Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 04/11/2022 | Report No: ESRSA02101

BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Nepal	SOUTH ASIA	P176543	
Project Name	Digital Nepal Acceleration (DNA) Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Digital Development	Investment Project Financing	4/11/2022	6/16/2022
Borrower(s)	Implementing Agency(ies)		
Nepal	Ministry of Communication and Information Technology , Nepal Telecommunications Authority, Ministry of Communications and IT		

Proposed Development Objective

To expand access to broadband in project areas, to improve the capacity of individuals and businesses to engage in the digital economy, and to enhance the foundations for digital government.

Financing (in USD Million)	Amount
Total Project Cost	180.00

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]

The proposed Project would include four components.

Component 1: Expanding access to broadband

- Promote rural broadband access and use through (i) funding to share costs and de-risk private sector investments (awarded competitively) to expand climate-resilient high-speed broadband services to about 100 selected municipalities, including public institutions (e.g., health centers, schools); (ii) programs—designed with community input— that will promote digital literacy and broadband adoption among specific user groups (e.g., girls and women, students, persons with disabilities, low-income households, people from areas vulnerable to climate change, and small businesses).
- Improve international connectivity through creation of a virtual landing station and pre-purchase of high-capacity international bandwidth for the Government and priority users (e.g., educational institutions).

Component 2: Improving the capacity of individuals and businesses to engage in the digital economy

- Develop advanced digital skills of individuals through a program that is responsive to private sector demand for digitally skilled workers (in IT-related sectors and possibly across other sectors and occupations) and seeking to increase employability of participants (with a focus on women, persons with disabilities, and people from rural areas, or areas vulnerable to climate change-related economic transitions).
- Promote digital businesses, through: (i) support to incubation and acceleration programs for digital startups; and (ii) advisory support and feasibility studies to develop the planned Information Technology (IT) Park and a network of innovation and cocreation centers.

Component 3: Enhancing the foundations of digital government

- Enhance the digital trust ecosystem through the development of digital signatures, the cybersecurity regulatory framework and capacity within the Government, including the establishment of a national cybersecurity cell, enhancement of the personal data protection regulatory framework.
- Increase resilient data center capacity by supporting policy development, standards, and infrastructure, and the enhancement of capacity, cybersecurity, and climate-resilience of the government's data centers.
- Implement select digital services through the design and implementation of at least ten Digital Nepal Framework initiatives (beyond those supported through the other Project activities) including through partnerships with the private sector and other stakeholders (e.g., development partners, civil society organizations).

Component 4: Project management and coordination

- This will support Project management and coordination functions, including capacity building of staffs of the implementing agencies. It will finance technical support, fiduciary, environment & social (E&S) standards implementation, and monitoring & evaluation. It includes incremental operating costs relevant to the Project.

D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

The project coverage is nationwide. Nepal's vision for digital development is outlined in the Digital Nepal Framework (DNF) 2019 which seeks to digitize eight sectors (e.g., health, education, agriculture) through 80 initiatives. The Project will help implementation of this framework. The private sector and civil society also note the need for

inclusive digital development. There is interest from the private sector to play a more-strategic role, building on investments in telecommunication connectivity, digital financial services, and e-commerce platforms. The 15th National Plan also includes clear reference to Nepal's digital ambitions. The Government of Nepal (GoN) recognizes that digital development plays an important enabling role to support the Green, Resilient, and Inclusive Development (GRID) Agenda.

Digital inclusion (ensuring that all individuals and businesses have access to affordable, high-speed connectivity and secure digital services) is held back by gaps in coverage and affordability of high-speed connectivity. Coverage gaps are typically due to high costs of deployment especially in rural and in mountainous areas, due to high prices of upstream international connectivity, but also limited competitive pressure on the telecommunications market to expand coverage and innovate services. Digital public and private service delivery is hampered by gaps in the infrastructure (e.g., limited data center capacity), poor coordination among public agencies and institutional capacity constraints, limited funding for digitization of public services, limited human resources to support digitization efforts in the public and private sectors, and missing foundational elements (e.g., a foundational ID, digital signatures). The rural-urban gap in internet use is 32 percent, the gender gap is 33 percent, and a 67 percent gap related to disability status. On the user side, the disparities in the access and use of online services are caused by lack of awareness and digital skills, affordability issues, as well as absence of women-specific programs and accessible platforms. These digital divides cause further inequalities, widening opportunity gaps in access to online learning, telehealth, and digital financial services. For example, UNICEF has found that two-thirds of Nepal's schoolchildren were unable to access remote learning during school closures. The Project will strengthen digital foundations while facilitating digitization across the economy as part of its effort to build back better from the COVID-19 pandemic and implement the GRID framework.

