implementation of environmental and social policies, standards and measures including assessment of risks, impacts and mitigation measures implementation in compliance with ESMF. These include measures to mitigate the impact of construction activities, as well as health and safety protection measures and reporting of any incidents (including COVID-19 occurrence) as per ESIRT; prepares and submits the initiation of legal documents for the approval of investments in accordance with the legal provisions in force;
n) Ensures the execution of the construction works in accordance with the general ESMF and relevant site-specific ESMPs/ESMP Checklists/CHMP and monitors and reports the social and environmental aspects of the project throughout its period of operation;
o) 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.

Oversight and guidance for the implementation of the SEP will also be provided by PIU.

10.2 Project Monitoring and Reporting

Monitoring helps track the environmental and social performance of the project, to determine whether it is achieving its outcomes and meeting various environmental and social requirements, and whether additional measures need to be implemented. It is important to document the monitoring of mitigation measures set out in the ESMP and ESMF, pursuant to ESCP defined responsibilities and obligations.

The MES will monitor the environmental and social performance of the project in accordance with the legal agreement (including the ESCP) and ESMF. The extent and mode of monitoring is agreed upon with the Bank, and is proportionate to the nature of the project, the project's environmental and social risks and impacts, and compliance requirements. Implementation of ESMPs Checklist prepared for particular sub-projects is responsibility of a respective Contractor, including of Mitigation Plan and Monitoring Plan. Nevertheless, as the overall ESF compliance falls under responsibilities of the MES, the PIU will perform regular supervision of the Project and ESS (ESMF, ESMP,ESMP Checklist) compliance as well as prescribe corrective measures.

The MES must ensure that adequate institutional arrangements, systems, resources and personnel are in place to carry out monitoring.

Based on the results of the monitoring, the MES will identify any necessary corrective and preventive actions, and incorporate these in an amended ESCP or the relevant management tool, in a manner acceptable to the Bank. The MSE has to implement the agreed corrective and preventive actions in accordance with the amended ESCP or relevant management tool, and monitor and report on these actions.

The MSE has to notify the Bank promptly of any incident or accident relating to the project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.

ESMP implementation reports for the works envisaged under the project will be submitted semi-annually, unless works are located in nature protected areas or can impact cultural heritage. For such projects (located in the sensitive areas/buildings), ESMP implementation reports will be prepared quarterly (if not differently agreed with the WB Environmental and Social Specialists).

Detailed responsibilities during the project implementation and reporting obligations are given below in the Table 11. and Table 12.

Table 12

Table 11. Responsibilities during project preparation/implementation

Responsible entity / authority	Material measures and actions
MSE PIU	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
PIU E&S specialists	- will be engaged by the PIU, - complete the screening questionnaire and prepare screening report ; - preparing site-specific ESMP/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 ESMP /ESMP Checklists/CHMP), - preparing site-specific ESMP/ESMP Checklist/CHMP implementation reports; - advising and guiding the contractors on 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, and beneficiaries, - 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 • Good housekeeping, • Other relevant E&S issues; - responding on WB requirements and Head of PIU
MSE PIU FGRM focal point	- responsible for managing the Feedback and Grievance Mechanism (FGM)

Table 12. Reporting obligations during project implementation

Author/addressed to	Report	Frequency
Contractors (Supervising engineer) to PIU	- ESMP/ESMP Checklists/CHMPs implementation; - Monitoring reports (ESMP/ESMP Checklists/CHMPs implementation of ESMP/ESMP Checklist	- Monthly (including initial/inception report)
MSE PIU to WB	- Environmental and Social assessment implementation report	- Semi-annually, unless works are located in nature protected areas or can impact cultural heritage. For such projects (located in the sensitive areas/buildings), ESMP implementation reports will be prepared quarterly (if not differently agreed with the WB Environmental and Social Specialists).
FGRM focal points for MSE	- Snapshot of status of complaints received/ resolved/ delayed (FGRM Report)	- Monthly
FGM focal points for MSE and ES specialists	- Snapshots of stakeholder engagement activities carried, feedback provided/incorporated or rationale for not including feedback (SEP Report)	- Monthly
PIU FGM 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 MSE PIU to World Bank	- Progress reports 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
MSE PIU 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 (including COVID 19 spread) 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 FEEDBACK AND GRIEVANCE MECHANISM

The main objective of the Feedback and Grievance Mechanism (FGM) is to allow stakeholders to submit complaints, feedback, queries, suggestions, or compliments related to the overall management and implementation of the project. The FGM 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 will assign a staff member under the direct responsibility of the Head of the PIU to be responsible for managing the FGM.

Any project-related feedback or grievance received should be forwarded within 24 hours to the PIU FGM focal point, who will register it 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 (according to a typology to be developed in the updated SEP[87]); 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 FGM 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 FGM focal point will then investigate the submission by reaching out to relevant actors as appropriate.

Following the investigation, the PIU FGM focal point will propose a resolution to the complainant in writing within a maximum timeframe of 10 days from the moment the complaint was acknowledged. If an issue is still pending by the end of 10 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.

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 FGM 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.

[87] A possible typology of complaints could for example include: grievances linked to building eligibility; choice of technical design; quality of works; waste/debris disposal by the contractor

In relation to the potential Environmental and Social impacts generated within each of the sub-project, the PIU team will closely work with the communications specialists, 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.

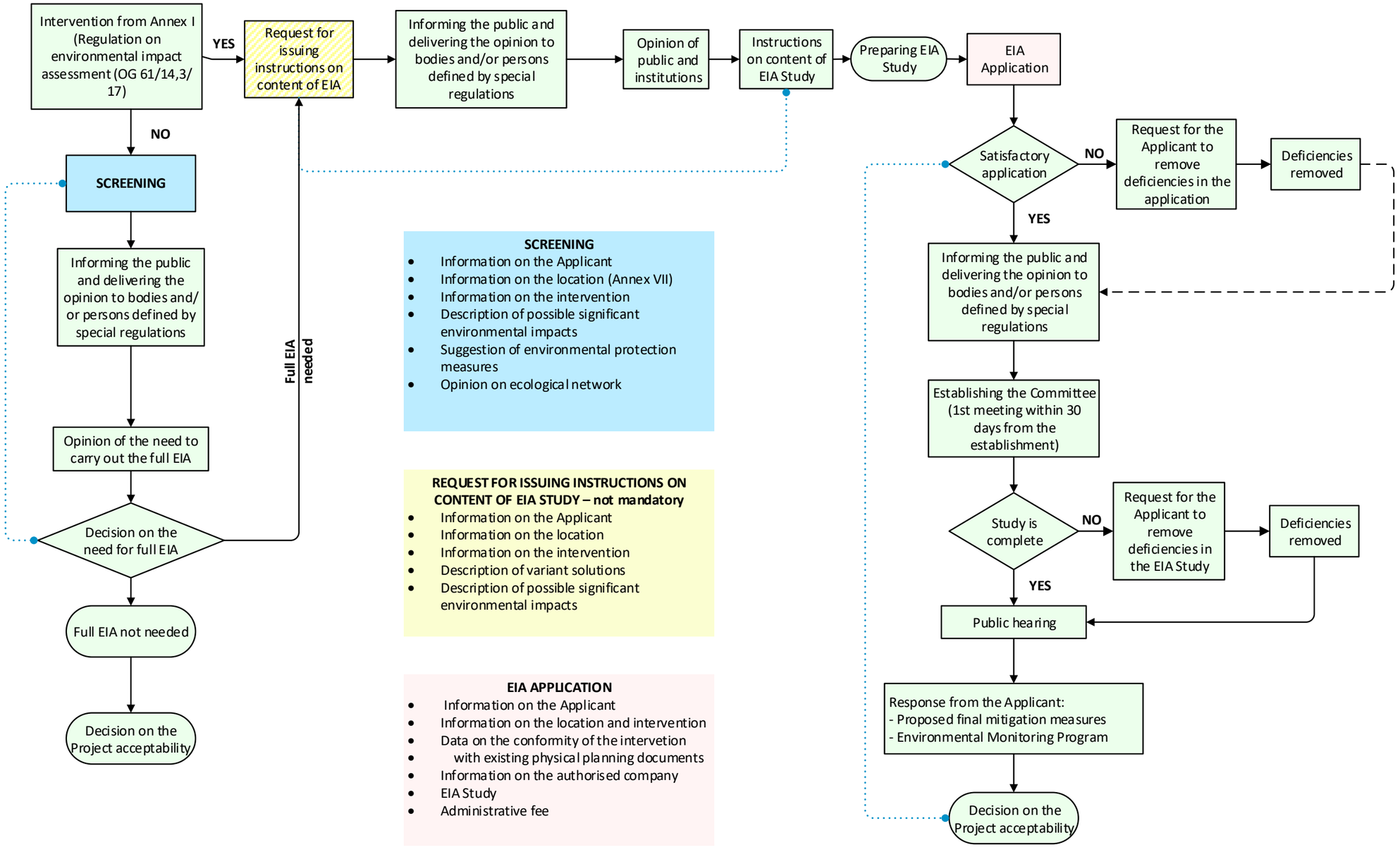
World Bank Grievance Redress Service

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 .

12 ANNEXES

ANNEX I - THE NATIONAL EIA PROCEDURE



ANNEX II - NATURA 2000 NETWORK AND PROTECTED PARTS OF NATURE – LEGAL PROTECTION PROCEDURE ACCORDING TO CROATIAN LEGISLATION

Ecological Network Impact Assessment (ENIA)

The most important mechanism for the protection of ecological network of the Republic of Croatia (NATURA 2000 network) is the Ecological Network Impact Assessment (ENIA).

Through the so-called the previous assessment of the intervention/project is 'scanned' and it is assessed whether it is possible to exclude its negative impact on the ecological network. If not, reference is made to the main assessment, which looks in more detail at the possible negative impacts, tries to find alternative solutions to achieve the goal of the intervention/ project, as well as measures that can be used to mitigate the impacts.

Ecological Network Impact Assessment (ENIA) steps:

- **Screening**
- **Main assessment**
- **Establishment of overriding public interest and approval of the project with compensatory measures**

ENIA is carried out before obtaining a location permit or other approval for the implementation of the project.

ENIA procedures

For interventions/projects for which screening procedure is carried out as part of environmental impact assessment (EIA), in line with the Regulation on environmental impact assessment (Annex II and III of the Regulation), screening of impacts on ecological network is done as a part of screening within EIA.

For interventions for which EIA is obligatory (Annex I of the Regulation), and preparation of environmental study is necessary, screening of impacts on ecological network is carried out before initiating the EIA procedure and preparation of EIA study.

For projects/interventions for which EIA must be conducted, main assessment is carried out as a part of EIA procedure.

For projects/interventions for which it is not necessary to carry out the EIA screening and EIA procedure (not listed in Annex I, II, III of the Regulation) – ENIA is a separate procedure.

Competent authority

MoESD is competent authority for ENIA screening and main assessment for projects/ interventions:

- For which the MoESD conducts screening for EIA and EIA procedure (Annex II and III of the Regulation on environmental impact assessment),
- Whose scope is located in the area of two or more counties/City of Zagreb

Administrative body in the county/City of Zagreb is competent authority for ENIA screening and main assessment for projects/interventions:

- For which the administrative body in the county/City of Zagreb conducts screening for EIA and EIA procedure (Annex III of the Regulation, except when the intervention/project is planned on the area of two or more counties/City of Zagreb)
- Which can have a significant negative impact on the ecological network protection objectives and integrity of the ecological network area

For projects/interventions for which it is not necessary to carry out the EIA screening and EIA procedure (not listed in Annex I, II, III of the Regulation) the request for ENIA screening is submitted to the administrative body in the county/City of Zagreb, which in the evaluation process obtains an opinion from the MoESD on the possible negative impact on the ecological network. In case possible negative impacts on the ecological network are identified, a main assessment should be carried out. The MoESD conducts the procedure of the main assessment or the procedure of determining the prevailing interest with compensatory measures for intervention/project for which it conducts EIA procedure, and the competent authority in the county/City of Zagreb for those procedures for which is the holder of the EIA.

