



GOVERNMENT OF SOMALILAND

**MINISTRY OF INFORMATION COMMUNICATION AND TECHNOLOGY
(MICT)**

**EASTERN AFRICA REGIONAL DIGITAL INTEGRATION PROJECT (EA-RDIP)
SERIES OF PROJECTS (SOP) PHASE I**

***ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)
FOR CAMPUS NETWORK SUB-PROJECT***

UNIVERSITY OF AMOUD

JULY 2026

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Acronyms

C-ESMP	Contractor Environmental and Social Management Plan
EA	Environmental Audit
EA-RDIP	Eastern Africa Regional Digital Integration Project
E&S	Environmental and Social
EHS	Environmental, Health and Safety
EHSS	Environmental, Health, Safety and Social
EIA	Environmental Impact Assessment

ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMF	Environmental and Social Management Framework
ESS	Environmental and Social Standard
GBV	Gender-Based Violence
GIIP	Good International Industry Practice
GRM	Grievance Redress Mechanism
HEIs	Higher Education Institutions
ICT	Information and Communication Technology
IDP	Internally Displaced Person
LMP	Labor Management Procedures
MICT	Ministry of Information and Communication Technology
MoECC	Ministry of Environment and Climate Change
MoLSAF	Ministry of Labour, Social and Family Affairs
NDP	National Development Plan
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment
PIU	Project Implementation Unit
SEA	Sexual Exploitation and Abuse
SEAH	Sexual Exploitation, Abuse and Harassment
SEP	Stakeholder Engagement Plan
SH	Sexual Harassment
SNCHE	Somaliland National Commission for Higher Education
SOP	Series of Projects
WB	World Bank
WBG	World Bank Group
MICT	Ministry of Information Technology and Communication

Executive summary

This Environmental and Social Management Plan (ESMP) has been prepared for the proposed Campus Network Installation Sub-project at Amoud University under the Eastern Africa Regional Digital Integration Project (EA-RDIP). The sub-project aims to design, deploy, test, and operationalize a secure, reliable, scalable, and high-performance campus network to improve teaching, learning, research, administration, communication, and digital service delivery across the university.

The proposed works will be implemented within the existing Amoud University campus and will include site verification, confirmation of network design and cable routes, delivery and installation of routers, switches, cabinets, wireless access points, structured cabling, fibre-optic cables, conduits, electrical connections, grounding, surge protection, and backup power systems where applicable. Limited civil works may also be required, including drilling, wall or ceiling mounting, minor trenching, manhole construction, cable routing, reinstatement of disturbed surfaces, system configuration, testing, and commissioning.

The sub-project is expected to generate significant positive impacts, including improved internet connectivity, better access to e-learning platforms, digital libraries and research resources, enhanced communication between departments, improved administrative efficiency, stronger network security, data protection, system integrity, and reduced dependence on personal mobile data. The project will also support more inclusive digital access for students, staff, women, persons with disabilities, and other university users.

The environmental and social risk rating of the sub-project is considered moderate. The anticipated impacts are expected to be site-specific, temporary, reversible, and manageable, as the works mainly involve ICT installation within an existing university campus and do not require land acquisition, physical displacement, economic displacement, or restrictions on land use. However, the active campus environment, presence of students and staff, and the vegetated setting of Amoud University require careful planning and supervision.

The main environmental risks include minor dust, noise, vibration, localized soil disturbance, erosion risk, accidental spills, damage to paved surfaces or existing infrastructure, and disturbance to trees, grass cover, landscaped areas, forest patches, and shaded spaces. The works may also generate packaging materials, cable offcuts, excavated materials, damaged components, batteries, obsolete devices, and

other construction and electronic waste. E-waste will be managed in line with the EA-RDIP E-Waste Management Plan, including inventory control, segregation, secure storage, and transfer to approved handlers. Burning, dumping, informal dismantling, and uncontrolled recycling of electronic waste will be prohibited.

The main social risks include temporary disruption to lectures, examinations, offices, laboratories, libraries, walkways, ICT rooms, and student services. Students, staff, visitors, and service providers may also be exposed to safety risks from open trenches, loose cables, ladders, tools, debris, delivery vehicles, electrical works, and restricted access routes. These risks will be managed through advance communication, coordination with the university, safe work scheduling, barriers, warning signs, trench covers, alternative access routes, and good housekeeping.

Labor and occupational health and safety risks may arise from electrical works, drilling, trenching, cable pulling, working at height, lifting, manual handling, battery handling, and use of tools. These risks will be managed through the EA-RDIP Labor Management Procedures, written employment terms, prohibition of child and forced labor, fair payment, qualified workers, PPE, toolbox talks, first-aid arrangements, emergency response, workers' GRM, and incident reporting.

GBV/SEA/SH risks are considered low but non-negligible due to interaction between workers, students, staff, visitors, and service providers in an active university setting. All workers will be required to sign Codes of Conduct, receive awareness training, and comply with zero tolerance for harassment, exploitation, and abuse. SEA/SH complaints will be handled confidentially and referred through survivor-centered procedures.

The MICT PIU will have overall responsibility for implementation oversight and E&S compliance. The PIU Environmental, Social, and GBV/SEA/SH Specialists will monitor implementation, review contractor reports, verify compliance, and ensure corrective actions are completed. Amoud University will assign focal persons to support site access, coordination, communication, grievance referral, and scheduling of works. The Contractor will be responsible for day-to-day implementation of mitigation measures and will prepare a site-specific C-ESMP before mobilization.

Monitoring and reporting will be conducted throughout implementation. The Contractor will submit regular EHS/ESMP reports covering mitigation measures, OHS, waste and e-waste, grievances, stakeholder communication, training, incidents, and corrective actions. The PIU will review and consolidate reports for submission to the World Bank. Serious incidents will be reported within the required timelines.

A project-level Grievance Redress Mechanism will remain accessible to students, staff, workers, visitors, service providers, and other campus users. Complaints will be recorded, tracked, addressed, and closed within agreed timelines. Overall, the sub-project is expected to deliver important educational, institutional, and digital benefits while presenting moderate, localized, temporary, and manageable environmental and social risks, provided that this ESMP, the C-ESMP, EA-RDIP ESF instruments, World Bank ESSs, WBG EHS Guidelines, national requirements, and GIIP are fully implemented.

Chapter 1. Introduction

Through the World Bank's support, 'The Eastern Africa Regional Digital Integration Operation (EA-RDIP) (2023-2028) is being prepared to address connectivity needs for countries in the Horn of Africa region. The proposed program aims to advance the regional integration of digital markets in Eastern Africa through supporting cross-border connectivity, harmonization of data and e-commerce regulations and policies, and removal of trade barriers, with the vision of establishing a Single Digital Market (SDM). Regional efforts to move towards an SDM are envisioned to have economic and welfare gains for all participating economies and will be especially beneficial for smaller economies to tap larger regional markets for economic expansion. It is proposed for the project components to follow the SDM framework and for

participating countries (Somaliland, South Sudan & Somalia in phase 1) to tailor each component for its investment and technical assistance needs.

Specifically, in Somaliland, EA-RDIP will support the government in establishing digital connectivity and integrating with the regional digital market. EA-RDIP aims to increase access to broadband and digital services by developing and integrating digital markets in the Eastern Africa region. The proposed interventions will provide investment financing to address connectivity infrastructure gaps and technical assistance to ensure regional harmonization of regulations and standards towards the development of the regional digital market for the countries in the Horn of Africa region. The project has four components, as briefly described below:

- *Component 1. Connectivity Market Development and Integration.* This component will provide support to develop terrestrial cross-border connectivity and expand backbone and last-mile connectivity to rural and remote communities.
- *Component 2. Data Market Development and Integration.* This component will provide support to the integration and development of the data market, to enable secure exchange, storage, and processing of data across borders, including strengthening the environment for cybersecurity.
- *Component 3. Online Market Development and Integration.* This component will provide support to the integration and development of the online market, through targeted support for e-service enablers and digital skills.
- *Component 4. Project Management and implementation.* This component will provide technical assistance and capacity support for project preparation and implementation.

EA-RDIP in Somaliland is being implemented by the Ministry of Information and Communication Technology (MICT). A Project Implementation Unit (PIU) has been set up at the MICT responsible for overall implementation, fiduciary, Environment and Social Framework (ESF) compliance for the project.

1.1 Sub-project rationale

The proposed Campus Network Installation Sub-project is justified by the need to strengthen digital connectivity within Somaliland's public higher education institutions and support the country's wider digital transformation agenda. Higher Education Institutions play a vital role in improving education quality, public service delivery, innovation, employability, and sustainable economic growth. Reliable and high-quality internet connectivity is therefore essential to improve teaching, learning, research, administration, and coordination within universities. The endorsement letter from MICT and the Somaliland National Commission for Higher Education

confirms strong institutional support for enhancing digital infrastructure in HEIs, including the establishment of campus networks and expansion of institutional connectivity under EA-RDIP.

The sub-project will address existing connectivity gaps by improving access to digital services across selected public universities. It will support e-learning, digital libraries, online research, student information systems, communication between departments, and administrative efficiency. The first phase prioritizes universities based on institutional capacity, student population, and staffing levels, with the University of Hargeisa, Amoud University, and University of Burao among the key institutions selected for support.

Overall, the sub-project is expected to contribute to improved learning outcomes, enhanced institutional performance, stronger digital skills, and better access to technology for students, lecturers, researchers, and university staff. It also provides a foundation for future inter-university connectivity and long-term digital development across Somaliland's higher education sector.

1.2 Sub-project Description

1.2.1 Project Location

The sub-project is located within the main campus of Amoud University, situated on the outskirts of Borama City in the Awdal Region of Somaliland. The campus is an established higher education environment comprising academic buildings, administrative offices, lecture halls, laboratories, libraries, student facilities, internal roads, pedestrian walkways, landscaped areas, and supporting infrastructure.

The proposed campus network activities will be implemented entirely within the existing university premises and will not require land acquisition, physical displacement, economic displacement, or restrictions on land use. Network infrastructure will be installed across selected academic, administrative, and service buildings based on the approved technical design and verified cable routes.

A project location map should be included in this section to show the Amoud University campus, surrounding access roads, nearby environmental and social receptors, existing buildings and infrastructure, and the specific areas where campus network activities will be undertaken. The proposed sub-project is intended to strengthen the university's existing digital infrastructure and improve the reliability, security, and coverage of internet connectivity in support of teaching, learning, research, communication, and administrative service delivery.



Figure 1: Location of the Amoud University campus and proposed sub-project area

1.2.2 Project Phases

The sub-project will be implemented through three principal phases: the pre-implementation phase, the implementation phase, and the operation phase.

The pre-implementation phase will include technical assessments, site verification, confirmation of the network design and cable routes, environmental and social screening, stakeholder consultations, procurement of contractors and equipment, and preparation and approval of the required environmental and social instruments.