D. 2. Borrower's Institutional Capacity

The Ministry of Communications and Information Technology (MoCIT) will implement the Project. MoCIT, DoIT, NITC, and NTA will be responsible for implementation of specific activities. Critically, all technical specifications, terms of reference, delivery acceptance, other technical and quality assurance mechanisms, and payments made to vendors and contractors would be the responsibility of each of the Implementing Agencies (IA).

The Project will constitute a Project Steering Committee (PSC), chaired by the Secretary of MoCIT and with the participation of representatives of key agencies involved in the implementation of various activities, including the MoCIT itself and its Department of IT (DoIT) and the National IT Center (NITC), the Nepal Telecommunication Authority (NTA). A Project Steering Committee (PSC) will provide strategic oversight to ensure smooth implementation of the overall Project and its activities by supporting coordination among the implementing agencies and with other Government agencies and stakeholders. . Each implementing agency would submit its Annual Work Plan for activities to be financed by the Project to PSC, which would consolidate and recommend budget allocations as needed.

A Project Management Unit (PMU) will be established in the MoICT. The PMU will have two roles: as a coordinating body for all Project administrative activities and as an implementing entity for the MoCIT for specific parts of the Project. It will operate under the direction of the Joint Secretary of MoCIT responsible for implementation of the DNF. As defined in the project's FA and the POM, the PMU will support the procurement, financial management,

environmental and social standards implementation reporting and monitoring tasks for all project activities and development of regular Project reports (in accordance with World Bank standards and regulations), for all the implementing agencies involved in the Project. The PMU will hire one environmental and one social specialist to implement E&S measures following the ESMF, LMP and SEP. Each IA will identify a Focal Point who will be the coordinator interfacing between the PMU and the IA to ensure smooth implementation of Project activities. The focal points will work with the PMU to ensure compliance with ESSs in their respective project activities. Each IA will establish an internal Project Implementation Team (PIT) including the one Environmental and Social Specialist (PIT ESS), to oversee and manage the activities under its responsibility. The PIT members will be dedicated to the Project-related activities for the maximum time possible to ensure timely and high-quality implementation.

MoCIT, NTA, DoIT and NITC have limited experience in implementing externally funded projects and no recent experience of implementing World Bank financed projects following Environmental and Social Framework (ESF). The PMU will recruit environmental and social specialists and other implementing agencies will designate E&S focal points in their Project Implementation Teams (PIT). All implementing agencies will need significant capacity building in E&S planning and management. The ESMF and ESCP include relevant E&S training and capacity building measures.

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC) — Moderate

Environmental Risk Rating — Moderate

The project activities to be financed include civil works related to enhancement of broadband infrastructure, deployment of high-speed broadband networks based on fiber optic cable or advanced wireless technologies to facilitate remote work during and after the COVID-19 pandemic, and upgrading middle-mile network infrastructure. In addition, a global standard national cyber security center(NCSC) will be established and technical assistance will be provided to conduct feasibility study for establishing an IT Park. The government will construct four data centers (physical infrastructure considered as “associated facilities” for the Project) where the Project will finance supply and installation of IT and ancillary equipment. The environmental risks and impacts are expected to be site-specific, short-term, and reversible. Potential environmental impacts include: (i) soil removal and vegetation clearance for the construction of the new data centers, cyber security center and for the deployment of fiber optic cables; (ii) generation of solid waste from residual construction materials; (iii) management and disposal of electronic waste (E-waste) as a result of the decommission of old equipment which includes unused e-gadgets, fibers and electronic wires; and (iv) nuisance related to dust generation, vibration and noise during construction activities. Waste management and safe disposal of construction debris as well as managing construction impacts, including change in traffic patterns impacting road safety conditions and access, dust, noise and vibration will be important during the construction phase. E-waste will be generated during the operational phase as a result of the decommissioning of old equipment which includes unused e-gadgets, fibers and electronic wires during operation phase.