Protected parts of nature

Protected parts of nature:

1. **Nine categories of protected areas :**
   - Strict reserve
   - National park
   - Special reserve
   - Nature park
   - Regional park
   - Nature monument
   - Significant landscape
   - Park-forest
   - Park architecture monument
2. **Protected species:**
   - Strictly protected wild species
3. **Protected minerals and fossils**

Protected areas are divided into classes:

- ***Protected areas of national significance:*** strict reserve, national park, special reserve and nature park

- ***Protected areas of local significance:*** regional park, nature monument, significant landscape, forest-park and park architecture monument.

Protected parts of nature are managed by public institutions established by the Government of the Republic of Croatia (for national parks and nature parks) and counties.

For projects/interventions in the protected parts of nature for which it is necessary to obtain a building permit, it is necessary to issue certificate by:

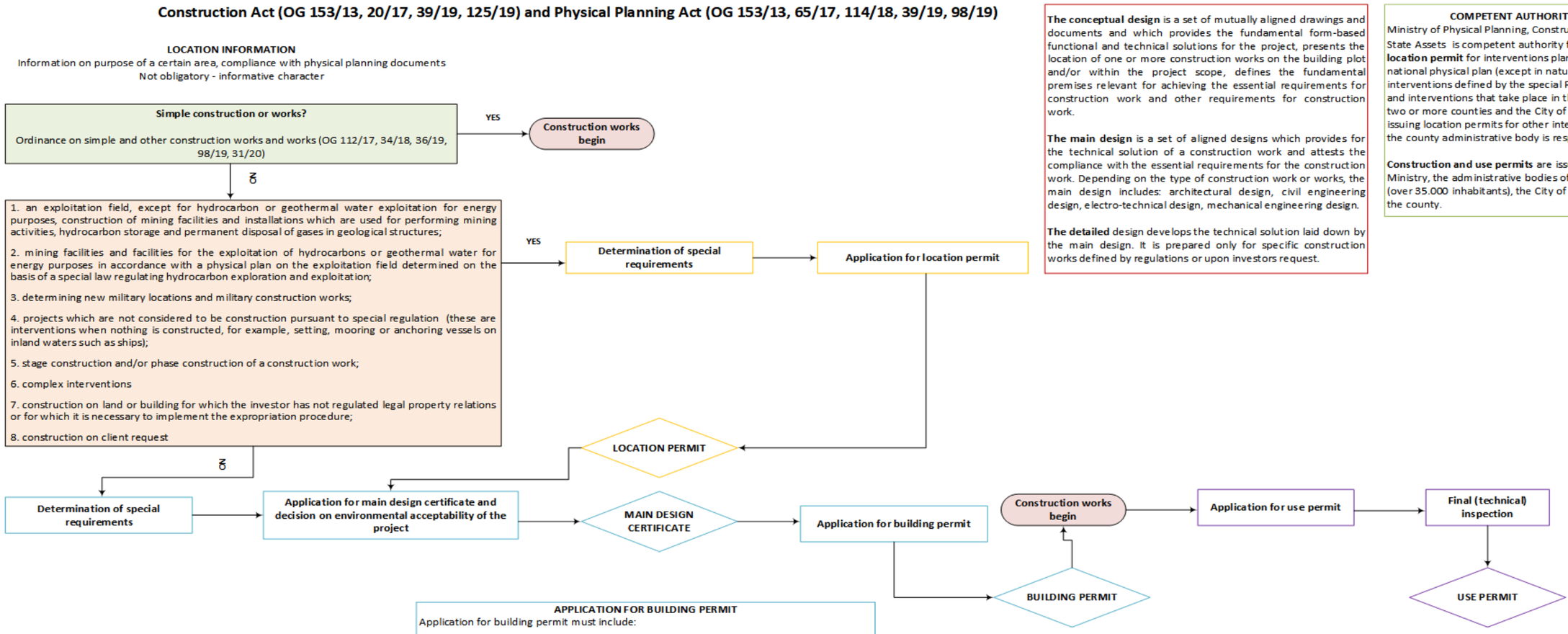
- MoESD for projects/ interventions in the area of a special reserve, national park or nature park managed by a public institution competent for national park or nature park
- Public institution for national parks or nature parks for projects/ interventions carried out in the area of a national park or nature park, for which the public institution is not competent
- Administrative body for projects/ interventions carried out in the area of a regional park, nature monument, significant landscape, park-forest and park architecture monuments.

This certificate does not need to be obtained for projects/ interventions that have been the subject of a ENIA main assessment.

For projects/interventions in the protected parts of nature for which it is not necessary to obtain a building permit, it is necessary to issue permission by:

- MoESD for projects/interventions and research in the area of strict reserve, national park, special reserve and nature park,
- Administrative body for projects/interventions and research in the area of nature monument, regional park, significant landscape, park-forest and park architecture monument.

ANNEX III - PROCEDURE OF ISSUING LOCATION, BUILDING AND USE PERMIT ACCORDING TO CONSTRUCTION ACT (OG 153/13, 20/17, 39/19,125/19) AND THE PHYSICAL PLANNING ACT (OG 153/13, 65/17, 114/18, 39/19, 98/19)



The conceptual design is a set of mutually aligned drawings and documents and which provides the fundamental form-based functional and technical solutions for the project, presents the location of one or more construction works on the building plot and/or within the project scope, defines the fundamental premises relevant for achieving the essential requirements for construction work and other requirements for construction work.

The main design is a set of aligned designs which provides for the technical solution of a construction work and attests the compliance with the essential requirements for the construction work. Depending on the type of construction work or works, the main design includes: architectural design, civil engineering design, electro-technical design, mechanical engineering design.

The detailed design develops the technical solution laid down by the main design. It is prepared only for specific construction works defined by regulations or upon investors request.

COMPETENT AUTHORITY

Ministry of Physical Planning, Construction and State Assets is competent authority for issuing: **location permit** for interventions planned by the national physical plan (except in nature park), interventions defined by the special Regulation and interventions that take place in the area of two or more counties and the City of Zagreb. For issuing location permits for other interventions, the county administrative body is responsible.

Construction and use permits are issued by the Ministry, the administrative bodies of large cities (over 35.000 inhabitants), the City of Zagreb and the county.

APPLICATION FOR LOCATION PERMIT

Application for location permit must include:

- conceptual design in electronic format,
- print version of conceptual design certified by the designer,
- statement of the designer that the conceptual design was developed in accordance with the spatial plan (part of the conceptual design),
- geodetic project (part of the conceptual design in the case of forming the building plot),
- special requirements and/or evidence that the applicant has submitted the request for determining special requirements,
- decision on the environmental acceptability of the project if it is a project which requires an environmental impact assessment and/or appropriate assessment of the impact of a project on the ecological network, pursuant to special regulations,
- decision on environmental screening process if it contains environmental protection measures and / or environmental monitoring program,
- certificate on validation of the conceptual design if the project was developed according to foreign regulations

APPLICATION FOR BUILDING PERMIT

Application for building permit must include:

- location permit (if project is subject to the issuing location permit),
- allotment study (if project is subject to issuing location permit)
- main design in electronic format,
- print version of main design certified by the designer or main designer, in case that several of them participate in its preparation,
- energy performance certificate of the building in electronic form, signed with an electronic signature
- print version of energy performance certificate of the building certified by the designers and the main designer, in case that several of them participate in its preparation
- written report on the performed main design audit, if the audit is prescribed,
- certificate on the main design validation, if the design has been developed according to foreign regulations,
- evidence of legal interest for the issuance of a building permit,
- certificates of public law bodies that the main design was developed in accordance with special requirement respectively special requirements defined by location permit,
- certificate that the main design was developed in accordance with the decision on the environmental acceptability of the project,
- evidence that applicant may be the investor (concession, approval or other official act prescribed by a special regulation) in the case of a construction work for which a special act prescribes who the investor may be

APPLICATION FOR USE PERMIT

Application for use permit must include:

- photocopy of the building permit or a copy of the main design for the construction work that may be built or works that may be carried out on the basis of the main design,
- information regarding the parties involved in the building,
- written statement of the contractor on works completed and the requirements for the maintenance of the construction work,
- final report of the supervising engineer on the completion of the construction work,
- statement of the authorised geodetic engineer that the construction work was built in accordance with the surveying design, if the construction work is subject to developing the surveying design,
- geodetic survey of as-built situation or surveying study for entering the construction work in the cadastre or for change of information on buildings and other construction works, if the construction work is not subject to developing the surveying design, but it is to be entered in the cadastre,
- evidence that in cadastre building plot is formed (for construction for which by allotment study building plot is formed),
- energy certificate of the building, if the application is submitted for a building that must comply with the energy performance requirements.

ANNEX IV- PROCEDURES FOR ISSUING LOCATION, BUILDING AND USE PERMITS (REGULAR PROCEDURE – NO NATURAL DISASTER PROCLAIMED)

LOCATION INFORMATION Informal act which contains information on: purpose of a certain area, compliance with physical planning documents, is it an area for which special conditions are defined (i.e. whether it is listed in the Cultural Heritage Register). Issued, within 8 days of application submission by the administrative authority in whose area the land is situated. Not obligatory - informative character
INTERVENTIONS FOR WHICH LOCATION/BUILDING PERMIT IS NOT REQUIRED
1. For simple and other construction works and works defined by Ordinance on simple and other construction works and works (OG 112/17, 34/18, 36/19, 98/19,31/20) it is not necessary to issue location/building permit and construction works may begin: **a) without location/building permit and without main design**. Without location/building permit and main design, works such as maintenance of the existing building, emergency repairs etc. can be performed. **b) without location / building permit, in accordance with the main design / standard design:** i.e. separately object being built in the existing building parcel for which there is a building permit for already existing construction. Also, apart from construction based on the construction project, various works can be carried out e.g. adding, restoring or replacing building parts such as transparent facade elements, thermal insulation of floors, walls, ceilings, flat, sloping and curved roofs. 2. 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
INTERVENTIONS FOR WHICH LOCATION PERMIT IS REQUIRED
Location permit must be issued for: 1. an exploitation field, except for hydrocarbon or geothermal water exploitation for energy purposes, construction of mining facilities and installations which are used for performing mining activities, hydrocarbon storage and permanent disposal of gases in geological structures; 2. mining facilities and facilities for the exploitation of hydrocarbons or geothermal water for energy purposes in accordance with a physical plan on the exploitation field determined on the basis of a special law regulating hydrocarbon exploration and exploitation; 3. determining new military locations and military construction works; 4. projects which are not considered to be construction pursuant to special regulation[88] (these are interventions when nothing is constructed, for example, setting, mooring or anchoring vessels on inland waters such as ships); 5. stage construction and/or phase construction of a construction work; 6. complex interventions 7. construction on land or building for which the investor has not regulated legal property relations or for which it is necessary to implement the expropriation procedure; 8. construction on client request
a) Determination of special requirements Special requirements have to be determined prior to initiating the procedure for issuing the location permit at the request of the designer or the investor, or during that procedure upon request of the Ministry. Exceptionally, water regulation conditions and special conditions for the protection of cultural heritage are obtained prior location permit at the request of the investor. For the purpose of obtaining special requirements that were not obtained prior to initiation of the procedure for issuing the location permit, the Ministry invites body and / or person defined by special regulations to review conceptual design. The applicant and the designer are present during the conceptual design overview. List of public bodies responsible for the determination of special requirements are available at the web address: https://dozvola.mgipu.hr/javnopravna-tijela

[88] Ordinance on operations in an area which are not considered construction, for which the location permit is issued (OG 105/2017)

b) Application for issuing location permit must include:

- conceptual design in electronic format,
- print version of conceptual design certified by the designer,
- statement of the designer that the conceptual design was developed in accordance with the spatial plan (part of the conceptual design)
- geodetic project (part of the conceptual design in the case of forming the building plot)
- special requirements and/or evidence that the applicant has submitted the request for determining special requirements,
- decision on the environmental acceptability of the project if it is a project which requires an environmental impact assessment and/or appropriate assessment of the impact of a project on the ecological network, pursuant to special regulations,
- decision on environmental screening process if it contains environmental protection measures and / or environmental monitoring program,
- certificate on validation of the conceptual design if the project was developed according to foreign regulations

Validity of the location permit

The location permit shall cease to be valid if within two years from the day the location permit became final and effective:

- the application for issuing the concession was not submitted,
- the application for adoption of the decision on expropriation was not submitted,
- the proposal for adopting the decision on servitudes or the right to construction on land owned by the Republic of Croatia was not submitted,
- the application for issuance of the building permit was not submitted, or the implementation of the project for which the official act for construction is not issued, has not started.

