



Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

Date Prepared/Updated: 10/16/2019 | Report No: ESRSC00854



BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
North Macedonia	EUROPE AND CENTRAL ASIA	P170993	
Project Name	North Macedonia Digital Economy (NODE)		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Digital Development	Investment Project Financing	5/8/2020	7/7/2020
Borrower(s)	Implementing Agency(ies)		
	Public Enterprise Macedonia Broadcasting (JP MRD)		

Proposed Development Objective(s)

The Project Development Objective (PDO) for the North Macedonia Digital Economy (NODE) Project is to improve access to high-speed broadband services in Project areas and to online knowledge sources and services among citizens and public institutions.

Financing (in USD Million)	Amount
Total Project Cost	33.82

B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

Through the proposed Project, the Government of the Republic of North Macedonia aims to considerably improve the state of the national Digital (broadband) Infrastructure by investing in the backhaul networks to benefit selected Project areas. Broadband connectivity is recognized as an essential resource for the future competitiveness of North Macedonia and its socioeconomic development, especially from the standpoint of inclusion. Broadband and broadband-enabled technologies nurture innovations, trigger business processes improvements, and improve linkages to the global economy.



The Project will be structured along three main components:

Component 1 will include construction of the National Transport Optical Network (further: NODE Network) and creation of enabling conditions for its proper functioning. The NODE Network will connect the following:

- White zones and justified Grey zones;
- Locations for free Wi-Fi Internet access points; and
- Public institutions: educational institutions (schools, universities, libraries, research centers, etc.), health institutions, ministries, courts, municipalities and other state administration authorities and bodies. Beneficiary public institutions shall be connected to symmetrical access to the ultrafast broadband internet with speeds of at least 1Gbps.

It is envisaged that the Public Enterprise Macedonian Broadcasting (JP MRD) would be in charge of the construction, maintenance and management of the NODE Network, as well as the infrastructure in the white and justified grey zones.

Other envisaged activities include the review of the regulatory framework to ensure open and non-discriminatory access of internet service providers to the deployed NODE Network and awareness raising and information sharing activities in Project areas.

Component 2 will contain activities aimed at institutional transformation and strengthening of JP MRD as an owner and operator of the NODE Network.

Component 3 will include Project Implementation Support. The construction and development of the NODE Network will be based on the Feasibility Study (FS) and other project documentation to be prepared and financed by the WBIF Technical Assistance Grant.

D. Environmental and Social Overview

D.1. Project location(s) and salient characteristics relevant to the ES assessment [geographic, environmental, social]

The project will finance development of broadband infrastructure in order to provide access to high-speed broadband internet connections to unconnected or under-served settlements and public institutions across the country. The investments will include creation of the National Transport Optical Network (NODE Network) and creation of enabling conditions for its proper functioning under the Component 1: Digital Infrastructure, sub-component 1.1 NODE Network.

The sub-project scope and technologies for construction of NODE Network are not fully defined yet; however, no major civil works are expected. The works will be small civil works (earthworks, microtrenching, etc.) for laying cables along existing linear infrastructure (e.g. roads), connection of optic fiber cables to existing electricity poles and in exceptional cases installation of new poles for optic fiber cables. The construction and development of the NODE Network will be based on a feasibility study and other project documentation that are currently being developed through the Technical Assistance Grant executed by the WB. The exact location of any above-mentioned works is unknown yet, therefore geographical scope of works can be considered the territory of the Republic of North Macedonia. It is not expected that locations will be known before the appraisal.

As the Project location is wide, some activities may, although unlikely, take place in the nature protected areas, however, even in that case, no significant environmental impacts are expected as works are reduced to shallow



trenching, micro-trenching next to the existing linear infrastructure (roads), re-pavement, installing fiber-optic cables on poles (existing and in rare cases new) and similar. Nevertheless, the planned works will inevitably cause some dust emissions, reduction of greenery, disturbance of topsoil, noise emissions, and human presence can cause disturbance to animals, which might be considerable for the nature protected areas. Risks to consider also include occupational health and safety (OHS) and community safety risks resulting from operating machinery (e.g. trenchers, asphalt cutters, etc.), vehicles, short term traffic disturbance, working at heights, risk of electric shocks (if installing to electricity poles), etc.