The implementation phase will involve the delivery, installation, configuration, testing, and commissioning of the campus network infrastructure. Activities may include fibre-optic and structured cabling, installation of routers, switches, network cabinets, wireless access points, backup power systems, and associated electrical connections. Limited civil works may also be undertaken where necessary.

The operation phase will begin after successful testing and commissioning of the network. During this phase, the installed infrastructure will be used to support teaching, learning, research, communication, administration, and access to digital services. Routine inspection, maintenance, software updates, equipment

replacement, cybersecurity management, and environmentally sound management of e-waste will continue throughout the operational life of the network.

1.2.2.1 Pre-implementation Phase

The pre-implementation phase will include all preparatory activities required before commencement of physical work. The phase will begin with technical site assessments to verify the location and condition of existing infrastructure, confirm the network design, identify cable routes, determine equipment locations, and assess electrical and backup power requirements.

The assessments will also identify existing utilities, internal roads, drainage channels, landscaped areas, trees, walkways, classrooms, offices, laboratories, libraries, and other sensitive locations that may be affected by the works. Cable routes and equipment locations will be selected to minimize disruption, avoid unnecessary vegetation clearance, prevent damage to existing infrastructure, and maintain safe access for students, staff, visitors, and persons with disabilities.

Environmental and social screening will be completed to identify potential risks associated with occupational health and safety, electrical works, working at height, trenching, drilling, access disruption, waste generation, e-waste, community safety, labor conditions, SEA/SH, and stakeholder grievances.

Consultations will be undertaken with Amoud University management, the university ICT unit, academic and administrative staff, students, representatives of vulnerable groups, campus service providers, and other relevant stakeholders. The consultations will provide information on the proposed activities, implementation schedule, expected benefits, potential risks, mitigation measures, temporary access arrangements, and available grievance reporting channels.

Procurement of contractors, materials, and equipment will also be undertaken during this phase. Environmental, social, health, safety, labor, waste management, e-waste management, stakeholder engagement, and Code of Conduct requirements will be incorporated into bidding documents and contracts.

Before mobilization, the Contractor will prepare a site-specific Contractor Environmental and Social Management Plan aligned with this ESMP and the applicable EA-RDIP environmental and social instruments. The C-ESMP and supporting plans will be reviewed and approved by the PIU before any physical works commence.

1.2.2.2 Implementation Phase

The implementation phase will involve the installation, configuration, testing, and commissioning of the campus network within Amoud University. Activities may include installation of fibre-optic cables, structured cabling, routers, switches, network

cabinets, wireless access points, electrical connections, grounding systems, surge protection, backup power systems, conduits, poles, manholes, and cable trays.

Minor civil works may be undertaken where technically necessary. These may include drilling, trenching, excavation, fixing conduits, wall or ceiling modifications, installation of cable supports, minor electrical works, and reinstatement of affected walls, floors, roads, walkways, landscaped areas, and other surfaces.

The Contractor will be responsible for implementing environmental, social, health, and safety measures throughout this phase. Work areas will be clearly marked and secured using barriers, warning signs, trench covers, and controlled access arrangements. Safe alternative routes will be provided where walkways or entrances are temporarily affected.

The Contractor will coordinate the work programme with Amoud University management and the academic calendar to minimize interference with lectures, examinations, laboratory activities, office operations, and student services. Noisy, disruptive, or high-risk activities will be scheduled during less busy periods wherever practicable.

Workers will be provided with appropriate personal protective equipment and trained in safe work procedures. Qualified personnel will undertake electrical installations, fibre-optic works, network configuration, and other specialized activities. Task-specific risk assessments, toolbox talks, first-aid arrangements, fire prevention measures, emergency response procedures, electrical isolation, ladder safety, manual handling procedures, and incident reporting requirements will be implemented.

All waste generated during installation will be segregated at source. Packaging materials, cable offcuts, excavated materials, damaged fittings, general waste, hazardous waste, batteries, and electronic waste will be collected, stored, transported, and disposed of through approved channels. E-waste will be securely stored in a weather-protected area and managed in accordance with the EA-RDIP E-Waste Management Plan. Burning, dumping, uncontrolled dismantling, and informal recycling of electronic components will be prohibited.

All workers will sign and comply with a Code of Conduct addressing respectful behavior, discrimination, harassment, GBV, SEA, and SH. Workers will receive mandatory awareness training, and confidential grievance channels will be available to workers and campus users.

Following installation, the Contractor will test and certify the network, address identified defects, restore affected areas, remove waste and temporary barriers, and complete final commissioning in coordination with the PIU and Amoud University.

1.2.2.3 Operation Phase

The operation phase will begin after successful installation, testing, certification, and commissioning of the campus network. During this phase, the network infrastructure will be used to improve internet connectivity, digital learning, research, communication, collaboration, data management, and administrative services across Amoud University.

Amoud University management and its ICT unit will be responsible for the routine operation, security, maintenance, and responsible use of the installed network infrastructure. The university will maintain appropriate access controls, equipment-room security, network monitoring, password and authentication requirements, cybersecurity measures, system backups, and incident-response procedures.

Routine maintenance activities may include inspection of routers, switches, cabinets, access points, cables, electrical connections, batteries, and backup power systems. Other activities may include software and firmware updates, troubleshooting, network performance monitoring, replacement of damaged components, repair of cables, upgrading of security controls, and testing of backup and redundancy systems.

Any damaged, obsolete, or end-of-life electronic equipment generated during operation will be recorded, segregated, securely stored, and transferred to approved or authorized e-waste handlers in accordance with the EA-RDIP E-Waste Management Plan. Electronic equipment and batteries will not be burned, dumped, informally dismantled, or disposed of together with general waste.

The project-level Grievance Redress Mechanism will remain available during the operation phase to receive and address concerns related to network performance, service interruption, equipment maintenance, safety, accessibility, data security, inappropriate use of the network, or any other project-related issue.

The operation of the campus network is expected to deliver long-term benefits, including improved access to digital learning platforms, stronger research capacity, enhanced administrative efficiency, improved network security and system integrity, reduced reliance on personal mobile data, and more equitable access to reliable digital services for students, staff, women, persons with disabilities, and other university users.

1.2.3 Description of Sub-project Activities

The Campus Network Sub-project aims to design, deploy, test, and operationalize a secure, scalable, reliable, and high-performance digital network across Amoud University. The network will support academic, administrative, research, and digital learning activities while contributing to the university's broader digital transformation.

Amoud University currently experiences connectivity challenges that may include unreliable internet access, fragmented network infrastructure, limited bandwidth, uneven network coverage, weak network management systems, and restricted access to digital learning resources and research platforms. These constraints affect the efficiency of teaching, learning, research, communication, and administrative service delivery.

To address these gaps, the sub-project will support the installation and operationalization of campus network infrastructure within selected buildings and service areas of Amoud University. The proposed activities are expected to include:

- technical site verification and confirmation of the network design;
- identification and marking of approved cable routes;
- delivery, handling, and temporary storage of ICT equipment and materials;
- installation of routers, switches, network cabinets, wireless access points, structured cabling, fibre-optic cables, conduits, cable trays, and related equipment;
- installation of electrical connections, grounding, surge protection, and backup power systems where applicable;
- limited drilling, wall or ceiling mounting, trenching, manhole construction, and minor surface modifications where required;
- system configuration, network security setup, testing, certification, and commissioning; and
- restoration and cleaning of all areas affected by installation activities.

The works will be undertaken within an active university environment and are expected to generate moderate, site-specific, temporary, and manageable environmental and social risks. Potential environmental impacts may include dust, noise, vibration, minor soil disturbance, localized erosion, accidental spills, disturbance to grass cover, shade trees or landscaped areas, and damage to paved surfaces or existing infrastructure. The activities may also generate packaging waste, cable offcuts, excavated materials, damaged components, batteries, obsolete equipment, and other forms of construction and electronic waste.

Potential social and community health and safety risks may include temporary disruption of lectures, examinations, laboratory activities, administrative services, and student movement. Access to classrooms, offices, libraries, laboratories, walkways, and other facilities may be temporarily restricted during trenching, cabling, drilling, or equipment installation. Students, staff, visitors, and small business operators may also be exposed to open trenches, loose cables, ladders, tools, construction materials, electrical works, delivery vehicles, noise, dust, and temporarily closed access routes.

Other potential risks include occupational injuries, accidental damage to existing utilities, poor communication with campus users, exclusion of vulnerable persons from consultations, unsafe working conditions, use of unqualified personnel, delayed

payment of workers, inappropriate worker conduct, SEA/SH risks, equipment theft or tampering, unauthorized network access, system failure, data security breaches, and grievances from students, staff, workers, visitors, or neighboring communities.

These risks will be managed through implementation of this ESMP and an approved site-specific Contractor Environmental and Social Management Plan. Measures will include good housekeeping, advance communication, careful work scheduling, controlled access, warning signs, physical barriers, safe pedestrian diversions, use of personal protective equipment, qualified technical personnel, proper waste segregation, secure e-waste storage, Code of Conduct enforcement, stakeholder engagement, grievance management, and adherence to Somaliland national requirements, the World Bank Environmental and Social Framework, the World Bank Group Environmental, Health and Safety Guidelines, and Good International Industry Practice.

1.2.4 Project alternatives

This subsection (1.5) discusses the project alternatives considered for the proposed Campus Network Installation Sub-project at the University of Amoud. The purpose is to ensure that the selected option is technically feasible, environmentally and socially acceptable, cost-effective, and aligned with the objectives of EA-RDIP and the University's digital transformation needs.

No-Project Alternative: Under this option, the campus network installation would not be implemented. This would avoid short-term construction-related impacts such as dust, noise, vibration, waste generation, e-waste, access disruption, and occupational health and safety risks. However, the existing connectivity challenges would remain, including unreliable internet connectivity, fragmented ICT infrastructure, limited bandwidth, weak network management systems, and restricted access to digital learning resources. Therefore, this option is not preferred because it would limit improvements in teaching, learning, research, administration, and digital transformation at the University of Amoud.

Proposed Project Alternative: This is the preferred option and involves the design, deployment, and operationalization of a secure, scalable, and high-performance campus network within the existing University of Amoud campus. The activities include site verification, network design confirmation, delivery and installation of routers, switches, cabinets, access points, structured cabling, limited civil and electrical works, system configuration, testing, and commissioning. The alternative is preferred because it directly addresses the university's connectivity gaps and is expected to generate significant positive impacts for students, lecturers, researchers, and administrative staff.

Alternative Installation Methods and Routing: During implementation, the project should prioritize the use of existing service corridors, walls, ceilings, cable trays, conduits, and internal utility routes wherever feasible. This will reduce the need for new trenching, drilling, manhole construction, vegetation disturbance, and damage to paved surfaces. Where trenching or drilling is unavoidable, works should be limited to the minimum required area, properly supervised, and followed by immediate reinstatement.