If two building permits are issued for construction activity for which a single location permit has been issued, the two-year term ends by the issue of the first building permit. Validity of the location permit shall be extended once upon the request of the applicant or investor for two additional years, provided that the requirements have not changed which were determined in accordance with the provisions of legislation and other requirements in accordance with which the location permit was issued.

Public participation

Prior to issuing a location permit, the competent authority is obliged to provide to interested party insight to project documentation: by a public invitation displayed on the bulletin board of the competent authority or in person, depending on with how many properties project directly borders, on its web sites and on the property for which location permit is issued. The public invitation is deemed delivered after eight days from displaying the invitation on the bulletin board of the administrative body.

BUILDING PERMIT

a) Determination of special requirements

For projects/interventions for which location permit is issued special requirements determined during that procedure are valid for building permitting procedure. For other projects/interventions determination of special requirements must be carried out during building permitting procedure.

b) Main design certificate

Main design certificate must be issued before initiating building permitting procedure. This certificate confirms that main design is prepared in line with special requirements defined by the location permit respectively with special requirements determined by competent public body.

c) C***ertificate that the main design was developed in accordance with the decision on the environmental acceptability of the project***

d) Application for issuing building permit must include:

- location permit (if project is subject to the issuing location permit),
- allotment study (if project is subject to the issuing location permit),
- main design in electronic format,
- print version of main design certified by the designer or main designer, in case that several of them participate in its preparation,
- energy performance certificate of the building in electronic form, signed with an electronic signature,
- print version of energy performance certificate of the building certified by the designers and the main designer, in case that several of them participate in its preparation,
- written report on the performed main design audit, if the audit is prescribed,
- certificate on the main design validation, if the design has been developed according to foreign regulations,

- evidence of legal interest for the issuance of a building permit,
- certificates of public law bodies that the main design was developed in accordance with special requirement respectively special requirements defined by location permit,
- certificate that the main design was developed in accordance with the decision on the environmental acceptability of the project,
- evidence that applicant may be the investor (concession, approval or other official act prescribed by a special regulation) in the case of a construction work for which a special act prescribes who the investor may be.

Validity of the building permit

- A building permit shall cease to be valid if, within three years from the date it became, final and effective, the investor fails to commence construction
- Validity can be extended once for three year period

Public participation

See public participation for interventions for which location permit is required

USE PERMIT

Application for issuing use permit must include:

- photocopy of the building permit or a copy of the main design for the construction work that may be built or works that may be carried out on the basis of the main design,
- information regarding the parties involved in the building,
- written statement of the contractor on works completed and the requirements for the maintenance of the construction work,
- final report of the supervising engineer on the completion of the construction work,
- statement of the authorized geodetic engineer that the construction work was built in accordance with the surveying design, if the construction work is subject to developing the surveying design,
- geodetic survey of as-built situation or surveying study for entering the construction work in the cadastre or for change of information on buildings and other construction works, if the construction work is not subject to developing the surveying design, but it is to be entered in the cadastre,
- evidence that in cadastre building plot is formed (for construction for which by allotment study building plot is formed),
- energy certificate of the building, if the application is submitted for a building that must comply with the energy performance requirements.

After final inspection during which and no faults were identified or were removed use permit is issued.

Other variants of use permit are:

a) temporary use permit - for the construction work when no final results concerning the assessment of compliance or the attestation of quality of certain parts of the construction work are available, but the final inspection established that the construction work has been built in conformity with the building permit

b) use permit for a part of the construction work - may be issued before the completion of the whole construction work for a part of the construction work (must be provided in the main design)

REMOVAL OF CONSTRUCTION WORKS

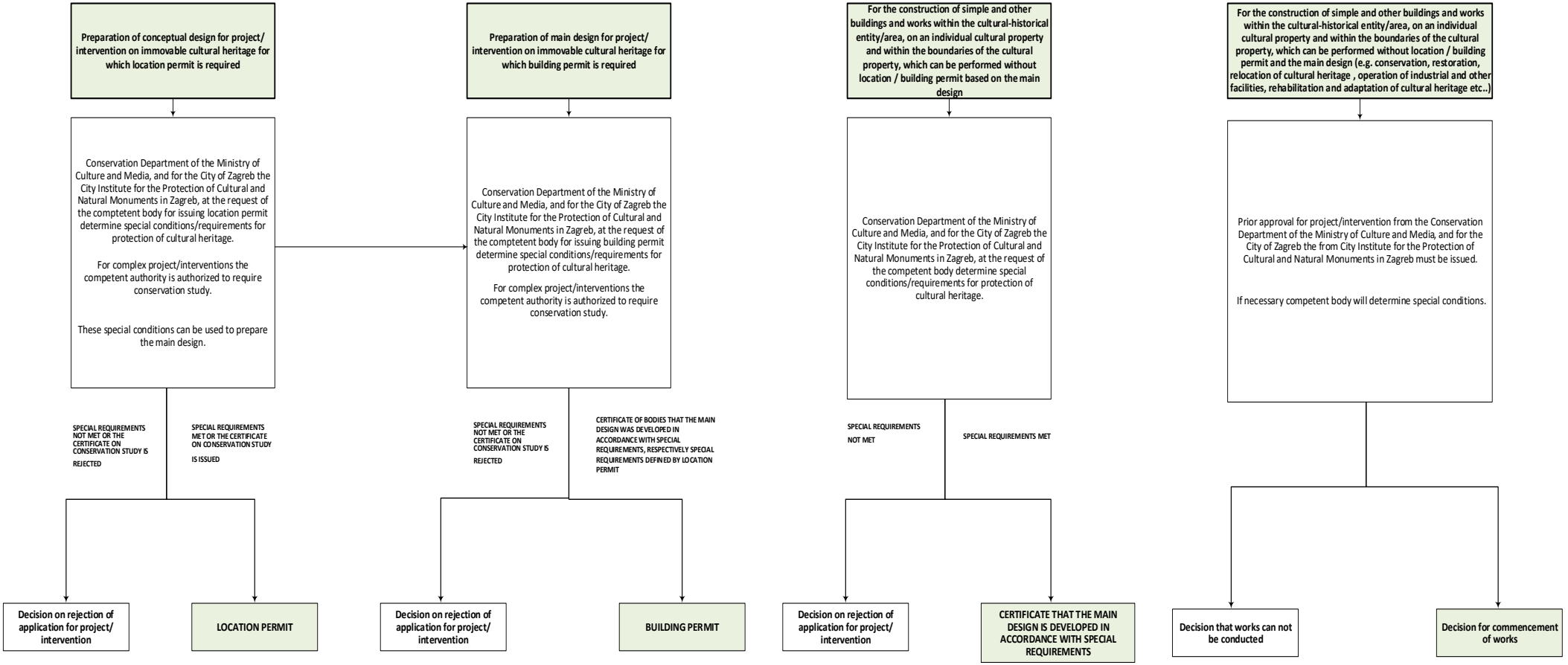
The removal of the construction work or any part thereof may be carried out on the basis of the removal design following submission of notification to the building control authority in the county.

Exceptionally removal design is not required for constructions defined by the Ordinance on simple and other construction works and works (OG 112/17, 34/18, 36/19) or if the removal of a construction work is carried out by the building inspection according to the decision on the removal of that construction work.

In the notification of the commencement of works on the removal of the construction work, the owner must indicate:

- the designer of the removal design,
- designations of that design,
- the contractor and the supervising engineer,
- authorisation of the Ministry of Culture (when the construction work intended for removal is registered in the Register of Cultural Heritage).

ANNEX V - 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)



ANNEX VI - WORKING WITH ASBESTOS WASTE

During the rehabilitation and refurbishment certain quantities of asbestos waste can occur, therefore in this Annex asbestos management is presented in more detail.

Before starting intervention 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.

A. 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).

B. 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 Economy and Sustainable Development (MoESD) for collection hazardous waste, county offices and City of Zagreb for collection of non-hazardous)[89]
- in the case of waste transport, must entered into the Register of Waste Carriers kept in the MoESD 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,
    - proper use and wearing of work or protective clothes and personal protective equipment,

[89] 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

- 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.

C. General conditions regarding workers health protection which contractor has 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 exceeded, work must not continue in the affected area until appropriate measures are taken to protect the exposed workers,

- where exposure cannot 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 cannot 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.

Specific measures for strongly and weekly bound asbestos can be found as following:

Asbestos Hazard Management

Once the presence of asbestos containing materials (ACM) in the existing infrastructure has been presumed or confirmed and their disturbance is shown to be unavoidable, incorporate the following requirements in the ESMP/ESMP Checklist for construction works:

• Provide the host country laws and regulations for controlling worker and environmental exposure to Asbestos during construction works and waste disposal where ACM are present;

• As licensing and permitting of the asbestos abatement work is required, foresee the award of a specifically licensed company;

• Require that the beneficiary or the selected contractor notifies authorities of the removal and disposal according to applicable regulations and cooperates fully with representatives of the responsible agency during all inspections and inquiries;

• Require that the construction firms/and or individuals employed during the construction have received training in relevant health and safety issues;

• Require that contaminated disposable clothing is used only in contaminated environment and pulled off and packed in impermeable waste bags, before entering clean rooms / cars. Require that shoes are likewise properly cleaned in order not to disperse asbestos dust into clean environments.

Asbestos Disposal is possible only to licensed landfills equipped for asbestos disposal.

Best practice is to prevent or minimize asbestos containing dust release, resulting from a destruction free removal process.

Main Remediation Work Steps for strongly bound asbestos:

- Prohibit any mechanical stress on fiber-cement panels (no drilling, cutting, smashing, cutting, dropping etc.)
- Strive demounting procedure using lifting devices
- Wear appropriate respiratory protection FFP3 and disposable coveralls
- Moisten panels before uninstall;
- Collect panels without destruction
- Pack them plastic foil / e.g. panel big-bags with Asbestos Label
- Orderly Store in an interim storage until transport and disposal at appropriate disposal site.