On the social side most important issues would be how to strengthen outreach and awareness raise about the potential that remote communities will have with the new opportunities. The activities will have to be oriented in a such away to target all segments of population regardless of gender or age. there are no other perceived social challenges.

North Macedonia is a country in the Balkan Peninsula in Southeast Europe. This landlocked country with a total area of 25,713 km², has borders with Kosovo to the northwest, Serbia to the northeast, Bulgaria to the east, Greece to the south, and Albania to the west. The country is geographically clearly defined by a central valley formed by the Vardar river and framed along its borders by mountain ranges. The terrain is mostly rugged, located between the Šara Mountains range and Osogovo range, which frame the valley of the Vardar river. Three large lakes — Lake Ohrid, Lake Prespa and Dojran Lake — lie on the southern borders, bisected by the frontiers with Albania and Greece. Ohrid is considered to be one of the oldest lakes and biotopes in the world. The region is seismically active and has been the site of destructive earthquakes in the past. The capital and largest city, Skopje, is home to roughly a quarter of the nation's 2.06 million inhabitants. The country is further divided into 80 municipalities, and consists primarily of rural country towns, with only 45% of the population concentrated in the larger towns and cities.

D. 2. Borrower's Institutional Capacity

The implementing agency Public Enterprise Macedonia Broadcasting (JP MRD), which is also the main institutional beneficiary was confirmed for the Project. JP MRD is a publicly-owned company that provides a national broadcasting network and services. It is planned that JP MRD will be responsible for building, operation, maintenance and provision of the services to ISPs via the financed infrastructure. The National Operational Broadband Plan, adopted by the Government, further stipulated the role in the Project for the following institutions:

- Ministry of Information Society and Administration (MISA);
- Agency for Electronic Communications (AEK); and
- Broadband Competence Office (BCO), soon to be established.

While MoF, MISA and JP MRD will have a dedicated role in the proposed Project implementation, the two remaining institutions will support MISA and JP MRD with technical inputs, as required throughout the implementation. As JP MRD has no previous experience of environmental and social issues management nor in using WB ESF and environmental and social standards, its capacity to implement the Project will be supported as necessary through consultants covering environmental and social issues and technical supervision and oversight

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS



A. Environmental and Social Risk Classification (ESRC)

Moderate

Environmental Risk Rating

Moderate

The potential adverse risks and impacts on human populations and environment are not likely to be significant. The project activities are not complex or large. Given the low environmental management capacity of the implementing agency (JP MRD), the planned civil works, potential OHS and community safety impacts as well as the fact that Project area does not exclude protected natural areas, the environmental risk is rated as moderate. The project activities will not have long-lasting adverse negative environmental impacts. Instead, it is rather expected that those will be predictable, temporary, low in magnitude, site specific and typical for the small scale civil and/or installation works that are expected and include, but are not limited to: small-scale earthworks (digging narrow and shallow trenches for laying cables), micro-trenching roads and repaving, installation of cables to the existing infrastructure (e.g. electricity poles) or installation of new poles and similar. The listed activities can produce the following effects: emission of dust and (internal combustion) gases, noise, mineral and construction waste generation, small risk of water and soil pollution, disturbance of animals, etc. and can cause occupational health and safety mostly resulting from the operations that include machinery for earthworks and micro-trenching. In urbanized areas the magnitude of impact will be low to moderate, whereas in the nature protected areas it can increase depending on the types of works, however, remaining temporary and reversible. Off-site activities can include production of asphalt and concrete which can, if not properly managed, could cause adverse, low to medium magnitude, but still localized impacts.