Alternative Work Scheduling: The project should also consider alternative work schedules to minimize disruption to university activities. Noisy, dusty, or access-restricting works should preferably be conducted during weekends, holidays, semester breaks, or low-activity periods. Works should avoid examination periods, lectures,

library peak hours, and sensitive academic activities. This alternative will help reduce inconvenience to students, lecturers, staff, and visitors.

1.3 Scope and structure of this ESMP

This ESMP applies to all activities under the proposed Campus Network Installation Sub-project at the University of Amoud. The scope covers the pre-implementation, implementation, and operation phases, including site verification, confirmation of network design, delivery and installation of ICT equipment, cable laying, drilling, mounting, minor trenching, manhole construction, electrical works, configuration, testing, commissioning, operation, maintenance, and management of related e-waste.

The ESMP covers the assessment and management of environmental and social risks that are associated with sub-project activities, including but not limited to dust, noise, vibration, solid waste, e-waste, hazardous waste, minor soil disturbance, occupational health and safety, community health and safety, temporary access disruption, traffic and pedestrian safety, labor management, stakeholder engagement, GBV/SEAH prevention, grievance redress, and monitoring and reporting. The ESMP is structured to include the project description, policy and legal framework, baseline environmental and social conditions, assessment of risks and impacts, mitigation measures, monitoring arrangements, institutional responsibilities, capacity building, GRM, disclosure arrangements, and implementation budget.

1.4 Disclosure of the ESMP

The final cleared ESMP will be publicly disclosed to ensure transparency, accessibility, and stakeholder awareness of the environmental and social management measures for the University of Hargeisa Campus Network Installation Sub-project. The ESMP will be disclosed on the Ministry website and the project website, and will also be shared with the University administration, Contractor, PIU, and World Bank team.

The disclosed ESMP will serve as the main reference document for implementation, supervision, monitoring, reporting, and compliance. It will ensure that all relevant parties understand the identified risks, mitigation measures, institutional roles, reporting requirements, grievance procedures, and contractor obligations before and during implementation.

CAMPUS NETWORK FOR SELECTED PUBLIC UNIVERSITIES AMOUDUNIVERISTY

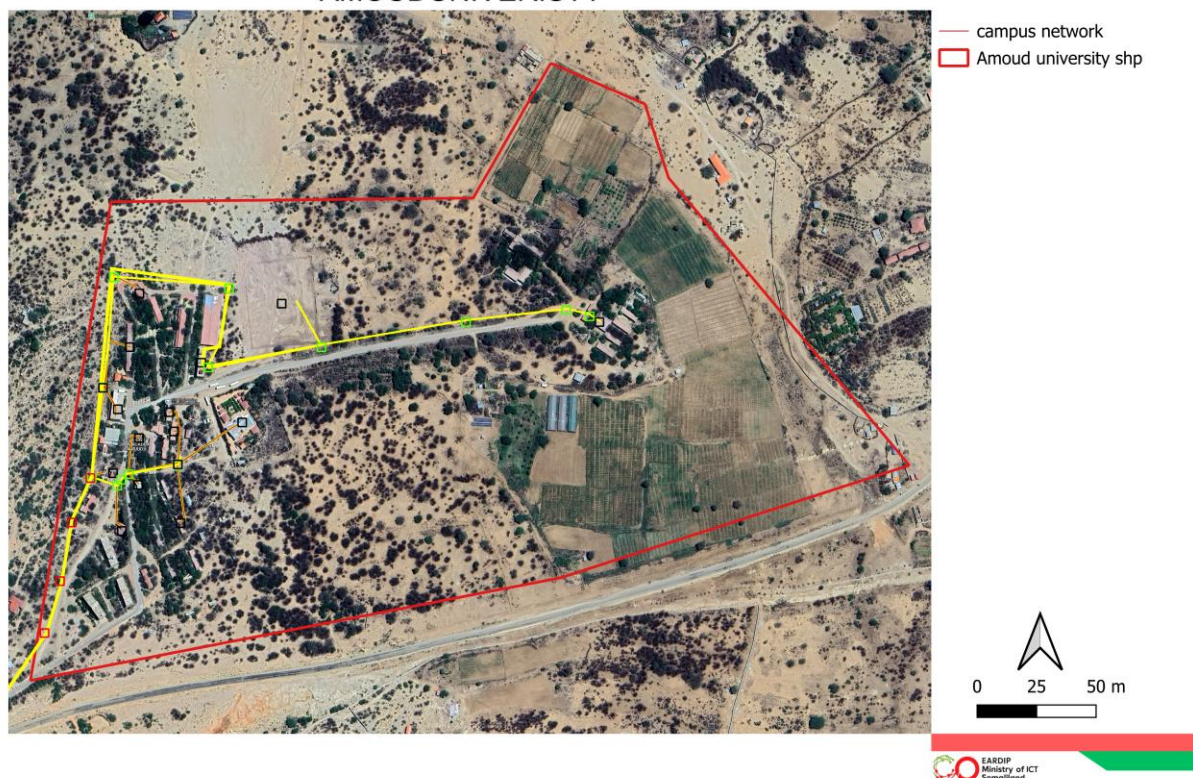


Figure 2: the map shows fibre optic routes inside the university of Amoud

Chapter 2. Policy, Legislative and Institutional Frameworks

2.1 Somaliland National legislation, policies and Laws

The Constitution of the Republic of Somaliland (2001) forms the foundation of environmental and land governance. Article 18 of the constitution gives special priority to the protection and safeguarding of the environment, and wellbeing. Article 12 establishes that land is a public asset owned by the nation and managed by the state, with the government responsible for exploration and exploitation of natural resources on both land and sea. Also, Article 18 emphasizes disaster responses, including famine, epidemics, storms, and earthquakes.

- **The Somaliland Environmental Management Act (2014):** Building on constitutional provisions, the Somaliland Environmental Management Act (2014) operationalizes Articles 12(4) and 18(1) by requiring Environmental Impact Assessments (EIA) for projects likely to affect land, water, agriculture, industry, transport, or energy. This legislation provides the first systematic mechanism for integrating environmental considerations into development planning.
- **The National Environmental Policy** provides the framework for sustainable environmental governance, promoting EIA processes, biodiversity conservation, environmental audits, community participation, and integration of cross-cutting issues such as climate change and gender.

The Ministry of Environment and Climate Change (MoECC) is the lead authority for environmental management. Its work is guided by the National Environmental Policy (2015), which provides a framework for sustainable environmental governance. The policy emphasizes the right to a healthy environment, harmonization of sectoral laws, and active participation of communities and the private sector. It also promotes EIA, environmental audits, biodiversity conservation, environmental education, and cross-cutting interventions in land tenure, climate change, gender, youth inclusion, and human settlements.

- **Somaliland, Urban Waste Management and Sanitation Laws No 83 of 2018:** This law applies to the solid, liquid, and sanitary waste management in the cities of the Republic of Somaliland and consisting of 64 articles, mainly aims to:
 - o have clean cities that are safe for public health, and improve their beauty, hygiene, and sanitation;
 - o promote all the social services related to environmental sanitation to strengthen and enhance the availability of a clean environment in which to live;
 - o have a law to strengthen the capacity of the Urban Sanitation and Waste Management;
 - o enable the development of the National Plan for Solid Waste, Liquid, and Sanitation and translate it into national plans;
 - o establish a collaborative framework for collaboration between all stakeholders in the development of waste management and sanitation;
 - o encourage the Public-Private Partnership (PPP) system in the sector. The services related to hygiene and sanitation are the responsibility of the local Governments whose duties are detailed in article 5.

The Law deals with the companies responsible for the services related to waste management and with (i) waste companies (art.11); (ii) slaughterhouse companies

(art.12); (iii) waste development and recycling companies (art.13). As for the sub-sectors, the Law considers the following (i) household waste (art.17); (ii) commercial waste (art.18); (iii) industrial waste (art.19); (iv) hazardous waste produced by health facilities (art.20); (v) waste produced in public areas, such as road, schools, markets, fishery-related fields, building. Waste management includes storage and separation, collection, and disposal which are the objects of articles 28-31. Regarding the garbage dumps, article 33 establishes that they have to be placed where the local government and the relevant government agencies have checked to see that it is appropriate. The waste management business is organized through a license and contracts system (art. 34) and with the payment of fees, as provided in article 35.

- **Draft Land Tenure Policy:** A draft Land Tenure Policy seeks to secure equitable access to land, safeguard pastoralists' rights, strengthen tenure security across social groups, and ensure compensation and participation in land-related decision-making. Resource Roles and Responsibilities of Workforce on site. Land tenure remains a critical challenge. Somaliland lacks a comprehensive written law on land acquisition, with governance often falling under Xeer, the traditional customary law.

National Social and GBV regulations, policies and procedures

The Constitution of the Republic of Somaliland (2001) guarantees social welfare, protection of vulnerable groups, labor rights, and safe working conditions under Articles 18, 19, and 20.

Constitutional Provisions Supporting Social Protection and Inclusion:

- o The Constitution of the Republic of Somaliland (2001) establishes the overarching social governance framework. Several articles directly shape social risk management:
- o Article 18 protects personal rights and emphasizes state responsibility in responding to disasters, epidemics, and public emergencies.
- o Article 19 highlights social welfare obligations, mandating support for vulnerable groups including people with disabilities, orphans, and marginalized communities.
- o Article 20 guarantees the right and duty to work under safe and fair conditions, forming the foundation of labor protections and workplace safety standards.

Labor Regulations and Workforce Protection

The Labor Code of Somaliland (2004), commonly referenced in practice, establishes key social protections that are particularly relevant to construction and public-sector projects. Despite variations in implementation, the Code prohibits forced and child labor, promotes equal opportunity and non-discrimination in employment, and requires the provision of safe and healthy working conditions. It also mandates the use of written employment contracts, fair wage practices, and provides workers with entitlements to leave, compensation, and adequate rest of periods.

The Labor Code establishes provisions for safe working conditions, prohibition of child and forced labor, non-discrimination, written contracts, fair wages, and worker entitlements.

Social Protection and Vulnerable Groups

The **National Social Protection Policy (2019)**, led by the Ministry of Labour and Social Affairs (MOLSAF), establishes a national framework for protecting vulnerable populations in Somaliland. The policy focuses on the provision of cash transfers and social assistance, strengthening community-based welfare structures, promoting disability-inclusive programming, and enhancing child protection and family welfare mechanisms to reduce vulnerability and social exclusion.

This policy strengthens social assistance systems and promotes disability inclusion, child protection, and welfare support mechanisms.

Gender and GBV/SEAH-Related Frameworks

The **National Gender Policy (2021)**, led by the Ministry of Labour and Social Affairs (MoLSAF), outlines the Government of Somaliland's commitment to promoting gender equality and advancing women's rights across all sectors. The policy prioritizes enhancing women's economic and political participation, preventing gender-based violence and strengthening survivor support services, promoting gender-responsive institutions and policies, and mainstreaming gender considerations into national development planning. In practice, Somaliland applies relevant international standards through MoLSAF and development partners by enforcing Codes of Conduct for all project workers, establishing mandatory GBV/SEAH reporting pathways, ensuring survivor-centered response mechanisms, and strengthening community awareness, grievance mechanisms, and community health, safety, and public welfare systems.