Further hints are:

- Nails/rivets shall be removed with sharp tools
- If the fixing can`t be released, small sheets can be pried out one by one

- Dismantling of asbestos cement panels shall happen in a work back way, for roofs from the ridge to the eaves, for walls from top to bottom
- When removing fixation materials, the product has to be secured against sliding off
- Whenever possible, products shall be lifted off rather than quarried out
- Encrustation or plant cover can be scraped off, using a wood scraper
- Broken bits and debris shall be wrapped in dust proof foil or bags
- The contaminated material has to be transported to the ground carefully
- The transportation of asbestos cement products has to take place in a way, that prevents asbestos dusts to be released (packaging)
- For cleaning use H-class vacuum cleaners only.
- Storage and transport of material has to happen in suited, closed containers

To be avoided:
- Breaking, cutting, throwing and milling of sheets
- Drilling, sawing, grinding with fast running machinery
- Cleaning with high pressure cleaners
- Shaking out of canvasses or undercover sheeting
- Usage of debris chutes

Abatement method for Asbestos Containing Material

Abatement of weakly bound asbestos material include:
The Removal of ACM in enclosed containment is the typical way of remediation of ACM of bigger volumes with high ACM densities. The size of a containment is limited by the capacity of the installed vacuum holding devices of appropriate capacity (minimum rate of air change = 5 times per hour).

Requirements
- Under pressure shall be maintained by means of an installed vacuum holding device incl. reserve capacity
- Containments must be of proper structure and all parts must be well ventilated
- Personal safety equipment must be worn inside enclosure (disposable coveralls, overshoes, appropriate respiratory protection FFP3)
- Outside of Enclosure a bystander has to be placed for safety and control reasons

Remediation Work Steps
- Dense compartmentalization of total enclosure including installation of required scaffolding
- Establishment of three-chamber personnel lock(s) with staff shower and of a dual chamber material lock.
- Establishment of a negative pressure (air-exchange rate and pressure according to rules) including vacuum monitoring at minimum 2 points and exhaust air extraction to the outside.
- Manual removal of ACM material from surfaces (Primary and Precision cleaning).
- Treatment, collection and packaging of un-cleanable asbestos-contaminated by-products (e.g. metal scrap, mineral wool), porous or solidified asbestos or other ACM.

- Inside air sampling for clearance is recommended after finalization of removal works.

- Comments:
- Asbestos removal should be performed from top to bottom
- Air flow in the enclosure should be from the top to down
- Staff must not work under under-pressure longer than 2 hours without break

Metal air ducts and steam pipes with ACM gasket rings requirements

Remediation Work Steps

- Pipe or Duct Flanges with ACM gasket ring must not be opened
- Flanges shall be moistened from all sides, e.g. with manual water sprayer
- Flanges cut out as a whole (not opened) and packed dustproof into double plastic foil
- Flanges shall be transported to scrap recycling in order to be melted in Steel production

Further comments:

- In the case of opening the flanges both sides of flanges and the ambient air will be contaminated.

Textiles containing asbestos requirements

- Assessment of the occurrence of ACM in thermal insulations and gaskets (mainly by lab analysis), such as sealing cords of hot metal appliances.

Remediation Work Steps

- Prior to and regularly during all manipulation works, moistening of surfaces from all sides, e.g. with manual water sprayer, in order to prevent asbestos dust generation
- Manually cut out the ACM product, preferably as a whole. Don't use electromechanical devices that might cause dust generation and distribution.
- Pack product or parts into dustproof double plastic foil with Asbestos label
- Dispose in packed form on
- interim storage or suitable landfills

Comments:

Other good international industrial practice should be applied, if not in collision with the national regulation.

ANNEX VII - 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 VIII - ENVIRONMENTAL AND SOCIAL SCREENING QUESTIONNAIRE AND SCREENING REPORT

This form is to be used by the PIUs to screen for the potential environmental and social risks and impacts of a proposed sub-project. It will help the PIU 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 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 13. 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.	Will the sub-project include civil works?					
2.	Is the activity listed in the IFC exclusion list?					
3.	Will the sub-project include only rehabilitation /refurbishment works?					
4.	If 'No' under the question 2: What other type of works will be included?					
5.	According to national legislation does the subproject require EIA?					
6.	Has the opinion that EIA it is not needed been issued? (please attach)					
7.	Is the sub-project taking place in the nature protected or ecological network area?					
8.	Is preliminary assessment of acceptability for the ecological					

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

No.	Screening Questionnaire	Yes	No	Not known	Not applicable	Additional Clarifications
	to recreation or other facilities, which could be affected by the sub-project?					
26.	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?					
27.	Are there areas within or around the location which are densely populated or built-up, that could be affected by the sub-project?					
28.	May sub-project cause impact on community health and safety?					

Screening Report template

Screening report template can be adjusted in agreement with the WB

Categorization of the Risk	☐ **Low Risk**	☐ **Moderate Risk**	☐ **Substantial Risk**	☐ **High Risk**
	The applicant needs to prepare:	The applicant needs to prepare:	Not eligible for financing	
	N/A (OHS plan prepared in line with the national legislation - Law on OHS)	ESMP Checklist/ESMP/CHMP		
Environmental impacts including OHS and CH identified (short description and note on significance)				
Social impacts identified (short description and note on significance):				
List of instruments to be prepared				
Required permits				
Additional comments:				

Project Categorization confirmed WB E&S Specialists: _____

Signature of responsible person: _____
Date: _____

ANNEX IX - ESMP CHECK LIST TEMPLATE

The template presented below will be revised for specific sub-projects to reflect scope of works and E&S concerns.

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.

ESMP Checklist implementation report will be submitted to WB semi-annually if not agreed differently.

Workers code of conduct (subject to WB approval) will be a part of bidding documentation and contracts with Contractors. Code of conduct will extend to sub-contractors and be a part of Contractor's contractual agreements.

Table 14. 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)	Environmental/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				
Verify self-organised consultations and consensus of demonstration schools				
INSTITUTIONAL CAPACITY BUILDING				
Will there be any capacity building?	**[X] N or []Y**			
ATTACHEMENTS				
Attachment 1: Site plan / photo Attachment 2: Agreement for waste disposal Other permits/agreements – as required				

Table 15. 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. Rehabilitation/adaptation/refurbishment • Increase in dust from rehabilitation / refurbishment 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, B, F below
	C. 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 C below
	D. Biodiversity • Vicinity of recognized protection area or ecological network • Disturbance of protected animal habitats • Cutting of trees/forest	[ ] Yes [ ] No	If "Yes", See Section D below
	E. Waste generation and management • Generation of waste	[ ] Yes [ ] No	If "Yes", See Section E below
	F. Traffic disturbance • Site specific vehicular traffic • Site is in a populated area	[ ] Yes [ ] No	If "Yes", See Section A, B, F below

Mitigation measures

A. General conditions and social risk management

B. Rehabilitation/refurbishment activities

C. Cultural and historical heritage

D. Biodiversity

E. Waste generation and management

F. Traffic disturbance

Table 16. Part III - Environmental and social mitigation measures

Activity	Parameter	Mitigation measures checklist
A General conditions and social risk management	Site organization, occupational and health safety, permits and certificates	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), c) assign person who is in charge of communication with and receiving requests/complaints from local population, d) try to limit construction activities at night. When necessary, carefully schedule night work and inform affected community beforehand, e) all legally required permits have been acquired and are kept on site, f) contractor/subcontractors have valid operating licenses, g) all work is carried out in a safe and disciplined manner designed to minimize impacts on neighbouring residents and environment, h) 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, etc.), i) appropriate informative and warning signposting of the sites inform workers of key rules and regulations to follow, j) the construction location is fenced and marked, k) public is informed on the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works), l) entry for unemployed person within the project location is prohibited (within the

Activity	Parameter	Mitigation measures checklist
		warning tapes and fences when/where deem needed), m) open pits are covered and clearly marked when not worked on, n) the surrounding area near the project is kept clean, o) machines are handled only by experienced and appropriately trained personnel, thus reducing the risk of accidents. p) No fires will be allowed on site under any circumstance. q) devices, equipment and fire extinguishers are always functional, so in case of need they could be used rapidly and efficiently. The contractor shall have operational fire-fighting equipment available on site at all times. Their position is communicated to workers and marked. The level of fire-fighting equipment must be assessed and evaluated through a typical risk assessment. There is an appointed person on the site responsible for the fire protection. Procedures in the case of fire are well known to all employees. r) first aid kits are available on the site and personnel trained to use it, s) 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), etc, t) procedures for cases of emergency (including spills, accidents, etc.) are available at the site, u) 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, v) purchased equipment installed and used respecting all safety measures prescribed by the producer of equipment and best practices, w) in the case of rehabilitation/refurbishment 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, x) no temporary storage of construction materials and waste occurs within any type of private property, y) 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) z) ensure trainings for workers on hygiene and other preventative measures against COVID-19 are carried out.

Activity	Parameter	Mitigation measures checklist
		aa) 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) bb) In the case works are taking place while the school is in operation, the works must be separated/sealed off by screens, fences and similar to minimize risks and prevent impacts . cc)
	Notification, workers and community safety	a) Emergency Preparedness and Response Plan is prepared and updated in accordance with national legislation. b) OHS implementation Plan is prepared and updated in accordance with national legislation (part of the plan of works) and ESMF (ESMP Checklist). c) The local construction and environment inspectorates and communities (including students and staff) have been notified of upcoming activities. d) Workers code of conduct acceptable to PIU will be a part of contracting documentation and provide training to all workers to manage Sexual Exploitation and Abuse / Sexual Harassment risks in the sub-projects e) All legally required permits have been acquired for construction and/or rehabilitation. f) All work will be carried out in a safe and disciplined manner designed to minimize impacts on students, staff, neighbouring residents and environment. g) Workers are well trained in using potentially dangerous equipment. h) Any health and safety incidents should be reported to project manager immediately and to WB within 48 hours. This should be well communicated to the construction staff. i) Workers' PPE will comply with international good practice (obligatory wearing of hardhats at all times, masks and safety glasses as needed and prescribed, harnesses and safety boots). j) Appropriate signposting of the sites will inform workers of key rules and regulations to follow. k) All construction sites are equipped with appropriate sanitary facilities and resting places for workers. Workers will not use any school facilities, including sanitary. l) Construction sites are fenced off or protected by properly designed barricades or tape-marked. m) Material stockpiles or stacks, such as pipes, are made stable and well secured to avoid collapse and possible injury to site workers.