Social Risk Rating

Low

The social risk rating for the project are proposed to be low. The project will not finance works that are complex and large in scale those there will be no need neither for land take nor any displacement, as all civil works will be in existing infrastructure such as along existing roads. Given that the works will be specialized small scale works for laying cables and installation of a WIFI equipment. the number of workers working will be small per sections thus there will be no issues with labor influx. The Labor and Working conditions would be easily monitored, with special emphasis to non-skilled workers that will be hired most probably in temporary basis. Project will also monitor for criteria for working conditions for the primary supply workers from the quarries. While installation works for the optical networks in inhabited areas would cause a small increase of the project related traffic but it will be very limited in scale and pace. From the social side The only challenge will be coordination and community engagement to enhance the benefits of the project. The efforts should be focused to make sure that ISPs that will use the infrastructure to provide affordable service to us much as households. This could be part of the criteria for the beneficiary ISPs. JP MRD will build missing infrastructure to allow ISPs to connect households. So JP MRD primary clients will be ISPs and public institutions Thus on the social side most important issue would be how to ensure ISPs use the infrastructure and connect interested households as well as strengthen outreach and raise awareness about the potential that remote communities will have with the new opportunities that may open up from availability of broad-band internet. The activities will have to be oriented in a such away to target all segments of population regardless of gender or age.

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

Public Disclosure



ESS1 applies to the project due to the environmental and social risks associated with project activities under the Component 1: Digital Infrastructure, sub-component 1.1 NODE Network Infrastructure.

The expected impacts from the NODE Network construction are to be low-magnitude, temporary, localized, while including OHS and community health risks. The construction technologies, still unselected, may include use of machinery for earthworks and micro-trenching, short term traffic disruption (due to micro-trenching along roads and other linear infrastructure) and possibly working around high voltage and at heights when installing cables to existing electricity poles. The installation methods will be either laying fiber over poles or underground. It is roughly estimated that Project will support installation of around 500 km of fiber optic cables with 500 m segments. If unmitigated, the Project activities are likely to produce the following negative effects to the environmental and safety: gaseous emissions from internal combustion engines and those of dust, generation of construction, commercial and municipal waste (although in small quantities) and possibly small amounts of hazardous waste, emissions of noise and vibration causing related nuisance to the local community, , limited loss of greenery, as well as risks related to OHS and traffic safety. In the case of works in areas with natural significance, short term impacts to landscape and biodiversity are possible as a result of animal disturbance, stomping, littering and extensive removal of green and soil. Off-site activities very unlikely but may include production of asphalt and concrete, extraction of gravel and other mineral resources, extraction of water, which can, if not properly managed, can cause adverse, low to medium magnitude, but localized impacts.

Whereas scope of works for relevant activities under the sub-component 1.1 NODE Network of sub-projects as well as the exact locations are still unknown, therefore the implementing agency (Public Enterprise Macedonia Broadcasting - JP MRD) will prepare Environmental and Social Management Framework (ESMF) to guide environmental due diligence of sub-projects including definition of risks, site-specific and method-specific impacts, mitigation measures defined in the individual environmental assessments (EAs) as mandatory management instruments. The EAs will be required in the form of Environmental and Social Management Plan (ESMP) for the works in protected natural areas, while ESMP Checklist will be used for typical works in urban and rural areas. ESMF, that includes ESMP and ESMP Checklists templates, will be prepared, publicly disclosed and consulted prior to appraisal by the JP MRD. In accordance with their purpose, the site specific EAs will be timely disclosed, publicly consulted and constitute an integral part of bidding documents for contractors.

As the construction works on sub-projects will be implemented by external Contractors (and possibly sub-contractors) Labor Management Procedures will be prepared based on the project identified risks, national labor and OHS legislation and ESF requirements in order to close any potential gap to Labor and Working Conditions Standard (ESS2). As the preliminary screening identified traffic safety as the primary community risk, any related issues unaddressed by the national legislation or impeded by the institutional inefficiencies will be processed in the General Traffic/Road Safety section of ESMF. There will be no need for land acquisition as the optical cable laying works are done within the road network structure. There are no other social issues perceived during the concept stage. The ESMF will have chapter that will analyze and anticipate any other social risks and provide respective measures to address the risk.

Environment and Social Management Plans as well as traffic plans will be prepared by the implementation agency, contractors respectively against requirements of the Community Health and Safety Standard (ESS4). Stakeholder Engagement Plan (SEP) will be prepared with the purpose to establish and manage project relations/dialogue



between the Borrower, governmental and national, regional and local administrative institutions and the benefiting and impacted communities.