The policy promotes gender equality, prevention of Gender-Based Violence (GBV), and gender mainstreaming across sectors.

Public Health Regulations (Ministry of Health Development)

These regulations govern communicable disease control, occupational health standards, sanitation requirements in workplaces and public spaces, and health

inspection procedures. They also guide the implementation of construction-site health measures, including worker medical screening, provision of first aid services, emergency preparedness, and the establishment of adequate sanitation and hygiene facilities.

Youth and Social Inclusion Policies

The **Somaliland National Youth Policy (2017-2021)**, with ongoing updates) promotes youth empowerment through employment creation and skills development, enhanced youth participation in governance and decision-making processes, and the provision of safe and inclusive public spaces. The policy also supports stronger institutional coordination and social governance mechanisms to ensure that youth-related interventions are effectively integrated across sectors.

This policy promotes youth employment, skills development, and inclusive participation in governance.

National Development Plan (NDP-3, 2022-2027)

Somaliland National Development Plan III (NDP-3) integrates social development objectives across key thematic areas, including human capital development, gender equality, improved social services delivery, and the promotion of good governance and accountability to support inclusive and sustainable national development.

NDP-3 integrates social development, governance, gender equality, and sustainable economic growth objectives.

Somaliland Telecommunications Law No. 50/2020

The Telecommunications Law No. 50/2020 establishes the legal and regulatory framework for telecommunications networks, internet services, radio frequencies, fibre-optic infrastructure, and related ICT equipment in Somaliland. The law assigns responsibility to the Ministry of Information and Communication Technology (MICT) and the National Telecommunications Commission to regulate the sector, issue and monitor licenses, approve telecommunications equipment, allocate radio frequencies, establish technical and service-quality standards, and protect users' rights. It also promotes investment, fair competition, infrastructure sharing, expansion of fibre-optic networks, and wider access to modern communication services. Relevant to the campus network sub-project, all installed telecommunications equipment and wireless systems must comply with applicable technical standards, equipment-approval requirements, licensing conditions, and frequency-allocation rules. The network should also safeguard the confidentiality of users' information, maintain appropriate service quality, avoid interference with

other communication systems, and be installed and operated in coordination with the competent authorities and licensed service providers.

2.2 Applicable World Bank Environmental and Social standards and guidelines

The sub-project has been screened in accordance with the World Bank Environmental and Social Framework (ESF) to determine the applicable Environmental and Social Standards (ESS). Given the nature and scale of the proposed works—limited to the demolition of an existing structure and construction of a single-storey MICT office within an existing government compound—only ESS 1, ESS 2, ESS 3, ESS 4, ESS 6, ESS 8, and ESS 10 are applicable. These standards adequately address the anticipated environmental, occupational health and safety, labor, community safety, cultural heritage, and stakeholder engagement risks associated with the sub-project.

- **ESS1 - Assessment and Management of Environmental and Social Risks and Impacts:** This standard is fundamental for all project activities, requiring, where necessary, Environmental and Social Management Plans (ESMPs) to manage potential risks. For the campus network activity for public universities, ESS1 necessitates an ESMP specifically addressing issues like E-waste management, dust, waste management, and community health and safety during sub-project implementation.

The sub-project has been screened in accordance with the World Bank ESF and ESS1 is applicable as the sub-project involves civil works that may generate environmental and social risks, including dust emissions, e-waste, hazardous wastes, construction waste, occupational hazards, and temporary disturbances to university students and staff. The preparation and implementation of an Environmental and Social Management Plan (ESMP) ensure that these risks are properly identified, assessed, mitigated, monitored, and reported throughout the project lifecycle.

- **ESS2 - Labor and Working Conditions:** This standard ensures safe and fair labor practices, including working conditions, worker health and safety, and a separate grievance redress mechanism (GRM) for workers. The demolition and construction work of the MICT building requires strict adherence to ESS2 to protect workers from hazards like heavy equipment use and potential exposure to dust or other harmful substances.

ESS2 is relevant because the sub-project will engage direct and contracted workers during demolition and construction phases. Risks include occupational injuries, exposure to dust and noise, use of machinery, and potential labor-related grievances.

Compliance with ESS2 ensures safe working conditions, fair labor practices, prohibition of child and forced labor, implementation of occupational health and safety (OHS) measures, and establishment of workers' Grievance Redress Mechanism (GRM).

- **ESS3 - Resource Efficiency and Pollution Prevention and Management:** ESS3 is relevant to managing pollution and ensuring resource efficiency. For the Ministry site, it applies to managing dust, noise, and waste during demolition and construction, ensuring minimal environmental impact, and applying best practices in resource usage during reconstruction.

ESS3 applies due to potential pollution and resource use during implementation and operation phases. These include generation of E-waste, solid waste, possible hazardous materials, dust emissions, noise, and inefficient use of water and construction materials. The standard ensures the adoption of pollution prevention measures, proper waste management, efficient use of resources, and environmentally sound disposal practices

- **ESS4 - Community Health and Safety:** Focused on protecting the health and safety of nearby communities, ESS4 is critical for the PIU office sub-project to mitigate potential risks from dust, debris, noise, hazardous material exposure, traffic accidents, and potential issues due to labor influx, including sexual exploitation, abuse, and harassment (SEAH). Measures include fencing, safety signage, controlled traffic access and safety measures, prevention of SEAH through awareness raising among the workers and use of workers' code of conduct, and respective communication with residents about safety precautions.

ESS4 is relevant because campus network activities may pose temporary risks to students, staff, small business holders, and other campus users. Potential impacts include dust, noise, debris, traffic-related accidents, accessibility disturbance, and community exposure to excavation and trenching hazards. The standard ensures implementation of measures such as site fencing, safety signage, controlled access, traffic management, workers' Code of Conduct, and community awareness and grievance mechanisms

- **ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources:** focuses on protecting biodiversity, natural habitats, vegetation, and ecosystem services from project-related impacts. For the campus network assignment, the standard is relevant because installation activities may involve

limited trenching, drilling, cable routing, access works, and trimming or removal of vegetation within university compounds. Attention is required at campuses containing mature trees, landscaped areas, or nearby natural and protected vegetation. Measures include avoiding sensitive habitats, minimizing vegetation clearance, using existing access routes and cable corridors, protecting retained trees, preventing unnecessary disturbance to wildlife, controlling invasive species, and restoring disturbed areas after installation.

ESS6 is relevant because the network installation may cause localized impacts on campus vegetation and small habitats, where trees, natural vegetation, and areas containing invasive *Prosopis* have been identified. Although the activities are small-scale and occur mainly within existing developed campuses, improper trenching, material storage, vehicle movement, or waste disposal could damage vegetation and disturb fauna. The standard therefore requires prior inspection of work areas, avoidance of significant trees and sensitive vegetation, prohibition of unnecessary tree cutting or wildlife disturbance, appropriate management of invasive species, reinstatement of excavated areas, and monitoring by the contractor and the Project Implementation Unit.

- **ESS8 - Cultural Heritage:** ESS8 seeks to protect tangible and intangible cultural heritage. ESS8 may be relevant to this sub-project if there is a chance found during excavation works.

Although the sub-project is located within an existing university campus, ESS8 is applicable as a precautionary measure in case any physical cultural resources are encountered during excavation works. A Chance Find Procedure will be included in the ESMP to ensure proper management of any unexpected archaeological or cultural heritage findings

- **ESS10 - Stakeholder Engagement and Information Disclosure:** ESS10 emphasizes the need for ongoing community engagement and information dissemination. For the PIU sub-project, this involves informing stakeholders about construction timelines, risks and potential negative impacts, and benefits, and establishing a grievance mechanism to address concerns.

ESS10 is applicable because the sub-project affects stakeholders within and around the MICT compound. Effective stakeholder engagement is necessary to inform affected parties about project activities, timelines, potential risks, and mitigation measures. The establishment of a project-level Grievance Redress Mechanism (GRM) ensures transparency, accountability, and timely resolution of concerns

The remaining Environmental and Social Standards are not applicable to the MICT office construction sub-project. ESS5 is not triggered as no land acquisition, resettlement, or restrictions on land use are involved; all activities will be undertaken within the Amoud University main campus which is a public land owned by the university. ESS6 does not apply because the site is located in a previously developed urban area with no natural or critical habitats. ESS7 is not relevant as no Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities are present in the sub-project area. ESS9 is not applicable as the sub-project does not involve financial intermediary activities.

Table 1: Applicable E&S standards

E&S Standard	Applicability	Relevance of the standard	Compliance to the standard
ESS 1	Applicable	The sub-project may generate moderate, site-specific and temporary E&S risks, including dust, noise, vibration, waste, e-waste, OHS risks, access disruption, community safety risks and grievances which needs early identification and compliance management.	Preparation and implementation of this ESMP; preparation of site-specific C-ESMP by the Contractor; regular monitoring, reporting, incident management and corrective actions by the PIU and Contractor.
ESS 2		The sub-project will involve direct and contracted workers who may face OHS risks related to drilling, trenching, cable installation, electrical works, working at height, use of tools and movement of materials.	Contractor to comply with LMP requirements, provide written contracts, prohibit child and forced labor, ensure fair working conditions, provide PPE, conduct toolbox talks, establish workers' GRM and report OHS incidents.
ESS 3		The works may generate dust, noise, solid waste, packaging waste, cable offcuts, e-waste, batteries and limited hazardous waste.	Waste segregation, safe handling and storage, approved disposal, dust and noise control, e-waste management, spill prevention, efficient use of materials and

			implementation of good housekeeping measures.
ESS 4		Students, lecturers, staff, visitors and nearby users may be exposed to safety risks from open trenches, loose cables, tools, ladders, vehicle movement, restricted access, dust, noise and worker conduct.	Use of signage, barricades, safe access routes, traffic and pedestrian safety measures, advance communication, emergency preparedness, worker Codes of Conduct and GBV/SEAH prevention measures.
	Not Applicable	The sub-project will be implemented within the existing university campus and is not expected to require land acquisition, physical displacement, economic displacement or restrictions on land use.	No RAP/ARAP required. Any unexpected land access or asset-related issue shall be screened and addressed in line with the project RPF before works proceed.
ESS 6		Minor disturbance to campus vegetation, landscaped areas, shade trees, grass cover or small fauna may occur during trenching, cable routing, equipment movement or material storage.	Avoid unnecessary vegetation clearance, protect trees and landscaped areas, avoid sensitive biodiversity areas, manage invasive species where relevant, restrict work areas and reinstate disturbed areas after completion.
ESS 7	Not Applicable	No groups meeting the criteria of ESS7 are identified in the sub-project area.	No specific ESS7 instrument required. Stakeholder engagement will remain inclusive and accessible to all affected groups.
ESS 8	Applicable as precautionary measure	Excavation, trenching or ground disturbance may encounter unknown cultural heritage, graves or chance finds, although no known	Include and implement Chance Finds Procedure; stop work if chance finds are encountered; secure the area and notify PIU and relevant authorities before works resume.

		cultural heritage impact is expected.	
ESSS 9	Not Applicable	The sub-project does not involve financial intermediary activities.	No ESS9 action required.
ESS10	Applicable	Students, staff, university administration, contractors and other affected stakeholders need to be informed and engaged throughout implementation. Grievances may arise from access disruption, dust, noise, safety, worker conduct or service disruption.	Implement stakeholder engagement, disclose the ESMP, provide advance notice of works, establish accessible GRM channels, maintain grievance logs, provide feedback to complainants and report stakeholder engagement activities.