Activity	Parameter	Mitigation measures checklist
		n) Potentially hazardous areas (e.g. trenches, manholes, excavations) must be clearly marked.
	Stakeholder Engagement	a) The MSE will engage with stakeholders throughout the project life cycle, commencing such engagement as early as possible in the project development process and in a time frame that enables meaningful consultations with stakeholders on project design and implementation. The planned assessments of WDS pilot schools will include questions relevant to social inclusion beyond just respondents' economic background (for example, children with learning disabilities, students from Roma population). b) Founders of schools and schools that will apply to participate in the project will have to collect consent of parents/guardians of the students, which means that they will also take an active role in engaging other stakeholders and ensuring that all parents/guardians have received the information about the Project c) Availability of an effective, responsive and accessible GRM
B Rehabilitation / adaptation/ refurbishment	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. h) In the case works are taking place while the school is in operation, the works must be separated/sealed off by screens and similar to prevent spreading of dust and other emissions. i) Establish risks of radon emissions either by monitoring or in the national database. In the case there is a risk of exposure of students and staff to unacceptable limits of radon (>300 Bqm-3), the sub-project design will address the issue (possible solutions include

Activity	Parameter	Mitigation measures checklist
		solid floor with exhaust pipes, natural underfloor ventilation, assisted underfloor ventilation, natural or assisted room ventilation).
	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. f) In the case works are taking place while the school is in operation, the works must be separated/sealed off by screens and similar to prevent noise pollution and disturbance of students and staff. Particularly noisy works will take place outside of school working hours.
	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 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,

Activity	Parameter	Mitigation measures checklist
		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 repair / 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.
	Materials management	a) Construction material must originate from the licensed companies (e.g. company has to be able to present licenses for excavation of natural minerals, stone, lime, clay, etc.). The company has to present a proof of conformity with all national environmental and H&S legislation. b) Organization of works is such that construction materials is kept at the site in minimal quantities and for minimal amount of time. c) Sand and gravel used in construction works should be traceable to licensed companies with valid concessions. d) Quality of sand and gravel has to fulfil technical requirements and be unpolluted with oils, toxic, corrosive or hazardous substances and free of impurities.

Activity	Parameter	Mitigation measures checklist
		e) Producer of concrete has to obtain/hold all required working and emission permits and quality certifications. f) Ensure all transportation vehicles and machinery have been equipped with appropriate emission control equipment, regularly maintained and attested. g) Water used for production of concrete can be technical water, but free of hazardous and toxic pollutants, heavy metals and other substances hazardous to human health and environment.
	Labor Management	a) Mitigation of labor related risks will follow the labor management procedures outlined in 7.2.1, which will also be included in the contractor ESMP. b) Contractors will ensure that workers are hired, compensated and managed in adherence to national legislation and ESS2. This includes issues of contracts, labor rights, access to workers GRM without retaliation, prevention of SEA/SH including an accessible channel in the GRM to lodge related complaints, adherence to OHS and community health and safety measures.
	Transportation of Materials	a) Construction routes are clearly defined. b) Safety measures to prevent accidents are taken. c) All materials prone to dusting are transported in closed or covered trucks or wagons. d) All materials prone to dusting and susceptible to weather conditions are protected from atmospheric impacts either by windshields, covers, watered or other appropriate means e) Roads are regularly swept and cleaned at critical points. Spilled materials are immediately removed from a road and cleaned. Access roads are well maintained. f) Access of the construction and material delivery vehicles are strictly controlled, especially during the wet weather. g) Topsoil and stockpiles are kept separate. h) Stockpiles are located away from drainage lines, natural waterways and places susceptible to land erosion. i) All loads of soil are covered when being taken off the site for reuse/disposal j) Stockpiles do not exceed 2m in height to prevent dissipation and risk of fall.
C Cultural and historical heritage	Cultural heritage and Chance finds	a) if the building is located in a protected cultural and historical area or it is about buildings designated and protected as cultural heritage, 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

Activity	Parameter	Mitigation measures checklist
		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.
D 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 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 rehabilitation/refurbishment 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.
E 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) 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,* c) all waste has to be handed over with appropriate documentation to the companies authorized for the waste management (companies that have adequate waste permit),

Activity	Parameter	Mitigation measures checklist
		d) in the case of hazardous waste information on handing over waste to the final destination must be obtained, e) whenever feasible the contractor should reuse and recycle appropriate and viable materials (except asbestos), f) mineral (natural) construction and demolition waste has 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, g) burning or illegal dumping of waste is strictly prohibited.
	Hazardous waste	a) The containers holding ignitable or reactive wastes must be located at least 15 meters (50 feet) from the working facilities b) All hazardous wastes, including liquids, contaminated packaging and solids are transported by specially licensed carriers and disposed in a licensed facility. c) Temporary storage of liquid toxic or hazardous waste on site; all hazardous or toxic liquid substances will be kept in safe containers labelled with appropriate classification code in accordance with the Regulation on categories, types and classification of waste with a hazardous waste catalogue. These containers should be leak-proof in order to prevent spillage and leaching. The containers should poses 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. d) Solid hazardous waste should be kept in safe containers labelled with appropriate classification code in accordance with the Regulation on categories, types and classification of waste with a hazardous waste catalogue. These containers should be leak-proof in order to prevent spillage and leaching. These containers should be covered and protected from weather impact (rain and other) e) Oils, grease and sludge from the oil and grease collecting pits has to be removed from the pits, transported and disposed/recovered by a licensed company only and at the licensed landfills or other licensed facilities. f) Regular checks of containers containing toxic and hazardous wastes should be performed. g) In the case asbestos is discovered at the site, Asbestos Waste Management Plan will be developed to meet requirements of national legislation and GIIP presented in the ESMF, sticker prevailing.

Activity	Parameter	Mitigation measures checklist
F 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.
G Emergency preparedness Procedures	Prepare for safety of project workers during an emergency	Check if procedures have been developed and workers are informed
G Maintenance and safety in operational period	Maintenance and safety in operational period	a) Final beneficiary updates a maintenance plan to meet ESF requirements before completion of works. b) Maintenance plan is implemented and periodically updated. c) Emergency Preparedness and Response Plan is updated in accordance with national legislation.

Table 17. Cultural Heritage Management Plan (CHMP) Template

Content

1. Project description
2. Location (facility) description
3. Important historical facts
4. Valuable and protected elements
5. Level of protection and applicable regulation
6. Competent authority

CHMP measures			
Phase	**Mitigation measure**	**When should the measure be implemented**	**Implementation responsibility**
During activity preparation and design			
During activity implementation			
Use phase			

CHMP as an annex of ESMP Checklists in line with the ESS10, has to be enclosed and special conditions for the protection of cultural heritage (if applicable) have to be attached.

Table 18. Monitoring plan template

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 activity **preparation**	Natural radon emissions, unless monitoring had already been conducted	Radon gas presence in classrooms	Measuring Radon (222Rn) in Bqm-3; Methodology acceptable to Civil Protection Directorate – sector for radiological and nuclear safety	Before design is finalized	Health protection of students and staff		PIU
During activity **implementation**	Noise	In the noise exposed classrooms	Db; EN ISO 9612:2009	In the case of complaints from students or staff, or negative inspection finding	Health protection of students and staff		Contractor
	Dust	In the dust exposed classrooms	PM 2.5, PM 10	In the case of complaints from students or staff, or negative inspection finding	Health protection of students and staff		Contractor
	Use of PPE	At the site	Equipment is available and used	Periodically	OHS		PIU
	GRM	Project GRM separate workers GRM with SEA/SH channels	Who is using the GRM? Prevalence of Case categories Case Recording/ logging Timeframe for resolution Notification/ response to complainants Capacity of GRM Structures: budget, human resources, time	Monthly	Stakeholder engagement		PIU SS and communications specialists

	Labour related risks	C-LMP Contracts for workers Code of conduct Workers trained on SEA/SH prevention and availability of SEA/SH sensitive GRM	Labor management	Periodically	Adherence to the LMP		PIU SS
During activity **use phase**	Safety of equipment and furniture	In schools and school yards	Maintenance is regularly performed	Annually	Health protection of students and staff		Project beneficiary
	Water quality	Sanitary facilities in the school	Potable water quality check in lines with the parameters defined in the Ordinance on Compliance Parameters, Methods of Analysis, Monitoring and Water Safety Plans for Human Consumption And the Way of Keeping a Register of Legal Entities Performing Public Water Supply Activities	Before operational period, but after completion of works	Health protection of students and staff		Contractor

ANNEX X – ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) TEMPLATE

The Environmental and Social Management Plan (ESMP) consists of a number of mitigations and monitoring measures as well as of institutional measures to be enforced during the implementation and works in order to eliminate and neutralize negative environmental and social impacts or to reduce them to acceptable levels. The ESMP also includes a list of activities necessary to implement the said measures. ESMPs are, as a rule prepared for E&S aspects of site-specific activities and impacts.

When preparing the Environmental Management Plan the loan beneficiary and his Environmental and Social Assessment team (usually PIU) shall (a) identify direct, indirect and cumulative project risks and impacts, (b) identify series of responses to potentially adverse impacts, (c) define the requirements that will ensure effective and timely implementation of the said responses i.e. measures and (d) describe how to meet these requirements.

The Environmental and Social Management Plan (ESMP) includes the following components:

Impact mitigation

1. The ESMP identifies feasible and cost-effective measures that can mitigate potentially significant adverse impacts to the environment and communities to acceptable levels. If the mitigation measures are not feasible, sufficient of cost-effective, the ESMP may include compensation measures. The ESMP particularly:

(a) identifies and summarizes the adverse environmental and social impacts (including impacts on the indigenous population and involuntary relocation);

(b) provides detailed technical description of each measure including the type of impact it addresses and the conditions under which the measure is required (e.g. continually or in case of unforeseen events), together with the project design, description of equipment and operative procedures, if necessary.

(c) evaluates all potential impacts of the said measures

(d) provides a reference to other mitigation plans (e.g. for involuntary relocation, indigenous population or cultural property) required by the project.

Monitoring

2. Monitoring the state of environment during the implementation of the project provides information on key environmental aspects of the project, particularly on the impacts of the project on the environment and the efficiency of the mitigation measures. These measures enable the client and the Bank to evaluate the successfulness of the mitigation measures as a part of supervision and enable introduction of corrective action, if needed. Therefore, the ESMP identifies the monitoring objectives and specifies the type of monitoring with reference to Environmental and Social Assessment Report and measures described in the ESMP. Part of the ESMP referring to monitoring provides (a) specific descriptions and technical details of the monitoring measures, including parameters to be monitored, methods to be used, sampling locations, frequency of monitoring, restrictions and defined limit values that are a signal for corrective action, (b) monitoring and reporting procedures to (i) ensure early detection of conditions that require specific mitigation measures and (ii) provide information on monitoring progress and results.

Implementation Schedule and Cost Estimate

3. For all three aspects (mitigation, monitoring and development of capacities) the ESMP provides (a) a measure implementation plan that is an integral part of the project, with the plan stages and coordination in line with other project plans and (b) cost estimates and sources of funding for the cost of capital and recoverable cost arising from the ESMP, if possible to assess.

Environmental Mitigation Plan

Construction Phase					
Activity	Potential Environmental Impact	Proposed Mitigation Measures	Responsibility for Implementation of Mitigation Measures	Period for Implementation of Mitigation Measures	Mitigation Measures Implementation Costs
1.					
2.					
…					
Operational Phase					
1.					
2.					
…					

Monitoring Plan

Construction 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 (time and frequency)?*	**Who** *monitors the parameter (responsibility)?*	**Cost** *of monitoring the parameter*
1.					
2.					
…					
Operational Phase					
1.					
2.					
…					

ANNEX XI - MONTHLY FIELD ENVIRONMENTAL MONITORING CHECKLIST TEMPLATE

The template will be updated to reflect changes in the final version of ESMP/ESMP Checklist.

Monthly Monitoring Checklist will be filled in by Supervising Engineer.