An Environmental and Social Commitment Plan (ESCP), drawn and agreed between the Bank and the Borrower, will set out the important measures and actions that will be required for the project to meet environmental and social requirements over the project's lifetime. These measures will be implemented within specified time-frame and the status of implementation will be reviewed as part of project monitoring and reporting. All the plans are due before the Appraisal.

Areas where “Use of Borrower Framework” is being considered:

Borrower Framework will not be used.

ESS10 Stakeholder Engagement and Information Disclosure

Stakeholder engagement is key and critical to the success and sustainability of the project development objectives in this operation. In consultation with the Bank team, the counterpart agency will prepare and implement an inclusive Stakeholder Engagement Plan (SEP) proportionate to the nature and scale of the project and in order to address risks and impacts identified through consultative processes to be carried out during preparation. The projects direct both interested and affected stakeholders would be institutions and internet service providers (ISP) whereby indirectly affected stakeholders will be households living in so called undeserved areas with broad band internet. Households will not be connected directly by the project but by the ISPs as direct beneficiary of the newly installed infrastructure. Institutions would be further divided on those who can affect the process and services such as Ministry of Information Society and Administration (MISA); Agency for Electronic Communications (AEK); Broadband Competence Office (BCO), soon to be established and Public Enterprise Macedonian Broadcasting (JP MD) as well as institutions which will benefit from the program such as school, libraries, village clinics, cultural homes etc. Other Interested Party includes enterprises operating in these areas using internet for their daily operations but also individual farmers that can benefit from access to faster internet as well as students as part of the households. They will benefit either through the institutions or directly through the services that will be provided by ISP providers. The Stakeholder Engagement Plan will have separate section on how to identify, outreach and seek feedback from the vulnerable as well as women relevant for this project or traditionally under-served populations. These would be households living in more remote areas especially those without younger members in the households. The sections of the SEP will provide solution how this segment of the beneficiaries will reach benefits from the project. Thus, on the social side most important issues would be how to strengthen outreach and awareness raising about the potential that remote communities will have with the new opportunities, the availability of affordable high-speed broadband internet access and also to reach and solicit feedback fro women given the gender gap in the access and use of the broad band services. The SEP will have separate window on reach-in and engaging feedback from women The activities will have to be oriented in a such away to target all segments of population regardless of gender or age. In addition the GRM will be designed and customized to be available and easily reachable for the remote communities. Different ways to submit grievances will be available especially to more remote communities.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.



ESS2 Labor and Working Conditions

The PIU will be formed within JP MRD as the final beneficiary of the Project. JP MRD is a publicly-owned company that provides a national broadcasting network and services. It is planned that JP MRD will be responsible for operation, maintenance and provision of the services via the financed infrastructure. JP MRD's capacity to implement the Project will be supported through consultants covering procurement, FM, safeguards, technical supervision and oversight, and M&E functions thus there will be direct project workers whose contracts will be reviewed and endorsed by the Bank. There will be contracted workers as well. These are those working for the contractor companies that will do the works for the optical cable laying. Given that the works will be of a small scale, such as cable laying, the contractors would most probably use none-skilled labor for some of the works, whereby it can be anticipated that these will be part time and seasonal contracted workers, potentially the contractors might not apply all the benefits that full time employees would get. All the standards set for the contracted workers in the ESS2 will be applied through ESMPs and the LMP to avoid potential issues with compliance of the ESS2 standards with the seasonally contracted workers. The contractors will use the quarries and in this situation the LMP and ESMP will have provisions also for the so called category of primary supply workers that work in the quarries. The PIU will develop a Labor Management Procedure (LMP) which will set standards for the contracted workers to meet the standards set in the ESS2 with higher diligence to seasonally contracted workers and to those working for the quarries used for supply (primary supply workers)