2.3 Applicable World Bank Group Environmental, Health and Safety (EHS) Guidelines

The Campus Network sub-project will be implemented in compliance with the relevant World Bank Group Environmental, Health and Safety (EHS) Guidelines. Specifically, the General EHS Guidelines (covering environmental management, occupational health and safety, community health and safety, and construction and decommissioning practices) will apply to all sub-activities. In addition, the EHS Guidelines for Construction Materials Extraction will be applied, as relevant, to manage risks associated with sourcing of construction materials. These guidelines will be incorporated into the contractor's Environmental and Social Management Plan (ESMP) and enforced through contractual obligations and supervision arrangements.

2.3.1 General EHS Guidelines

The General EHS Guidelines will apply to all phases of the sub-project, including pre-implementation, implementation, and operation. The key areas of relevance include:

a) **Environmental Management**

- **Air Emissions and Ambient Air Quality:** Control of dust and particulate matter during excavation and earthworks through water spraying, covering of stockpiles, and vehicle speed control.
- **Noise Management:** Implementation of time restrictions for noisy activities, maintenance of equipment to reduce excessive noise, and communication with nearby institutions.
- **Waste Management:** Segregation of construction and purchasing equipment waste, safe storage of hazardous materials (if encountered), and disposal at approved municipal sites.
- **Water Quality Management:** Prevention of runoff contamination and proper drainage to avoid pollution of surrounding areas.

b) Occupational Health and Safety (OHS)

- Provision and mandatory use of Personal Protective Equipment (PPE).
- Safe operation of heavy machinery and equipment.
- Fall prevention measures for elevated works.
- Hazard communication and worker training.
- Emergency preparedness and response planning, including first aid, fire prevention, and evacuation procedures.
- Incident and accident reporting mechanisms.

c) Community Health and Safety

- Site fencing and restricted access to prevent unauthorized entry.
- Traffic management plans to reduce accident risks within the compound.
- Clear signage and communication with surrounding institutions.
- Measures to prevent labor-related risks, including enforcement of Codes of Conduct addressing GBV/SEA/SH.

d) Construction and Decommissioning Practices

- Safe demolition procedures to manage debris and structural instability risks.
- Proper handling of construction materials.
- Restoration and site clean-up following completion of works.

2.3.2 EHS Guidelines for Construction Materials Extraction

Although the sub-project itself does not involve direct extraction activities, the EHS Guidelines for Construction Materials Extraction are relevant where contractors source materials such as sand, gravel, or aggregates from third-party suppliers. These guidelines address:

- Environmental impacts of quarrying and borrow pits, including land degradation and erosion.
- Dust and noise control during extraction and transportation.
- Worker health and safety at extraction sites.
- Rehabilitation of extraction sites after use.
- Compliance with licensing and regulatory requirements.

The contractor will be required to source materials only from licensed and environmentally compliant suppliers and provide evidence of adherence to these standards.

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2.4 Good International Industry Practices (GIIP)

In addition to compliance with national regulations and the World Bank ESF, the campus network Sub-project draws on internationally recognized global best practices applicable to campus networks activity that are listed below. These practices provide practical guidance on occupational health and safety, environmental management, waste and resource efficiency, social inclusion, accessibility, and ethical labor practices. Integrating these standards strengthens risk management, promotes safe and inclusive working environments and supports sustainable and responsible sub-project implementation.

Occupational Health and Safety

- **ISO 45001 - Occupational Health and Safety Management Systems** Establishes systematic approaches to hazard identification, risk control, incident reporting and worker protection.
- **ILO Conventions and Guidelines on Occupational Safety and Health** Promote safe working conditions, prevention of accidents, prohibition of child and forced labor, and workers' rights.
- **ISO 14001 - Environmental Management Systems** Provides a structured framework for managing environmental risks, compliance, monitoring and corrective actions during construction.
- **UN Environment Programme (UNEP) Sustainable Construction Guidelines** Promote pollution prevention, waste minimization, efficient resource use and environmentally responsible construction practices.
- **EU Construction and Demolition Waste Management Protocol** Recognized global reference for waste segregation, recycling, reuse and documentation of construction waste streams.

- **Waste Hierarchy Principle** (Prevention-Reduce-Reuse-Recycle-Recover-Dispose) Widely adopted an international approach to minimize environmental impacts of construction waste.
- **NFPA (National Fire Protection Association) Standards** Internationally applied guidance on fire safety, emergency exits, fire extinguishers and evacuation planning in buildings.
- **International Building Code (IBC)** Sets standards for structural safety, fire protection, accessibility and safe building design.
- **UN Guidelines on Gender Equality and Women's Empowerment** Promote gender-responsive workplaces, equal employment opportunities and prevention of harassment and discrimination.
- **OECD Due Diligence Guidance for Responsible Business Conduct** Encourages transparency, grievance mechanisms, worker protection and ethical contractor behavior.
- **UN Convention on the Rights of Persons with Disabilities (CRPD)** Supports universal design, barrier-free access and inclusive infrastructure in public buildings.
- **Universal Design Principles** Promote accessibility through ramps, accessible toilets, signage, lighting and safe pathways for all users.
- **UNESCO Guidance on Chance Finds** International best practice for managing accidental discovery of cultural or historical materials during excavation.
- **AA1000 Stakeholder Engagement Standard**
- Provides principles for inclusive, responsive, and transparent engagement and grievance handling.
- **Green Building Council Guidelines** (e.g., passive cooling, daylighting, energy efficiency) Promote climate-appropriate design, reduced energy demand and sustainable operation of office buildings.

International conventions signed and ratified by Somaliland

2.5 International Safety Codes and Standards

The campus network design, installation, testing, and operation should follow internationally recognized safety and technical standards. Key standards include **ISO/IEC 11801** for structured telecommunications cabling in buildings and campus premises; **IEC 62368-1:2023** for protection against electrical shock, fire, excessive heat, and other hazards associated with ICT and communication equipment; and **IEEE**

802.3 and IEEE 802.11 for safe, compatible, and reliable wired Ethernet and wireless local-area networks.

Relevant good practice also includes applicable **IEC electrical installation, earthing, surge protection, electromagnetic compatibility, and lightning-protection standards**, together with **ISO 45001** occupational health and safety principles. These standards require the use of certified equipment, proper grounding and bonding, separation of power and data cables, fire-resistant cable routes, secure equipment racks, safe use of ladders and work-at-height equipment, electrical isolation before installation, appropriate personal protective equipment, and testing and certification of all installed cabling and equipment.

For fibre-optic installation, contractors should follow applicable **ITU-T recommendations**, including measures for safe cable routing, protection of existing infrastructure, proper reinstatement of trenches and penetrations, and prevention of exposure to fibre fragments and laser radiation. The standards are relevant because campus network activities involve cabling, drilling, trenching, electrical connections, equipment installation, work at height, and operation of powered ICT devices. Compliance will reduce risks of electrocution, fire, falls, cable-related accidents, network interference, equipment failure, and harm to workers, students, staff, and campus property.

Chapter 3. Baseline Information

This chapter (3) presents the existing environmental and social conditions of the proposed Campus Network installation site at Amoud University, which is located on the outskirts of Borama City. The baseline description is mainly informed by direct field observations made during the site visit, supported by discussions with university representatives and visual assessment of the campus setting. Limited site-specific literature was available for the Amoud University area; therefore, the baseline focuses on observed physical, biological, and social conditions within and around the campus. This information provides the basis for identifying and assessing potential environmental and social risks and impacts in line with the World Bank Environmental and Social Standards and applicable national environmental and social requirements as well as Good International Industry Practices (GIIP).

3.1 Physical Environment

3.1.1 Introduction

This subsection provides information related to the physical environment of Somaliland context, with a particular focus on Amoud University campus and surrounding areas. The information presented here is extracted from direct observations and review of literature. The main objective is to have an idea about the current condition and characteristics of the site to make sure there is minimal impact from this intervention.

3.1.2 Geomorphology and Topography

Somaliland is characterized by four distinct topographic zones. The first zone is the Guban, a low-lying coastal plain that extends from a few kilometers to about 70 kilometers inland from the Gulf of Aden. This zone is generally characterized by very hot climatic conditions, particularly during the summer season.

The second zone is the Golis Range, a high escarpment running east-west and parallel to the coastline. This mountainous zone rises to elevations of more than 2,000 meters above sea level, particularly around the Erigavo area.

The third zone is the Ogo Plateau, located south of the Golis Mountains and extending toward Ethiopia. It has an average elevation of approximately 1,200 meters above sea level and represents one of the main highland areas of the country.

Further inland and toward the south lies the Hawd, a broad red sandy plain that extends southward into Ethiopia. Elevations in this zone gradually decreased to around 500 meters above sea level. These topographic zones influence the country's climate, drainage patterns, vegetation cover, land use, and settlement distribution. The landscape is generally influenced by the Ogo plateau and the foothill systems associated with the Golis range. The campus area is characterized by gently undulating terrain, shallow drainage lines, and semi-arid landforms shaped by seasonal runoff, erosion, and weathering processes. The surrounding geomorphology includes relatively elevated ground, scattered vegetation, and dry stream channels that convey water during rainy periods. Due to this setting, any minor trenching or excavation works should be carefully managed to avoid localized erosion, surface runoff concentration, and disturbance to the existing campus landscape and vegetated areas.

The site is in the sloping south direction of the Golis range north of Borama, the area is near flat, with an elevation of 1395 m above the sea level.

3.1.3 Climate and Meteorology

Somaliland is generally divided into three main climatic zones: **desert, arid, and semi-arid**. The proposed activity site at Amoud University, located in Borama, Awdal Region, falls within the **semi-arid climatic zone**, which is generally characterized by

moderate rainfall compared to the coastal and eastern parts of Somaliland, scattered vegetation cover, and seasonal variability. The climate of the area is influenced by its western highland setting and proximity to the Ethiopian highlands, which contribute to relatively higher rainfall than many other parts of the country.