Table 19. Monthly field environmental monitoring checklist

Site location					
Name of contractor					
Name of supervisor					
Date of site visit					
Status of civil works					
Documents and activities to be examined	Status				Comments
	Yes	Partially	No	N/A	
Contractor holds all necessary permits					
Contractor holds agreement for final disposal of waste (including municipal waste)					
Work site is fenced, and warning signs installed, open pits covered and clearly marked, entry for unemployed person within the project location is prohibited					
Devices, equipment and fire extinguishers are on site and functional, first aid kits are available on the site and personnel trained to use it, procedures for cases of emergency (including spills, accidents, etc.) are available at the site					
The surrounding area near the project is kept clean					
Works do not impede pedestrian access and motor traffic, or temporary alternative access is provided					

Working hours are observed and community is informed in advance of any work activities to occur outside of normal working hours					
Construction machinery and equipment is in standard technical condition (no excessive exhaust and noise, no leakage of fuels and lubricants)					
Construction materials and waste are transported under the covered hood					
Construction site is watered in case of excessively dusty works					
Sites for temporary storage of waste and for vehicle/equipment servicing are designated and waste is stored separately by type in labelled containers					
Adequate lavatory facilities (toilets and washing areas) in the work site with adequate supplies of hot and cold running water, soap, are provided					
Workers have and wear adequate uniforms and protective gear (gloves, helmets, eye- glasses, etc.)					
COVID-19 preventive measures are conducted at work site (regular delivery PPEs, protocols for regular disinfection of rooms, equipment, tools, are in place and followed, handwashing and other sanitary stations are always supplied with clean water, soap, and disinfectant, etc)					
Servicing and fuelling of vehicles and machinery is undertaken on an impermeable surface at specially designated area					
Vehicles and machinery are washed away from natural water bodies in the way preventing direct discharge of runoff into the water bodies, proper storm water drainage systems installed					

Excess material and topsoil generated from soil excavation are stored separately and used for backfilling / site reinstatement as required					
Works taken on hold if chance find encountered and communication made to the state agencies responsible for cultural heritage preservation					
Upon completion of physical activity on site, the site is cleared of any remaining left-over from works and harmonized with the surrounding landscape (only autochthonous plant species that occur in the vegetation communities present in the wider area of the sub-project are used for restoration)					
Other					

ANNEX XII – ESF/SAFEGUARDS INTERIM NOTE

COVID-19 CONSIDERATIONS IN CONSTRUCTION/CIVIL WORKS PROJECTS

This note was issued on April 7, 2020 and includes links to the latest guidance as of this date (e.g. from WHO). Given the COVID-19 situation is rapidly evolving, when using this note it is important to check whether any updates to these external resources have been issued.

1. INTRODUCTION

The COVID-19 pandemic presents Governments with unprecedented challenges. Addressing COVID-19 related issues in both existing and new operations starts with recognizing that this is not business as usual and that circumstances require a highly adaptive responsive management design to avoid, minimize and manage what may be a rapidly evolving situation. In many cases, we will ask Borrowers to use reasonable efforts in the circumstances, recognizing that what may be possible today may be different next week (both positively, because more supplies and guidance may be available, and negatively, because the spread of the virus may have accelerated).

This interim note is intended to provide guidance to teams on how to support Borrowers in addressing key issues associated with COVID-19, and consolidates the advice that has already been provided over the past month. As such, it should be used in place of other guidance that has been provided to date. This note will be developed as the global situation and the Bank's learning (and that of others) develops. This is not a time when 'one size fits all'. More than ever, teams will need to work with Borrowers and projects to understand the activities being carried out and the risks that these activities may entail. Support will be needed in designing mitigation measures that are implementable in the context of the project. These measures will need to take into account capacity of the Government agencies, availability of supplies and the practical challenges of operations on-the-ground, including stakeholder engagement, supervision and monitoring. In many circumstances, communication itself may be challenging, where face-to-face meetings are restricted or prohibited, and where IT solutions are limited or unreliable.

This note emphasizes the importance of careful scenario planning, clear procedures and protocols, management systems, effective communication and coordination, and the need for high levels of responsiveness in a changing environment. It recommends assessing the current situation of the project, putting in place mitigation measures to avoid or minimize the chance of infection, and planning what to do if either project workers become infected or the work force includes workers from proximate communities affected by COVID-19. In many projects, measures to avoid or minimize will need to be implemented at the same time as dealing with sick workers and relations with the community, some of whom may also be ill or concerned about infection. Borrowers should understand the obligations that contractors have under their existing contracts (see Section 3), require contractors to put in place appropriate organizational structures (see Section 4) and develop procedures to address different aspects of COVID-19 (see Section 5).

2. CHALLENGES WITH CONSTRUCTION/CIVIL WORKS

Projects involving construction/civil works frequently involve a large work force, together with suppliers and supporting functions and services. The work force may comprise workers from international, national, regional, and local labor markets. They may need to live in on-site accommodation, lodge within communities close to work sites or return to their homes after work. There may be different contractors permanently present on site, carrying out different activities, each with their own dedicated workers. Supply chains may involve international, regional and national suppliers facilitating the regular flow of goods and services to the project (including supplies essential to the project such as fuel, food, and water). As such there will also be regular flow of parties entering

and exiting the site; support services, such as catering, cleaning services, equipment, material and supply deliveries, and specialist sub-contractors, brought in to deliver specific elements of the works.

Given the complexity and the concentrated number of workers, the potential for the spread of infectious disease in projects involving construction is extremely serious, as are the implications of such a spread. Projects may experience large numbers of the work force becoming ill, which will strain the project's health facilities, have implications for local emergency and health services and may jeopardize the progress of the construction work and the schedule of the project. Such impacts will be exacerbated where a work force is large and/or the project is in remote or under-serviced areas. In such circumstances, relationships with the community can be strained or difficult and conflict can arise, particularly if people feel they are being exposed to disease by the project or are having to compete for scarce resources. The project must also exercise appropriate precautions against introducing the infection to local communities.

3. DOES THE CONSTRUCTION CONTRACT COVER THIS SITUATION?

Given the unprecedented nature of the COVID-19 pandemic, it is unlikely that the existing construction/civil works contracts will cover all the things that a prudent contractor will need to do. Nevertheless, the first place for a Borrower to start is with the contract, determining what a contractor's existing obligations are, and how these relate to the current situation.

The obligations on health and safety will depend on what kind of contract exists (between the Borrower and the main contractor; between the main contractors and the sub-contractors). It will differ if the Borrower used the World Bank's standard procurement documents (SPDs) or used national bidding documents. If a FIDIC document has been used, there will be general provisions relating to health and safety. For example, the standard FIDIC, Conditions of Contract for Construction (Second Edition 2017), which contains no 'ESF enhancements', states (in the General Conditions, clause 6.7) that the Contractor will be required:

- 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, in collaboration with local health authorities, that medical staff, first aid facilities, sick bay, ambulance services and any other medical services specified are available at all times at the site and at any accommodation
- to ensure suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics

These requirements have been enhanced through the introduction of the ESF into the SPDs (edition dated July 2019). The general FIDIC clause referred to above has been strengthened to reflect the requirements of the ESF. Beyond FIDIC's general requirements discussed above, the Bank's Particular Conditions include a number of relevant requirements on the Contractor, including:

- to provide health and safety training for Contractor's Personnel (which include project workers and all personnel that the Contractor uses on site, including staff and other employees of the Contractor and Subcontractors and any other personnel assisting the Contractor in carrying out project activities)
- to put in place workplace processes for Contractor's Personnel to report work situations that are not safe or healthy
- gives Contractor's Personnel the right to report work situations which they believe are not safe or healthy, and to remove themselves from a work situation which they have a

reasonable justification to believe presents an imminent and serious danger to their life or health (with no reprisal for reporting or removing themselves)

- requires measures to be in place to avoid or minimize the spread of diseases including measures to avoid or minimize the transmission of communicable diseases that may be associated with the influx of temporary or permanent contract-related labor
- to provide an easily accessible grievance mechanism to raise workplace concerns

Where the contract form used is FIDIC, the Borrower (as the Employer) will be represented by the Engineer (also referred to in this note as the Supervising Engineer). The Engineer will be authorized to exercise authority specified in or necessarily implied from the construction contract. In such cases, the Engineer (through its staff on site) will be the interface between the PIU and the Contractor. It is important therefore to understand the scope of the Engineer's responsibilities. It is also important to recognize that in the case of infectious diseases such as COVID-19, project management – through the Contractor/subcontractor hierarchy – is only as effective as the weakest link. A thorough review of management procedures/plans as they will be implemented through the entire contractor hierarchy is important. Existing contracts provide the outline of this structure; they form the basis for the Borrower to understand how proposed mitigation measures will be designed and how adaptive management will be implemented, and to start a conversation with the Contractor on measures to address COVID-19 in the project.

4. WHAT PLANNING SHOULD THE BORROWER BE DOING?

Task teams should work with Borrowers (PIUs) to confirm that projects (i) are taking adequate precautions to prevent or minimize an outbreak of COVID-19, and (ii) have identified what to do in the event of an outbreak. Suggestions on how to do this are set out below:

- The PIU, either directly or through the Supervising Engineer, should request details in writing from the main Contractor of the measures being taken to address the risks. As stated in Section 3, the construction contract should include health and safety requirements, and these can be used as the basis for identification of, and requirements to implement, COVID-19 specific measures. The measures may be presented as a contingency plan, as an extension of the existing project emergency and preparedness plan or as standalone procedures. The measures may be reflected in revisions to the project's health and safety manual. This request should be made in writing (following any relevant procedure set out in the contract between the Borrower and the contractor).
- In making the request, it may be helpful for the PIU to specify the areas that should be covered. This should include the items set out in Section 5 below and take into account current and relevant guidance provided by national authorities, WHO and other organizations. See the list of references in the Annex to this note.
- The PIU should require the Contractor to convene regular meetings with the project health and safety specialists and medical staff (and where appropriate the local health authorities), and to take their advice in designing and implementing the agreed measures.
- Where possible, a senior person should be identified as a focal point to deal with COVID-19 issues. This can be a work supervisor or a health and safety specialist. This person can be responsible for coordinating preparation of the site and making sure that the measures taken are communicated to the workers, those entering the site and the local community. It is also advisable to designate at least one back-up person, in case the focal point becomes ill; that person should be aware of the arrangements that are in place.
- On sites where there are a number of contractors and therefore (in effect) different work forces, the request should emphasize the importance of coordination and communication between the different parties. Where necessary, the PIU should request the main contractor to put in place a protocol for regular meetings of the different contractors, requiring each to appoint a designated staff member (with back up) to attend such meetings. If meetings cannot

be held in person, they should be conducted using whatever IT is available. The effectiveness of mitigation measures will depend on the weakest implementation, and therefore it is important that all contractors and sub-contractors understand the risks and the procedure to be followed.

- The PIU, either directly or through the Supervising Engineer, may provide support to projects in identifying appropriate mitigation measures, particularly where these will involve interface with local services, in particular health and emergency services. In many cases, the PIU can play a valuable role in connecting project representatives with local Government agencies, and helping coordinate a strategic response, which takes into account the availability of resources. To be most effective, projects should consult and coordinate with relevant Government agencies and other projects in the vicinity.
- Workers should be encouraged to use the existing project grievance mechanism to report concerns relating to COVID-19, preparations being made by the project to address COVID-19 related issues, how procedures are being implemented, and concerns about the health of their co-workers and other staff.

5. WHAT SHOULD THE CONTRACTOR COVER?

The Contractor should identify measures to address the COVID-19 situation. What will be possible will depend on the context of the project: the location, existing project resources, availability of supplies, capacity of local emergency/health services, the extent to which the virus already exist in the area. A systematic approach to planning, recognizing the challenges associated with rapidly changing circumstances, will help the project put in place the best measures possible to address the situation. As discussed above, measures to address COVID-19 may be presented in different ways (as a contingency plan, as an extension of the existing project emergency and preparedness plan or as standalone procedures). PIUs and contractors should refer to guidance issued by relevant authorities, both national and international (e.g. WHO), which is regularly updated (see sample References and links provided in the Annex).