ESS3 Resource Efficiency and Pollution Prevention and Management

The ESS3 is relevant to the project. Installation of fiber optic cables and poles will include the use of a range of materials like asphalt, cement and others. The project might be a small user of material resources like gravel and stone from borrow pits and quarries. The ESMF will define criteria for quarries to be used (legal status, operating permits, compliance with health and safety standards). Traffic management and road safety plans will reflect transportation of resource materials. The project will not be significant user of energy or water resources. Small quantities of construction waste are expected. Though the measures in ESMF, site specific ESMPs and ESMP checklist, contractor will avoid or minimize the release of pollutants and assure compliance with the Environmental Health and Safety Guidelines and good construction practice. Generation of large quantities of any type of waste is also not expected: depending on the installation methods there may be (in total) moderate quantities of waste asphalt, topsoil, wire, oil contaminated containers (from vehicles and machinery) produced by project activities. Measures in ESMF and ESMPs will ensure the appropriate handling; storage use and disposal of hazardous and nonhazardous materials and wastes as well as management of work camps and work sites. Only use of attested vehicles and machinery will be allowed under the Project. The site specific ESMPs will be part of the tendering documentation and civil works contracts. Site management plan should be part of the contractors bid.

ESS4 Community Health and Safety

ESS4 is relevant to the project. Traffic safety plans will be prepared and community information for the works will be prepared and disclosed during the works on optical cable laying. The plans will be prepared by the contractors and approved by traffic police. ESMF will provide guidance for the preparation of Traffic Management Plans. Traffic management plans will be prepared by contractor and presented before the commencement of works. ESMPs will address issues such as gaseous emissions from internal combustion engines and those of dust, generation of



construction, commercial and municipal waste and possibly small quantities of hazardous waste, emissions of noise and vibration causing related nuisance to the local community as well as possible those related to OHS.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

Not relevant as works will be performed in the street network. The standard does not apply

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

The proposed operation’s sub-projects are expected to be restricted to existing road corridors and therefore impacts on habitats is expected to be limited. None the less as the location of are still not identified, some of the installation works might be, although unlikely, carried out in nature protected areas and natural habitats. The potential impacts will only be identified during project design when specific routes are known, and should be addressed in site specific ESMPs. ESMF would guide the process by which these impacts will be screened addressed in specific ESMPs. No activities will be allowed in or in proximity of critical habitats.

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

Not relevant.

ESS8 Cultural Heritage

Though the proposed operation will only require installation works along existing linear infrastructure, physical works excavations, movement of earth, quarrying and impounding and associated civil works will be undertaken. These types of activities may lead to contact with both known and unknown physical and cultural resources. Nevertheless, due to the countries cultural richness, during the earthworks chance finds might be possible. For that reason, ESMF, and site specific ESMPs and ESMP checklists will include provisions on chance finds and required practices.

ESS9 Financial Intermediaries

The standard is not relevant

C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways

No

Not relevant

OP 7.60 Projects in Disputed Areas

No

Not relevant

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered?

No

Public Disclosure



Financing Partners

Western Balkans Investment Framework (WBIF) will finance the Feasibility Study and related Project documentation, incl. ESMF

B. Proposed Measures, Actions and Timing (Borrower’s commitments)

Actions to be completed prior to Bank Board Approval:

- 1) The draft EMSF and site specific EMSPs for the locations known and designed before appraisal will be prepared disclosed and consulted prior to appraisal. ESMF will also include LMP as section
- 2) The draft stakeholder engagement plan will be prepared disclosed and consulted prior to appraisal.

Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):

The measures and actions to be outlined in the ESCP will include the preparation and implementation of:-

- i. Environmental and Social Management Plans or Environmental and Social Management Checklists for all relevant sub-project investments.
- iii. Traffic Management Plans
- iii. The implementation of the Labor Management Plan (as part of ESMP).
- iv. The operationalization of the Stakeholder Engagement Plan including the project level grievance mechanism as outlined in the Stakeholder Engagement Plan
- v. Capacity building for ESF implementation.

C. Timing

Tentative target date for preparing the Appraisal Stage ESRS	31-Oct-2019
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IV. CONTACT POINTS

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Implementing Agency(ies)

Implementing Agency: Public Enterprise Macedonia Broadcasting (JP MRD)

V. FOR MORE INFORMATION CONTACT

Public Disclosure



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VI. APPROVAL

Task Team Leader(s):	Natalija Gelvanovska-Garcia
Practice Manager (ENR/Social)	Javaid Afzal Recommended on 10-Oct-2019 at 17:25:21 EDT
Safeguards Advisor ESSA	Nina Chee (SAESSA) Cleared on 16-Oct-2019 at 09:22:27 EDT