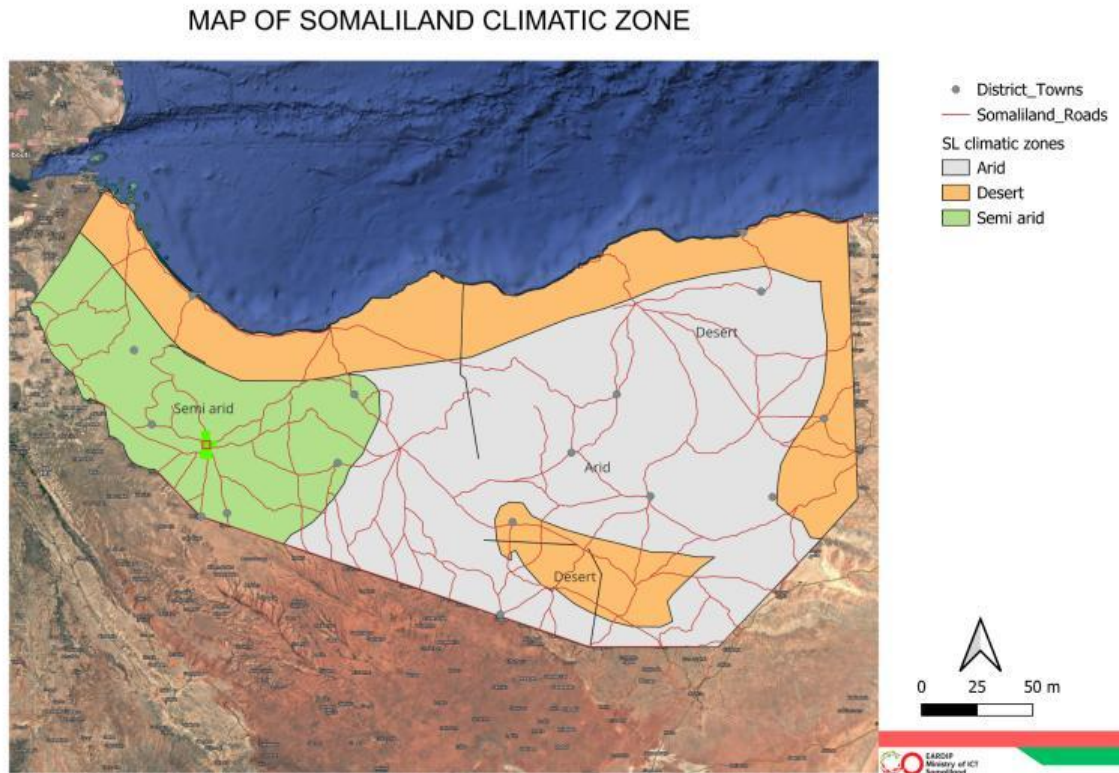


Figure 3: Somaliland climatic zones

3.1.3.1 Temperature

Somaliland generally experiences high temperatures, although temperature conditions vary according to altitude, location, and season. Coastal and low-lying areas are usually hotter, while the western highland areas, including Borama and the Amoud University area, experience relatively moderate temperatures. Overall, Somaliland has a harsh climate, and temperatures have been increasing due to climate change and other environmental pressures. High temperatures may influence project implementation by increasing dust generation, worker heat stress, and the need for adequate drinking water, rest periods, and safe working conditions during outdoor activities.

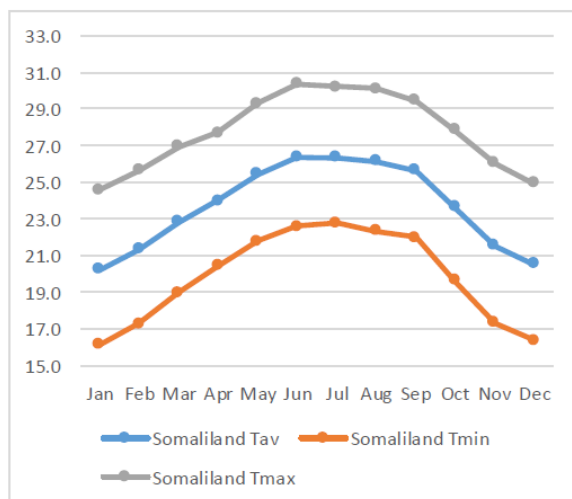


Figure 4: shows the maximum, minimum and average temperature for Somaliland.

3.1.3.2 Rainfall and Precipitation

Rainfall in Somaliland is highly variable across regions and seasons. The country experiences four main seasons: **Jilal**, the main dry season from December to early March; **Gu**, the main rainy season from March to May; **Haga**, a dry and hot season during which southern winds are common; and **Deyr**, the second rainy season from October to November before the onset of Jilal.

The total annual precipitation varies between climatic zones. According to SWALIM, the coastal areas receive the lowest rainfall, generally less than **100 mm annually**, while the western and mountainous areas receive the highest rainfall, often exceeding **550 mm annually**. Borama and the surrounding Amoud University area receive relatively higher rainfall compared to many eastern and coastal areas of Somaliland, with annual rainfall generally estimated between **350 mm and 550 mm**. Seasonal rainfall may temporarily affect site access, trenching, cable routing, soil stability, surface runoff, and reinstatement of disturbed areas.

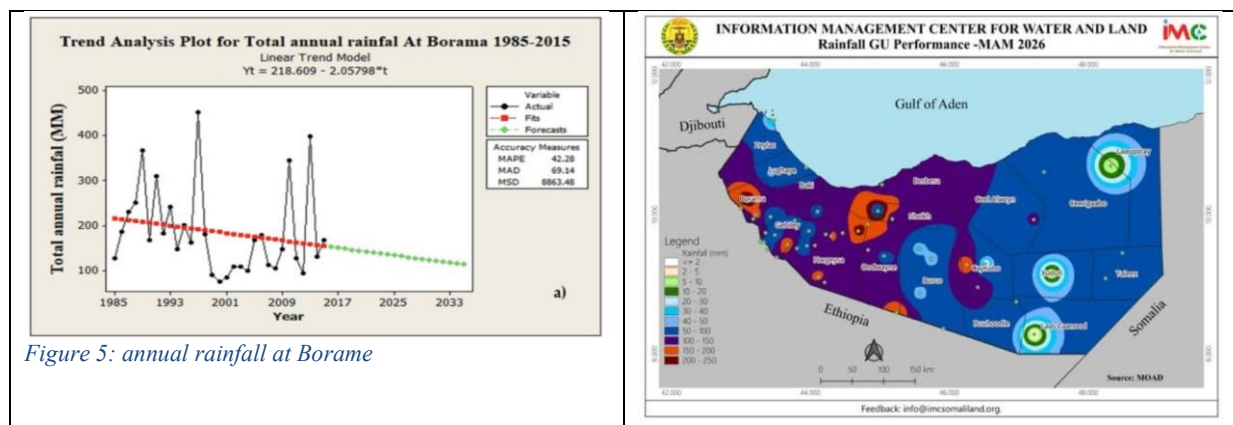


Figure 5: annual rainfall at Borame

3.1.3.3 Wind and Atmospheric Conditions

Wind conditions in Somaliland vary seasonally and are influenced by regional climatic patterns. During the **Haga** season, dry and hot winds are common and may contribute to dust movement, dryness, and discomfort for workers and nearby campus users. Wind may also increase the spread of dust during drilling, trenching, material handling, and movement of equipment. For this reason, exposed materials should be properly managed, work areas should be regularly cleaned, and dust-generating activities should be controlled, especially during dry and windy periods.

Rainfall variation is linked to four different seasons; Jilal (Dry season that extends between December and early March), Gu, (the wet main season starting from March to May), Haga (it is a dry and hot season, southern winds start during this season), Deyr, (the second wet season, it is an important season that comes before the main dry season (Jilal) from October to November), the annual rainfall varies between different regions, the amount ranges between 100 mm in the coastal areas up to 550 mm and above in the mountainous zones.

The total precipitation amount varies between climatic zones, according to SWALIM the coastal areas receive the lowest amount of rainfall (less than 100 mm) where western parts of the country receive the highest amount of rainfall (more than 550 mm). The Awdal region including Amoud like the other parts of the country has two rainy seasons and two dry seasons, it receives a rainfall estimated between 350 mm and 550 mm

Borama and the surrounding Amoud University area experience two main rainy seasons and two dry seasons, similar to other parts of Somaliland. The area receives relatively higher rainfall compared to many eastern regions, with annual rainfall generally estimated between 350 mm and 550 mm, influenced by its western highland setting and proximity to the Ethiopian highlands.

3.1.4 Geology and Soil Characteristics

Somaliland Geology has different geological formations that have been caused by different tectonic and non-tectonic activities that occurred during pre-cambrian era and extended to the recent quaternary sediments. General geologists identified four different geological sections with six major units.

1. Precambrian: Basement Complex (metamorphic and volcanic rocks)
2. Jurassic: Limestone, shale and sandstone
3. Cretaceous: Nubian sandstones (sandstones and limestones)
4. Tertiary (Eocene): Limestone, evaporitic rocks

- A. Auradu Formation (limestones)
- B. Taleex Formation (evaporitic rocks)
- C. Karkar Formation (limestones)
- 5. Tertiary (Oligocene to Miocene): Thick extensive series of sedimentary rocks
 - A. Daban series
 - B. Hafun Series and Iskushuban Formation
- 6. Pleistocene to Recent Alluvium
 - A. Basaltic rocks
 - B. Recent alluviums, terraces and coastal beaches

The Amoud University campus and its surrounding area is covered by recent alluviums along the stream beds and Biotite and/or amphibole schists are outcropped and covered on the majority of the site. The area is characterized by good and relatively dense vegetation coverage compared to many other urban and peri-urban settings in Somaliland. Grass cover is present within parts of the site, while other surrounding landscape parts includes agricultural land, built-up areas, planted shade trees, and natural forest patches. The vegetation provides important shade, contributes to the campus environment, and supports the ecological and landscape value of the area. The soil within the site generally has good structure and is not highly susceptible to erosion or weathering under normal conditions. However, due to the proposed installation activities, including minor trenching, cable routing, manhole construction, and movement of materials, localized disturbance may occur. Therefore, careful consideration should be given to minimizing ground disturbance, protecting grass cover, shade trees, agricultural surroundings, and natural forest areas, and ensuring that any disturbed surfaces are promptly backfilled, compacted, and restored after completion of the works.