Social Risk Rating — Moderate

Social risks and impacts associated with project activities will generally result from the construction of network infrastructures and associated facilities on a nationwide scope, including in the hill and mountainous regions.

Potential risks include i) temporary restriction of access to land/property and livelihood impacts during construction of new data center and laying of fiber optic cables depending on the length and location of the cables (e.g. roadside vendors); ii) cumulative and/or more severe impacts faced by IPs and other vulnerable groups such as women-headed households, elderly population, people with disabilities on livelihoods/physical displacement on the potential route of fiber optic network; iii) the project implementation units (PIU's) management capacity to engage in safeguarding social risks; iv) weak enforcement of national regulation; v) community health and safety; vi) potential influx of labor into targeted areas; vii) Occupational Health and Safety (OHS) hazards for the workers; viii) social risks associated with protection of personal data and data privacy considerations, and; ix) social exclusion of women, population living in rural and small town areas, persons with disabilities and other members of vulnerable groups in accessing project benefits. There is also continued risks associated with the COVID-19 pandemic and a need for having a robust plan on COVID-19 protocols. However, none of these risks are irreversible and long term and may be avoided, minimized and mitigated through appropriate E&S planning and management.

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:

Enhancement of broadband infrastructure , deployment of high speed broadband networks upgrading and expansion of middle-mile network infrastructure and establishment of global standard cyber security center , Towers, and construction of data centers (associated facilities) may cause environmental and social risks in areas of occupational and community health and safety issues (OHS and CHS; solid and e-waste management; road safety conditions and access, dust, noise and vibration; damage to assets; influx of labor; SEA/SH risk; inadequate stakeholder engagement; impacts on/exclusion of project benefits for women, elderly, small business owners and other IPs and vulnerable groups. These vulnerable groups may face barriers to access to broadband services because of affordability, lack of inclusion and, lack of digital awareness. Another key social risk that may arise due to enhanced access to internet would be increased cyber crimes especially again women and children.

To ensure that all risks related to project activities are adequately managed, an ESMF has been prepared in line with the Bank's Environmental and Social Standards and national regulations including Government of Nepal's Environmental Protection Act 2019 and Environmental Protection Rule 2020 and disclosed.

The precise location and scope of the new infrastructure investments to upgrade and expand the network are not defined at this stage and therefore a framework approach has been adopted. The ESMF includes the positive and negative, direct and indirect environmental and social impacts of the project and defines appropriate mitigation and management measures in accordance with the mitigation hierarchy (anticipation and avoidance, minimization, mitigation, offset or compensation). The ESMF provides guidance on environmental and social screening and procedures for the development of environmental and social management plans (ESMPs) to be prepared by the Implementing Agencies, when necessary and before any works begin based on the specific characteristics of the project activities. In addition, the client needs to undertake an environment and social screening and required E&S instruments in the first stage of early implementation to influence technical designs and before works commence.

The client is planning to establish four data centers (in Khumaltar, Kohalpur, and possibly at Butwal and Dharan). The construction of these data centers will not be financed by the project. However, construction of these facilities have been planned and will be carried out contemporaneously with the project. These data centers are directly and significantly related to the project and are necessary for the project to be viable and would not have been constructed, if the project did not exist. Therefore, according to the ESF, these centers considered as “associated facilities" and ESF will apply to the construction of these centers.

The Environmental and Social Commitment Plan (ESCP) includes a detailed timeline for implementation of mitigation measures as well as other requirements, including the preparation of sub-project specific ESMPs and RAPs as needed, and additional risk management documents that may be identified during project preparation or during the implementation of the ESMF. No physical works financed by the Project including the data centers (as these are associated facilities) will commence until the final E&S instruments are cleared, disclosed and consulted on.

ESS10 Stakeholder Engagement and Information Disclosure

The Borrower has prepared and disclosed a Stakeholder Engagement Plan (SEP). The SEP describes (i) the project stakeholders, making a distinction between those directly affected by the project and other interested parties; (ii) the timing and methods of engagement with key stakeholders throughout the life cycle of the project, including engagement activities before project appraisal, as well as local-level consultations once the locations of infrastructure interventions is known; (iii) the type of information that will be provided to stakeholders and how feedback from stakeholders will be solicited and recorded, (iv) differentiated measures to remove obstacles to participation as well as allow the effective participation of those identified as disadvantaged or vulnerable, and (v) the project-level Grievance Mechanism to be developed by the borrower. The SEP is a living document and will be updated as required throughout the project’s life cycle.