Addressing COVID-19 at a project site goes beyond occupational health and safety, and is a broader project issue which will require the involvement of different members of a project management team. In many cases, the most effective approach will be to establish procedures to address the issues, and then to ensure that these procedures are implemented systematically. Where appropriate given the project context, a designated team should be established to address COVID-19 issues, including PIU representatives, the Supervising Engineer, management (e.g. the project manager) of the contractor and sub-contractors, security, and medical and OHS professionals. Procedures should be clear and straightforward, improved as necessary, and supervised and monitored by the COVID-19 focal point(s). Procedures should be documented, distributed to all contractors, and discussed at regular meetings to facilitate adaptive management. The issues set out below include a number that represent expected good workplace management but are especially pertinent in preparing the project response to COVID-19.

a. ASSESSING WORKFORCE CHARACTERISTICS

Many construction sites will have a mix of workers e.g. workers from the local communities; workers from a different part of the country; workers from another country. Workers will be employed under different terms and conditions and be accommodated in different ways. Assessing these different aspects of the workforce will help in identifying appropriate mitigation measures:

- The Contractor should prepare a detailed profile of the project work force, key work activities, schedule for carrying out such activities, different durations of contract and rotations (e.g. 4 weeks on, 4 weeks off).

- This should include a breakdown of workers who reside at home (i.e. workers from the community), workers who lodge within the local community and workers in on-site accommodation. Where possible, it should also identify workers that may be more at risk from COVID-19, those with underlying health issues or who may be otherwise at risk.
- Consideration should be given to ways in which to minimize movement in and out of site. This could include lengthening the term of existing contracts, to avoid workers returning home to affected areas, or returning to site from affected areas.
- Workers accommodated on site should be required to minimize contact with people near the site, and in certain cases be prohibited from leaving the site for the duration of their contract, so that contact with local communities is avoided.
- Consideration should be given to requiring workers lodging in the local community to move to site accommodation (subject to availability) where they would be subject to the same restrictions.
- Workers from local communities, who return home daily, weekly or monthly, will be more difficult to manage. They should be subject to health checks at entry to the site (as set out above) and at some point, circumstances may make it necessary to require them to either use accommodation on site or not to come to work.

b. ENTRY/EXIT TO THE WORK SITE AND CHECKS ON COMMENCEMENT OF WORK

Entry/exit to the work site should be controlled and documented for both workers and other parties, including support staff and suppliers. Possible measures may include:

- Establishing a system for controlling entry/exit to the site, securing the boundaries of the site, and establishing designating entry/exit points (if they do not already exist). Entry/exit to the site should be documented.
- Training security staff on the (enhanced) system that has been put in place for securing the site and controlling entry and exit, the behaviours required of them in enforcing such system and any COVID -19 specific considerations.
- Training staff who will be monitoring entry to the site, providing them with the resources they need to document entry of workers, conducting temperature checks and recording details of any worker that is denied entry.
- Confirming that workers are fit for work before they enter the site or start work. While procedures should already be in place for this, special attention should be paid to workers with underlying health issues or who may be otherwise at risk. Consideration should be given to demobilization of staff with underlying health issues.
- Checking and recording temperatures of workers and other people entering the site or requiring self-reporting prior to or on entering the site.
- Providing daily briefings to workers prior to commencing work, focusing on COVID-19 specific considerations including cough etiquette, hand hygiene and distancing measures, using demonstrations and participatory methods.
- During the daily briefings, reminding workers to self-monitor for possible symptoms (fever, cough) and to report to their supervisor or the COVID-19 focal point if they have symptoms or are feeling unwell.
- Preventing a worker from an affected area or who has been in contact with an infected person from returning to the site for 14 days or (if that is not possible) isolating such worker for 14 days.
- Preventing a sick worker from entering the site, referring them to local health facilities if necessary or requiring them to isolate at home for 14 days.

c. GENERAL HYGIENE

Requirements on general hygiene should be communicated and monitored, to include:

- Training workers and staff on site on the signs and symptoms of COVID-19, how it is spread, how to protect themselves (including regular handwashing and social distancing) and what to do if they or other people have symptoms (for further information see WHO COVID-19 advice for the public).
- Placing posters and signs around the site, with images and text in local languages.
- Ensuring handwashing facilities supplied with soap, disposable paper towels and closed waste bins exist at key places throughout site, including at entrances/exits to work areas; where there is a toilet, canteen or food distribution, or provision of drinking water; in worker accommodation; at waste stations; at stores; and in common spaces. Where handwashing facilities do not exist or are not adequate, arrangements should be made to set them up. Alcohol based sanitizer (if available, 60-95% alcohol) can also be used.
- Review worker accommodations, and assess them in light of the requirements set out in IFC/EBRD guidance on Workers' Accommodation: processes and standards, which provides valuable guidance as to good practice for accommodation.
- Setting aside part of worker accommodation for precautionary self-quarantine as well as more formal isolation of staff who may be infected (see paragraph (f)).

d. CLEANING AND WASTE DISPOSAL

Conduct regular and thorough cleaning of all site facilities, including offices, accommodation, canteens, common spaces. Review cleaning protocols for key construction equipment (particularly if it is being operated by different workers). This should include:

- Providing cleaning staff with adequate cleaning equipment, materials and disinfectant.
- Review general cleaning systems, training cleaning staff on appropriate cleaning procedures and appropriate frequency in high use or high-risk areas.
- Where it is anticipated that cleaners will be required to clean areas that have been or are suspected to have been contaminated with COVID-19, providing them with appropriate PPE: gowns or aprons, gloves, eye protection (masks, goggles or face screens) and boots or closed work shoes. If appropriate PPE is not available, cleaners should be provided with best available alternatives.
- Training cleaners in proper hygiene (including handwashing) prior to, during and after conducting cleaning activities; how to safely use PPE (where required); in waste control (including for used PPE and cleaning materials).
- Any medical waste produced during the care of ill workers should be collected safely in designated containers or bags and treated and disposed of following relevant requirements (e.g., national, WHO). If open burning and incineration of medical wastes is necessary, this should be for as limited a duration as possible. Waste should be reduced and segregated, so that only the smallest amount of waste is incinerated (for further information see WHO interim guidance on water, sanitation and waste management for COVID-19).

e. ADJUSTING WORK PRACTICES

Consider changes to work processes and timings to reduce or minimize contact between workers, recognizing that this is likely to impact the project schedule. Such measures could include:

- Decreasing the size of work teams.
- Limiting the number of workers on site at any one time.
- Changing to a 24-hour work rotation.
- Adapting or redesigning work processes for specific work activities and tasks to enable social distancing, and training workers on these processes.
- Continuing with the usual safety trainings, adding COVID-19 specific considerations. Training should include proper use of normal PPE. While as of the date of this note, general advice is that construction workers do not require COVID-19 specific PPE, this should be kept under

review (for further information see WHO interim guidance on rational use of personal protective equipment (PPE) for COVID-19).

- Reviewing work methods to reduce use of construction PPE, in case supplies become scarce or the PPE is needed for medical workers or cleaners. This could include, e.g. trying to reduce the need for dust masks by checking that water sprinkling systems are in good working order and are maintained or reducing the speed limit for haul trucks.
- Arranging (where possible) for work breaks to be taken in outdoor areas within the site.
- Consider changing canteen layouts and phasing meal times to allow for social distancing and phasing access to and/or temporarily restricting access to leisure facilities that may exist on site, including gyms.
- At some point, it may be necessary to review the overall project schedule, to assess the extent to which it needs to be adjusted (or work stopped completely) to reflect prudent work practices, potential exposure of both workers and the community and availability of supplies, taking into account Government advice and instructions.

f. PROJECT MEDICAL SERVICES

Consider whether existing project medical services are adequate, taking into account existing infrastructure (size of clinic/medical post, number of beds, isolation facilities), medical staff, equipment and supplies, procedures and training. Where these are not adequate, consider upgrading services where possible, including:

- Expanding medical infrastructure and preparing areas where patients can be isolated. Guidance on setting up isolation facilities is set out in WHO interim guidance on considerations for quarantine of individuals in the context of containment for COVID-19). Isolation facilities should be located away from worker accommodation and ongoing work activities. Where possible, workers should be provided with a single well-ventilated room (open windows and door). Where this is not possible, isolation facilities should allow at least 1 meter between workers in the same room, separating workers with curtains, if possible. Sick workers should limit their movements, avoiding common areas and facilities and not be allowed visitors until they have been clear of symptoms for 14 days. If they need to use common areas and facilities (e.g. kitchens or canteens), they should only do so when unaffected workers are not present and the area/facilities should be cleaned prior to and after such use.
- Training medical staff, which should include current WHO advice on COVID-19 and recommendations on the specifics of COVID-19. Where COVID-19 infection is suspected, medical providers on site should follow WHO interim guidance on infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected.
- Training medical staff in testing, if testing is available.
- Assessing the current stock of equipment, supplies and medicines on site, and obtaining additional stock, where required and possible. This could include medical PPE, such as gowns, aprons, medical masks, gloves, and eye protection. Refer to WHO guidance as to what is advised (for further information see WHO interim guidance on rational use of personal protective equipment (PPE) for COVID-19).
- If PPE items are unavailable due to world-wide shortages, medical staff on the project should agree on alternatives and try to procure them. Alternatives that may commonly be found on constructions sites include dust masks, construction gloves and eye goggles. While these items are not recommended, they should be used as a last resort if no medical PPE is available.
- Ventilators will not normally be available on work sites, and in any event, intubation should only be conducted by experienced medical staff. If a worker is extremely ill and unable to breathe properly on his or her own, they should be referred immediately to the local hospital (see (g) below).

- Review existing methods for dealing with medical waste, including systems for storage and disposal (for further information see WHO interim guidance on water, sanitation and waste management for COVID-19, and WHO guidance on safe management of wastes from health-care activities).

g. LOCAL MEDICAL AND OTHER SERVICES

Given the limited scope of project medical services, the project may need to refer sick workers to local medical services. Preparation for this includes:

- Obtaining information as to the resources and capacity of local medical services (e.g. number of beds, availability of trained staff and essential supplies).
- Conducting preliminary discussions with specific medical facilities, to agree what should be done in the event of ill workers needing to be referred.
- Considering ways in which the project may be able to support local medical services in preparing for members of the community becoming ill, recognizing that the elderly or those with pre-existing medical conditions require additional support to access appropriate treatment if they become ill.
- Clarifying the way in which an ill worker will be transported to the medical facility, and checking availability of such transportation.
- Establishing an agreed protocol for communications with local emergency/medical services. Agreeing with the local medical services/specific medical facilities the scope of services to be provided, the procedure for in-take of patients and (where relevant) any costs or payments that may be involved.
- A procedure should also be prepared so that project management knows what to do in the unfortunate event that a worker ill with COVID-19 dies. While normal project procedures will continue to apply, COVID-19 may raise other issues because of the infectious nature of the disease. The project should liaise with the relevant local authorities to coordinate what should be done, including any reporting or other requirements under national law.

h. INSTANCES OR SPREAD OF THE VIRUS

WHO provides detailed advice on what should be done to treat a person who becomes sick or displays symptoms that could be associated with the COVID-19 virus (for further information see WHO interim guidance on infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected). The project should set out risk-based procedures to be followed, with differentiated approaches based on case severity (mild, moderate, severe, critical) and risk factors (such as age, hypertension, diabetes) (for further information see WHO interim guidance on operational considerations for case management of COVID-19 in health facility and community). These may include the following:

- If a worker has symptoms of COVID-19 (e.g. fever, dry cough, fatigue) the worker should be removed immediately from work activities and isolated on site.
- If testing is available on site, the worker should be tested on site. If a test is not available at site, the worker should be transported to the local health facilities to be tested (if testing is available).
- If the test is positive for COVID-19 or no testing is available, the worker should continue to be isolated. This will either be at the work site or at home. If at home, the worker should be transported to their home in transportation provided by the project.
- Extensive cleaning procedures with high-alcohol content disinfectant should be undertaken in the area where the worker was present, prior to any further work being undertaken in that area. Tools used by the worker should be cleaned using disinfectant and PPE disposed of.