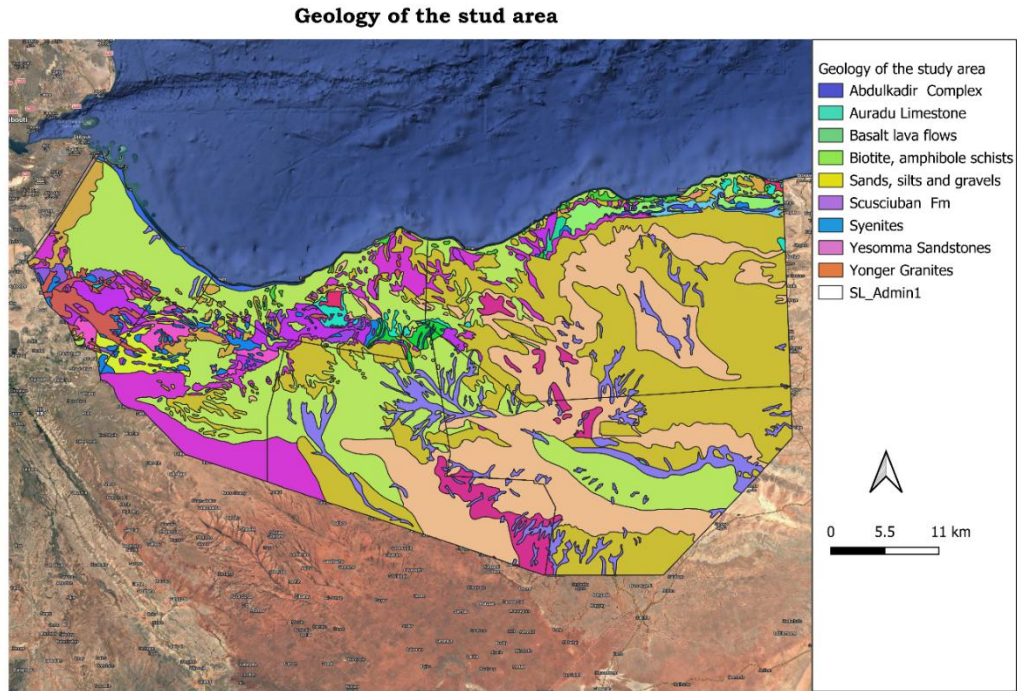


Figure 7: Somaliland geological map

3.1.5 GEOMORPHOLOGY

According to faillance & faillace (1986) three major physiographic areas can be found in Somaliland; the coastal belt and sloping plain, the mountainous zone incised by the numerous toggas and the plateaus and valleys which encompass the Hawd and Sool plateaus and the Nugal and Darror valleys.

The coastal belt is a narrow zone extending along the Red Sea from Zeila in the west to Maydh in the east. It is characterized by flat terrain adjacent to the coastline and gently sloping plains toward the mountainous zone, with a general northward slope toward the sea.

The mountainous zone is dominated by the Golis Range and is mainly composed of igneous and metamorphic rocks. Owing to its steep terrain, numerous seasonal drainage channels, locally known as *toggas*, originate in this zone and convey runoff toward the coastal plains.

The plateau zone represents the largest physiographic unit in the country and includes the Hawd and Sool plateaus, as well as the Nugaal and Dharoor valleys. It is characterized by extensive plains underlain by thick sedimentary formations. The area provides important grazing land for livestock but generally receives low and variable rainfall.

3.1.6 WATER SOURCES

Water sources come from surface and sub-surfaces sources.

3.1.6.1 Surface Water

Surface water sources include springs and Toggas, Berkads, and Dams where rural communities rely mostly on these sources. Also, shallow wells which are common in the mountainous areas are considered a primary water source for communities living in those areas.

Many communities face water stress due to recurrent droughts, where many of these surface waters are depleted during the dry season, and forces the living communities to migrate from one place to another seeking water for their livelihood. Considering the current site; Amoud has limited surface water where they capture during rainy seasons from roof catchments using berkads and small water tanks.

3.1.6.2 Groundwater

Sub-surface is the deep groundwater which is a reliable source compared to surface water. Groundwater movement and availability is different from place to place, considering the hydrogeological factors. In general; Somaliland has a potential groundwater with various depths (shallower up to 20 m and deep up to 550 m). On the plateaus such as Hawd and Sool the water table is deep where areas close to mountainous regions the water table is shallower.

The water supply system in Amoud is dependent on groundwater through multiple boreholes drilled and managed by the SHAAPA the main water supplier in the city. Recent studies show that many boreholes around the area is depleted leading to groundwater challenges in the city, efforts has been made to increase the rainfall harvesting techniques and new infrastructure is built up in the surrounding valleys and streams.

3.1.7 CLIMATE CHANGE

Climate change is one of the pressing issues in this era globally, the Horn of Africa region experiences various climatic changes including recurrent droughts, floods, reduced rainfall amounts, deforestation, and increasing temperature. In Somaliland, the semi-arid and arid climate coupled with the context of climate change led to an absolute climate variability.

Recurrent floods and droughts occur due to the unpredictability of rains; this has impacted the food security where many of the pastoral and agricultural communities lost their livelihood sources and end up in IDP camps. According to the Ministry of Resettlement the number of IDP's has increased dramatically in the wide country, and it is related to the recurrent droughts, according to Gurre (2016) 15 major droughts occurred since 1960 and up to 2016, the droughts that occurred in 1973-1974, 1984, 1991, 2010/2011 and 2016/2017 were most intense and widespread.

Table 2: Somaliland displacement figures by region

Regions	Sites	Household
Maroodijeex	28	17,801
Togdheer	30	28, 472
Sanaag	30	10,237
Awdal	16	5,018
Saaxil	8	2,095
Sool	6	3,225

3.1.8 Land Use and Physical Infrastructure

Land use in Amoud is predominantly semi-urban, reflecting the university's location outskirts of Borame where educational, residential, agricultural, and open natural land uses are present. The campus is mainly used for academic, administrative, residential, and institutional purposes, including lecture halls, offices, laboratories, libraries, student facilities, internal roads, walkways, utility areas, and open spaces. The surrounding land use includes scattered settlements, small-scale agriculture, grazing areas, natural vegetation, and access roads connecting the university to Borama town and nearby communities.

The existing infrastructure within the university includes academic buildings, administrative offices, ICT rooms, electricity supply systems, water and sanitation facilities, internal access roads, pedestrian walkways, drainage structures, boundary areas, and communication facilities. The proposed campus network installation will be implemented within the existing university compound and will mainly involve cable routing, installation of network equipment, minor drilling, mounting, and limited civil works. Therefore, the project is not expected to require additional land acquisition or cause major changes to existing land use.

3.1.9 Air Quality and Noise

There is a lack of data and information regarding the nature of air quality and noise levels. So, no air quality and noise data are available at the time of ESMP preparation.

Therefore, the assessment is based on visual observation of the campus setting, the nature of the proposed works, and expected sources of emissions and noise during implementation. The University of Amoud is located in semi-urban environment where existing air quality and noise conditions are mainly influenced by road traffic, movement of people, nearby small businesses, generators, and normal university activities.

In the absence of baseline measurements, the Contractor shall apply good international industry practice and preventive mitigation measures, including regular cleaning of work areas, dust suppression where necessary, proper handling and removal of waste, use of well-maintained equipment, switching off idle vehicles and machinery, limiting noisy works to agreed working hours, avoiding noisy activities during examinations or sensitive academic periods, and using low-noise or low-vibration methods where practical. If complaints are received or if works are expected to cause significant disturbance, the PIU may require the Contractor to conduct spot noise or air quality monitoring and implement additional corrective measures.

3.2 BIOLOGICAL ENVIRONMENT

This section describes the existing biological environment within and around the proposed Campus Network Installation Project area at the University of Amoud. The assessment considers the presence of vegetation, trees, landscaped areas, wildlife, sensitive habitats, and any biodiversity-related features that may be affected by the planned installation of works. Since the activities will be implemented within an existing built-up university campus, significant impacts on biodiversity are not anticipated. However, minor disturbance to vegetation, landscaped areas, and small fauna may occur during cable laying, trenching, drilling, equipment movement, and material storage. The section therefore identifies potential biological risks and outlines measures to avoid unnecessary vegetation clearance, protect existing trees and green areas, prevent pollution, and ensure proper reinstatement of disturbed areas after completion of works.

3.2.1 Flora

Amoud University and the surrounding environment includes a mix of agricultural land, natural vegetation, forested patches built-up areas. Unlike highly urbanized campus settings, the Amoud area has relatively good and dense vegetation coverage, including grass cover within parts of the site, planted shade trees, and natural forest areas. These vegetated and shaded areas provide important environmental, landscape, and social value, as they contribute to the campus setting and are used by students and staff for shade and resting. The site also includes developed campus facilities and access areas that support daily academic and administrative activities.



3.2.2 Fauna

Wildlife presence within and around the Amoud University area is relatively higher compared to highly urbanized city environments, mainly due to the campus location on the outskirts of Borama City, the presence of natural vegetation, forest patches, agricultural land, and the relatively less disturbed surrounding landscape. During consultations and field observations, it was noted that different wildlife species are

known or expected to occur in the wider area, including hyenas, foxes, deer, and other wild animals that may use the surrounding forested and open areas as habitat or movement corridors. In addition, snakes and other reptiles are also commonly reported in the area, particularly within vegetated, rocky, or less frequently disturbed sections. Bird species and small mammals may also be present within the campus and nearby agricultural and natural areas. Although the proposed campus network installation works are expected to be limited in scale and mainly confined to existing campus facilities and approved work corridors, the contractor should avoid unnecessary disturbance to vegetation, forest patches, wildlife habitats, and shaded areas. Workers should also be made aware of the possible presence of snakes and other wildlife, and any encounter with wildlife should be handled safely without killing, harming, or disturbing the animals.

3.2.3 Habitat types and Ecosystems

Coastal & Marine Ecosystems, according to Somaliland economic journal, coastal plains (Guban) provide good grazing for the camel and goats; According to FAO SWALIM, the coastal plains vegetation consists mainly of herbaceous plants. The vegetation in this region extends to the feet and slopes of the Golis Mountains. Close to the mountains, the predominant vegetation is sparse bushy *Acacia*, *Balanites aegyptiaca*, and *Commiphora* associations including *Boswellia* species. This area extends up to 800 km and several kilometers inward, from Zeilac to maydh. While the long and rough Mountain Escarpments (Golis Range) host evergreen forests that include native

plants such as *Juniperus procera* and *Buxus*. FAO indicated that in the past, the Golis Forest remained largely uninhabited and protected while today it is experiencing increased exploitation pressure. There are now even human settlements in the forest. The Ogo (Haud plateau) is inland large area that extends beyond Ethiopian border, represents an agropastoral area where communities take care the different types of livestock particularly camel, goat and sheep. This ecosystem features dense thornbush, succulents, and *Acacia* species that feed their animal. According to FAO SWALIM (2007) this inland is dominated by vegetation which has open shrubs and woody plants of *Acacia bussei*, *Acacia etbaica*, *Boscia* spp, *Cadaba* spp, and *Acacia mellifera*. Some herbaceous plants (mainly *Chrysopogon aucheri* and *Sporobolus* spp.) Grassland Plains (Ban) is an isolated area that is mostly found inland plateaus and characterized by dense grass. Nomadic people take care of their animals in this area during the rainy season and during dry season they migrate to bush areas where they can access water and feed from trees.

In the northern Golis mountain range the vegetation consists of evergreen trees of *Juniperus procera* and *Juniperus excelsa* and open shrubs of *Buxus hilderbrandtii*, *Dodonea viscosa* and *Terminalia brownii*, etc. In the past, the Golis Forest remained largely uninhabited and protected while today it is

experiencing increased exploitation pressure. There are now even human settlements in the forest.