Key stakeholders of this project include government officials, private sector businesses, internet users, women, people living in rural communities and small towns, members of social minorities, small business owners, people with disabilities, school-going children – other stakeholders will be identified early on in the engagement process. These will also include indigenous groups for whom a culturally appropriate process may be required. The Borrower will seek stakeholder feedback and opportunities for proposed future engagement, ensuring that all consultations are accessible, inclusive and through suitable channels in the local context. The project will include appropriate institutional arrangements to carry out the stakeholder engagement process. Given the anticipated scale of the project activities, and lack of experience of implementing agencies in carrying out stakeholder engagement, specific liaison officers will need to be identified or recruited at the PIU and the field level to coordinate and implement the SEP.

The SEP describes a project-level Grievance Mechanism (GM) accessible to project stakeholders according to the requirements of ESS10 to handle complaints by project-affected people regarding adverse temporary or permanent project impacts. The project GM will be used for workers’ grievances as per ESS2 and land/asset related issues as per

ESS5. The GM will be responsive to the risk of SEA/SH, and the need to be accessible to a wide diversity of stakeholder groups. It will also serve as a platform for continuous feedback from project-affected communities, other interested stakeholders and implementing structures.

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 project will involve direct workers, contracted workers and primary supply workers. A Labor Management Procedure (LMP) has been prepared and disclosed.

The project will adhere to Nepal's Labor Laws and the Bank's standards concerning labor conditions and Occupational Health and Safety (OHS), including child labor. Potential OHS related risks that may arise during construction activities will include risks of falls; handling of heavy loads; electric shocks; failure to use proper protective equipment during construction; procedures for safety measures in relation to physical and chemical hazards in the workplace. The ESMF assesses related OHS risks/impacts and proposes mitigation measures to be incorporated into a Health, Safety and Environmental plan in line with World Bank Group Environment, Health and Safety (EHSG) Guidelines for construction activities. COVID-19 protocols are included in this plan. The ESMF and LMP assess the Nepal labor laws and employment regulations and practices surrounding institutional restructuring to ensure that any changes (e.g. redundancies) due to digitization are managed in accordance with ESS2. All workers will access the Project GRM as described in the LMP and SEP and consistent with ESS2 and ESS10. The Project GRM will include experts familiar with labor related grievances and relevant policies.

ESS3 Resource Efficiency and Pollution Prevention and Management

The construction of the towers and the new data centers and the installation of fiber optic networks may generate non-hazardous waste (tubing, wires, etc) as well as some hazardous waste (including E-waste).

During construction phase, the project may present risks/impacts linked to generation of construction wastes including hazardous wastes, emission to air and noise. The ESMF assesses how resources will be managed efficiently to limit waste generation and to minimize potential adverse impacts on human and environmental health in infrastructure siting and construction. The ESMF in turn presents risk management procedures to manage these issues in line with the mitigation hierarchy and outlines measures to deal with construction debris and hazardous or non-hazardous materials that may need to be disposed off. The cable laying will use existing roads. The impacts will be temporary and will be mitigated with good construction practices. Alternative analysis in technical design documents will assess the potential for use of renewable energy sources (such as solar power for Wi-Fi hotspots, battery storage for backup power, etc.), heating and cooling systems in data centers in the sub-project design. The ESMF outlines measures to ensure that any land-based cable-laying activities minimize pollution and are integrated

with high standards of disaster resilience, including flooding and seismic activity. Prior to construction, site specific ESMPs will be prepared detailing measures to manage potential impacts.

ESS4 Community Health and Safety

Communities' health and safety issues are associated to typical risks/impacts of construction sites as vehicle traffic, dust, noise and vibrations, , increased insecurity faced by community especially by women and girls regarding their safety and mobility due to labor influx and specific hazards including, structural and site access issues.

The laying of fiber optic cables will be performed using trenching in addition to overheard cables and the construction works will transverse public infrastructures such as schools, health centers, district facilities, and across various settings (roads, agriculture lands, amongst others). Similarly, construction of data centers and cyber security centers the communities may expose with construction vehicles and transport, dust emissions, noise from potential construction site. Inappropriate disposal of solid waste if workers lack access to sanitary facilities and if workers are not undertaken precaution measures for COVID-19 then these activities may cause health related issues in communities. These impacts are short -term and can be managed easily by implementing site- specific ESMPs.