- Co-workers (i.e. workers with whom the sick worker was in close contact) should be required to stop work, and be required to quarantine themselves for 14 days, even if they have no symptoms.
- Family and other close contacts of the worker should be required to quarantine themselves for 14 days, even if they have no symptoms.
- If a case of COVID-19 is confirmed in a worker on the site, visitors should be restricted from entering the site and worker groups should be isolated from each other as much as possible.
- If workers live at home and has a family member who has a confirmed or suspected case of COVID-19, the worker should quarantine themselves and not be allowed on the project site for 14 days, even if they have no symptoms.
- Workers should continue to be paid throughout periods of illness, isolation or quarantine, or if they are required to stop work, in accordance with national law.
- Medical care (whether on site or in a local hospital or clinic) required by a worker should be paid for by the employer.

i. CONTINUITY OF SUPPLIES AND PROJECT ACTIVITIES

Where COVID-19 occurs, either in the project site or the community, access to the project site may be restricted, and movement of supplies may be affected.

- Identify back-up individuals, in case key people within the project management team (PIU, Supervising Engineer, Contractor, sub-contractors) become ill, and communicate who these are so that people are aware of the arrangements that have been put in place.
- Document procedures, so that people know what they are, and are not reliant on one person's knowledge.
- Understand the supply chain for necessary supplies of energy, water, food, medical supplies and cleaning equipment, consider how it could be impacted, and what alternatives are available. Early pro-active review of international, regional and national supply chains, especially for those supplies that are critical for the project, is important (e.g. fuel, food, medical, cleaning and other essential supplies). Planning for a 1-2 month interruption of critical goods may be appropriate for projects in more remote areas.
- Place orders for/procure critical supplies. If not available, consider alternatives (where feasible).
- Consider existing security arrangements, and whether these will be adequate in the event of interruption to normal project operations.
- Consider at what point it may become necessary for the project to significantly reduce activities or to stop work completely, and what should be done to prepare for this, and to re-start work when it becomes possible or feasible.

j. TRAINING AND COMMUNICATION WITH WORKERS

Workers need to be provided with regular opportunities to understand their situation, and how they can best protect themselves, their families and the community. They should be made aware of the procedures that have been put in place by the project, and their own responsibilities in implementing them.

- It is important to be aware that in communities close to the site and amongst workers without access to project management, social media is likely to be a major source of information. This raises the importance of regular information and engagement with workers (e.g. through training, town halls, tool boxes) that emphasizes what management is doing to deal with the risks of COVID-19. Allaying fear is an important aspect of work force peace of mind and business continuity. Workers should be given an opportunity to ask questions, express their concerns, and make suggestions.

- Training of workers should be conducted regularly, as discussed in the sections above, providing workers with a clear understanding of how they are expected to behave and carry out their work duties.
- Training should address issues of discrimination or prejudice if a worker becomes ill and provide an understanding of the trajectory of the virus, where workers return to work.
- Training should cover all issues that would normally be required on the work site, including use of safety procedures, use of construction PPE, occupational health and safety issues, and code of conduct, taking into account that work practices may have been adjusted.
- Communications should be clear, based on fact and designed to be easily understood by workers, for example by displaying posters on handwashing and social distancing, and what to do if a worker displays symptoms.

k. COMMUNICATION AND CONTACT WITH THE COMMUNITY

Relations with the community should be carefully managed, with a focus on measures that are being implemented to safeguard both workers and the community. The community may be concerned about the presence of non-local workers, or the risks posed to the community by local workers presence on the project site. The project should set out risk-based procedures to be followed , which may reflect WHO guidance (for further information see WHO Risk Communication and Community Engagement (RCCE) Action Plan Guidance COVID-19 Preparedness and Response). The following good practice should be considered:

- Communications should be clear, regular, based on fact and designed to be easily understood by community members.
- Communications should utilize available means. In most cases, face-to-face meetings with the community or community representatives will not be possible. Other forms of communication should be used; posters, pamphlets, radio, text message, electronic meetings. The means used should take into account the ability of different members of the community to access them, to make sure that communication reaches these groups.
- The community should be made aware of procedures put in place at site to address issues related to COVID-19. This should include all measures being implemented to limit or prohibit contact between workers and the community. These need to be communicated clearly, as some measures will have financial implications for the community (e.g. if workers are paying for lodging or using local facilities). The community should be made aware of the procedure for entry/exit to the site, the training being given to workers and the procedure that will be followed by the project if a worker becomes sick.
- If project representatives, contractors or workers are interacting with the community, they should practice social distancing and follow other COVID-19 guidance issued by relevant authorities, both national and international (e.g. WHO).

l. EMERGENCY POWERS AND LEGISLATION

Many Borrowers are enacting emergency legislation. The scope of such legislation, and the way it interacts with other legal requirements, will vary from country to country. Such legislation can cover a range of issues, for example:

- Declaring a public health emergency
- Authorizing the use of police or military in certain activities (e.g. enforcing curfews or restrictions on movement)
- Ordering certain categories of employees to work longer hours, not to take holiday or not to leave their job (e.g. health workers)
- Ordering non-essential workers to stay at home, for reduced pay or compulsory holiday

Except in exceptional circumstances (after referral to the World Bank's Operations Environmental and Social Review Committee (OESRC)), projects will need to follow emergency legislation to the extent that these are mandatory or advisable. It is important that the Borrower understands how mandatory requirements of the legislation will impact the project. Teams should require Borrowers (and in turn, Borrowers should request Contractors) to consider how the emergency legislation will impact the obligations of the Borrower set out in the legal agreement and the obligations set out in the construction contracts. Where the legislation requires a material departure from existing contractual obligations, this should be documented, setting out the relevant provisions.

ANNEX XIII - CODE OF CONDUCT

The Contractor's code of conduct mandatory to all employees must include, at least the following standards of behaviour:

- Full compliance with all laws, E&S standards and measures, company policies, procedures, rules, and contracts
- Maintaining high standards of polite and fair behaviour in dealings with investors, beneficiaries of works, local communities, suppliers, co-workers, and the general public
- Treating co-workers, beneficiaries of works, local communities, and the general public in a non-discriminatory manner with high regard for their rights and dignity
- Report any violations of law, ethical principles, policies and standards
- Refrain from engaging in any deceitful or corrupt activities
- Respecting all occupational health and safety and community health and safety policies and obligations
- Dress in an appropriate manner
- Restrain from verbal or physical violence
- Restrain from engaging in sexual harassment or any other type of harassment
- Restrain from intoxication (use of drugs or alcohol) at the work place.

Compliance with the code of conduct is a responsibility of OHS supervisor, Works supervisors and PIU. Breaches of the code of conduct are considered a very serious matter and may trigger (a) removal of particular employees form the site, (b) cancellation of the Contract

ANNEX XIV– LIST OF COVID-19 GUIDANCES

Schools (pupils and staff) will apply mandatory measures defined by Croatian Civil Protection Directorate and County Civil Protection Directorate (currently comprises keeping distance, mandatory use of mask, use of disinfections, attending in shifts, mandatory stay in).classrooms during breaks, etc.). Contractor's employees and PIUs will, in addition, consider WHO requirements.

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

- Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected, issued on March 19, 2020
- Recommendations to Member States to Improve Hygiene Practices, issued on April 1, 2020
- Severe Acute Respiratory Infections Treatment Center, issued on March 28, 2020
- Infection prevention and control at health care facilities (with a focus on settings with limited resources), issued in 2018
- Laboratory biosafety guidance related to coronavirus disease 2019 (COVID-19), issued on March 18, 2020
- Laboratory Biosafety Manual, 3rd edition, issued in 2014
- Laboratory testing for COVID-19, including specimen collection and shipment, issued on March 19, 2020
- Prioritized Laboratory Testing Strategy According to 4Cs Transmission Scenarios, issued on March 21, 2020
- Infection Prevention and Control for the safe management of a dead body in the context of COVID-19, issued on March 24, 2020
- Key considerations for repatriation and quarantine of travelers in relation to the outbreak COVID-19, issued on February 11, 2020
- Preparedness, prevention and control of COVID-19 for refugees and migrants in non-camp settings, issued on April 17, 2020
- Coronavirus disease (COVID-19) outbreak: rights, roles and responsibilities of health workers, including key considerations for occupational safety and health, issued on March 18, 2020
- Oxygen sources and distribution for COVID-19 treatment centers, issued on April 4, 2020
- Risk Communication and Community Engagement (RCCE) Action Plan Guidance COVID-19 Preparedness and Response, issued on March 16, 2020
- Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19), issued on March 19, 2020
- Operational considerations for case management of COVID-19 in health facility and community, issued on March 19, 2020
- Rational use of personal protective equipment for coronavirus disease 2019 (COVID-19), issued on February 27, 2020
- 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
- Safe management of wastes from health-care activities, issued in 2014
- Advice on the use of masks in the community, during home care and in healthcare settings in the context of the novel coronavirus (COVID-19) outbreak, issued on March 19, 2020
- Disability Considerations during the COVID-19 outbreak, issued on March 26, 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
- WBG EHS Guidelines for Healthcare Facilities, issued on April 30, 2007

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 GUIDANCE:

- Croatian Institute for Public Health: https://www.hzjz.hr/sluzba-epidemiologija-zaraznebolesti/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

- 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 : http://uznr.mrms.hr/wp-content/uploads/2020/04/uputa_za_gradilista_2020.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

- Government of the Republic of Croatia: https://koronavirus.hr/en

ANNEX XV - IFC EXCLUSION LIST

The IFC Exclusion List defines the types of projects that World Bank does not finance. IFC Exclusion List includes the following activities:

- Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international bans, such as pharmaceuticals, pesticides/herbicides, ozone depleting substances, PCB's, wildlife or products regulated under CITES.
- Production or trade in weapons and munitions.
- Production or trade in alcoholic beverages (excluding beer and wine).
- Production or trade in tobacco.
- Gambling, casinos and equivalent enterprises.
- Production or trade in radioactive materials. This does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where IFC considers the radioactive source to be trivial and/or adequately shielded.
- Production or trade in unbonded asbestos fibers. This does not apply to purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.
- Drift net fishing in the marine environment using nets in excess of 2.5 km. in length.
- Production or activities involving harmful or exploitative forms of forced labor2/harmful child labor.
- Commercial logging operations for use in primary tropical moist forest.
- Production or trade in wood or other forestry products other than from sustainably managed forests.
- Production, trade, storage, or transport of significant volumes of hazardous chemicals, or commercial scale usage of hazardous chemicals. Hazardous chemicals include gasoline, kerosene, and other petroleum products.
- Production or activities that impinge on the lands owned, or claimed under adjudication, by Indigenous Peoples, without full documented consent of such peoples.