Adverse social impacts such as gender-based violence (GBV), sexual exploitation and the transmission of communicable diseases such as HIV/AIDS on affected communities may also occur because of project activities, including labor influx. The client will comply with the community health and safety requirements as stipulated in WBG EHS telecommunication guidelines. These and other issues are reflected in the ESMF, which will provide guidance on the development of measures to address aspects associated with construction activities at the subproject level (e.g. traffic management plans) to be included in eventual project ESMPs and in the contractor's bidding documents. The ESMPs will include provisions to prevent or minimize the spread of COVID-19 to the community.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

Project activities such as establishment of data centers , setting up of cyber security centers, deployment of fiber optic cables and potential establishment of IT Park may require land acquisition, loss of private land/assets and temporary restriction on land use. The construction of the four data centers will not be financed by the project. However, these are considered as "associated facilities" for the project and ESF will apply to these construction activities.

Given that the specific sites for infrastructure interventions are not yet known, the borrower has prepared a Resettlement Policy Framework (RPF) prior to appraisal to clarify resettlement principles, organizational arrangements, and design criteria to be applied to subprojects or project components to be prepared during project implementation when a subproject requires land acquisition. The RPF sets out the procedures to be followed for the

preparation of site-specific Resettlement Action Plans (RAPs) as needed in accordance with the requirements of ESS5, including eligibility criteria for affected persons, procedures and standards for compensation, arrangements for consultations of project affected people, budget and monitoring arrangements.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

The specific locations of the telecommunication towers and data centers to be built is still to be determined while the deployment of fiber optic cables is expected to take place on existing right of ways (RoWs). Due to limited footprint of the infrastructure, no significant impacts on critical, natural or modified habitats are expected. To the extent technically feasible, construction will not occur within official protected areas or other areas of known high biodiversity or ecology value. Nonetheless, in the event construction occurs in or near any of these areas, ESS6 risks and impacts are outlined in the ESMF with adequate mitigation measures in place to ensure the sustainable management of natural resources. Site -specific ESMP will prepare with mitigation hierarchy to mitigate the possible negative impacts caused on forest and biodiversity.

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

There are 59 legally recognized indigenous groups (Adibashi/Janjati) in Nepal, which make up around 37 percent of the population and are spread across the country. This indigenous population is considered vulnerable and marginalized and meets the conditions of ESS7. As the coverage of the project will be nation-wide that will include areas inhabited by IP groups, the ESMF and SEP provide guidelines on how to avoid adverse impacts of the project on these communities and ensure their access to services and potentially participation in project activities and benefits. The SEP includes provisions for consultation with indigenous groups in a culturally appropriate manner. Project activities are not anticipated to cause relocation or impact resources or cultural heritage of these groups.

ESS8 Cultural Heritage

As deployment of optical fiber will be along the RoW of existing road, it is not expected to affect cultural heritage. The E&S screening template includes that the planned infrastructure does not affect any cultural heritage adversely. In addition, the ESMF includes a “Chance Find Procedures”. Potential adverse impacts to tangible and intangible cultural heritage will be further assessed once the site locations are known, and any negative impacts will be addressed in line with mitigation hierarchy through the preparation of site specific ESMPs.

ESS9 Financial Intermediaries

This standard is not currently relevant. The use of Financial intermediaries is not envisaged under the project.

B.3 Other Relevant Project Risks

None

C. Legal Operational Policies that Apply

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

B.3. Reliance on Borrower's policy, legal and institutional framework, relevant to the Project risks and impacts

Is this project being prepared for use of Borrower Framework?	No

Areas where "Use of Borrower Framework" is being considered:

The project will not rely on the Borrower's E&S Framework in the assessment, development and implementation of sub projects. However, the project will follow the ESF guidance and comply with Nepal's E&S legal and regulatory requirements.

IV. CONTACT POINTS

World Bank

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Borrower/Client/Recipient

Borrower: Nepal

Implementing Agency(ies)

Implementing Agency: Ministry of Communication and Information Technology

Implementing Agency: Nepal Telecommunications Authority

Implementing Agency: Ministry of Communications and IT

V. FOR MORE INFORMATION CONTACT

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VI. APPROVAL

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