In the central plains, vegetation varies from extensive grassland along the fixed dune areas to shrubby bushland with scattered trees in the west toward the Ethiopian border.

Plants and bushes include *Andropogon kelleri*, *Chrysopogon aucheri*, *Sporobolus ruspolianus*, *Indigofera ruspolii*, *Acacia* spp., *Commiphora* spp., *Cordeauxia edulis*, *Delonix elata*, *Terminalia orbicularis* and *Dobera glabra* etc.

In the southern regions (especially in the floodplain), the vegetation type is mainly low deciduous bushland of *Acacia* spp. which extends to the coastal dunes.

3.2.4 Ecological Threats

The major ecological threats represent climate change, deforestation, soil erosion, and water scarcity.

Bade (2012) indicated that deforestation is one of the leading critical challenges in Somaliland, since the country is underdeveloped and due to the urban expansion, firewood, charcoal and poles for traditional huts are produced from forests.

Water scarcity is among the major challenges of Somaliland where close to half of the country according to (MoWRD) doesn't have access to enough water. This remains challenging since every year thousands of pastoralists migrate from their original settlements to the IDPs.

Climate change is a global problem worsened due to human-induced activities. Global started warming since the beginning of industrial revolution and this challenge remains continuous despite several attempts made to control it. According to Bade (2012), in Somaliland climate change led recurrent droughts, increased biodiversity loss, species migration and encroachment of invasive plants and increased rural-urban migration.

According to European soil data center, the global losses 35 to 36 billion metric tons of soil. According to FAO SWALIM (2007), water and wind are the major agents that contribute to soil erosion; soil erosion by water is estimated at 76661.09 (sq.km) and 13520.54 (sq.km) contributed by wind.

In general; these factors alongside others remain the most threats for the ecology and need careful attention whenever a development project is planned to implement.

3.2.5 Ecosystem services

The ecosystem supports greatly the livelihood of the population of Somaliland. The benefit of ecosystem is delivered through main four categories:

- **Provisioning services:** the livelihood of most of the rural and urban communities rely on provisions of nature both directly and indirectly; animals get feed from nature to support the human livelihood where they provide meat and milk to survive. Also, humans directly benefit from ecosystems; they collect firewood and

burn charcoal to support their lives. Also, construction materials such as timber, sand and water are obtained to construct a living space for themselves.

- **Regulation services:** Healthy vegetation and intact soil systems prevent dramatic erosion and regulate dust in an arid environment. Coastal mangroves and coral reefs provide storm surge protection and act as essential habitats for artisanal fisheries
- **Supporting services:** Fundamental processes like soil formation, primary production, and nutrient cycling keep the arid ecosystems functioning, sustaining both livestock populations and indigenous wildlife
- **Cultural services:** The land holds immense socio-cultural value, underpinning nomadic pastoralist heritage and traditions. Furthermore, wildlife conservation initiatives in the region—such as the cheetah conservation programs near Hargeisa and protected rangeland areas Libaxyaley mountain near Borame—promote ecotourism and environmental awareness

3.3 Socio-Economic Environment

3.3.1 Demographic profile

The campus serves over 7,000 students and approximately 500 staff members. The student body is diverse, including many from rural regions and IDP settlements who rely on campus facilities for digital access.

3.3.2 Livelihoods and Economic Activities.

Borama is one of the main urban and economic centers in western Somaliland, with livelihoods mainly supported by agriculture, livestock-related activities, trade, education, small businesses, public services, agriculture, transport, and remittances. The town hosts a wide range of commercial activities, including retail shops, markets, restaurants, hotels, garages, construction material suppliers, financial services, mobile money agents, and transport services. These activities provide income opportunities for many households and support the wider local economy. The primary economic activity on campus consists of small-scale service providers, including cafeterias and stationery shops. These businesses rely on the university population and may face minor, temporary access disruptions during trenching.

Education is also an important economic driver in Borama, particularly because of the presence of Amoud University and other learning institutions. The university attracts students, lecturers, administrative staff, service providers, landlords, transport operators, food vendors, and small businesses that depend partly on student and staff demand. Around the university and along access roads, livelihood activities may include small shops, cafeterias, printing and stationery services, transport services, rental housing, and informal vending.

Agriculture and livestock remain important in the surrounding areas outside the urban center. Some communities depend on small-scale farming, livestock rearing, milk sales, fodder trade, and seasonal agricultural activities. Remittances from the diaspora also contribute significantly to household income, business investment, education, and housing development (FAO, 2025).

3.3.3 Education and Human Capital.

As the leading university, there is a high demand for digital research and e-learning. Currently, bandwidth limitations hinder the development of student research and administrative efficiency.

The presence of Amoud University contributes significantly to human capital development by attracting students, lecturers, researchers, administrative staff, and service providers from Borama and other regions. It also supports teacher training, health workforce development, research capacity, and professional skills needed by public institutions, private sector actors, and local communities.

Improved campus connectivity under the proposed project is expected to strengthen education and human capital outcomes by supporting e-learning, access to online academic resources, digital libraries, research collaboration, administrative systems, and communication between students and staff.

3.3.4 Gender Dynamics (Vulnerability)

Female students represent a significant portion of the population but often have less access to private laptops or home data, making them more reliant on campus networks.

Water, Sanitation and Hygiene (WASH)x

Amoud University is located in Borama, Awdal Region, where water supply and sanitation services are influenced by the semi-arid climate, seasonal rainfall variability, and increasing demand from the growing urban and institutional population. Within the university campus, WASH services are mainly required to support students, lecturers, administrative staff, visitors, and workers during normal academic and operational activities. The existing facilities include water supply points, sanitation facilities, handwashing areas, drainage arrangements, and waste collection points serving different academic and administrative blocks.

3.3.5 Infrastructure and Public Services

Amoud University is an important educational institution in Borama and has existing infrastructure that supports teaching, learning, research, administration, and student services. The campus includes academic buildings, administrative offices, classrooms,

laboratories, ICT rooms, libraries, internal roads, pedestrian walkways, electricity supply, water and sanitation facilities, communication systems, open spaces, and other service areas. The surrounding area also includes access roads, residential areas, small businesses, transport services, and public service facilities linked to Borama town.

The proposed campus network sub-project will improve the university's ICT infrastructure by strengthening internet connectivity, digital learning, communication, research access, and administrative efficiency. The works will be carried out within the existing university compound and are not expected to require new land or major changes to existing infrastructure.

3.3.6 Housing and Settlement Patterns

According to PIU team observations, around Amoud University, settlement is generally less dense than the central town and includes institutional buildings, student housing, scattered residential compounds, open land, access roads, small shops, and service facilities. The wider Borama area continues to experience urban expansion, and Somaliland authorities have recognized the need for improved urban planning in towns including Borama.

3.3.7 Cultural and Social Dynamics

Borama has strong social cohesion, active community structures, and a culture closely linked to education, trade, religion, and traditional leadership. The town includes students, academic staff, business communities, elders, religious leaders, women, youth, and local service providers. Amoud University contributes to the town's social and cultural life by attracting students and professionals from different areas and supporting learning, interaction, and knowledge exchange. The proposed campus network installation is not expected to significantly affect cultural or social dynamics, as works will be limited to the existing university compound. However, temporary disturbance to classrooms, offices, walkways, and student service areas should be managed through advance communication, inclusive engagement, proper worker conduct, and accessible grievance channels.

3.3.8 Community Safety and Security

The campus is an enclosed, safe environment. However, the introduction of external contractors requires strict adherence to the project's Code of Conduct and security protocols to maintain this safety. Providing this 'digital window' supports the NDP III 'Leave No One Behind' principle. By prioritizing access for female students and those from marginalized backgrounds, the project fulfills the national commitment to social equity and the empowerment of vulnerable groups as outlined in the country's 5-year strategic roadmap.

Chapter 4. Methodology

The team employed a number of different steps in order to develop this ESMP which includes reviewing the technical scope and preliminary design, referencing initial environmental and social screening, engaging relevant communities, carrying out environmental and social risk assessment, preparing mitigation measures, establishing monitoring and reporting mechanisms, and finally developing capacity building plan and compliance arrangement. The coming sections will explain in details various steps followed during the preparation of this document.

4.1 Reviewing the technical Scope and Preliminary Design

The university getting support from its internal engineers developed a campus network design which clearly identifies key routes, university buildings to be connected, manholes and the cable rooms. Alongside the design, the university provided technical specifications of the equipment that will be required in order to complete this assignment.

The PIU assessed the design and technical specifications, where it represented the foundation for this E&S screening phase and the preparation of this ESMP. The environmental and social risk assessment focused on the university campus in general and specifically fiber routes specified in the design.

4.2 Referencing the Initial Environmental and Social Screening

The PIU conducted initial environmental and social screening on the site where it is assessed against the potential environmental and social impacts and risks that might be associated with this sub-project. The assessment began identifying the fiber routes and then assessing the impacts that could be raised from this activity. During the assessment, the team proposed design revision in certain areas to ensure avoidance and minimization of risks.

The E&S screening report informed sub-project descriptions, anticipated risks, initial mitigation measures, and recommended conducting detailed ESMP, since the risk rate was moderate.

4.3 Engaging with Key Stakeholders

Stakeholders represent vital to this project overall, and particularly to this activity. The major stakeholder is the University of Amoud alongside other minor stakeholders such as holders of small businesses around the university and residents. Various

categories are identified that include students, university staff, lecturers, and university management. The PIU arranged different stakeholder meetings to identify the view of each category and their position towards this activity. Three major stakeholder meetings have been conducted since the inception of this activity.

4.4 Carrying out Environmental and Social Risk Assessment

Following the recommendations for the Environmental and Social Screening report, the ESF team conducted a risk assessment field for the university. The main purpose was to clearly anticipate the risks and impacts associated with this activity, alongside their extent, scale, and frequency. The assessment followed a combination of field work and desk review for the existing literature. Also, the outcomes from stakeholder meetings are incorporated into this assessment.

4.5 Developing Mitigation and Management Measures

Once all risks are identified, the next step was to develop mitigation measures to minimize, mitigate residuals, and compensate for the damages. Mitigation is developed in line with project environmental and social instruments that have been finalized.

The management measures encompass the responsibilities for implementation of both contractors and the PIU, monitoring indicators, and frequency.

4.6 Establishing Monitoring, Reporting, and Compliance Arrangements

The ESMP clearly defines the responsibilities for monitoring, reporting, and compliance arrangements. The ESMP identified key entities involved in this activity and their respective responsibilities. Key entities include the PIU, the contractor, and World Bank. Each of the mentioned entities will take a part for the process of implementation of this document, where the PIU serves the overall responsibility, WB supports technical aspects and financial and procurement matters, and finally the contractor which is exact implementer of this activity.

4.7 Preparing Documentation, Training, and Handover Requirements

The final stage of the assessment is to prepare the capacity building for the contractor's technical lead and workers to ensure proper compliance with the national and world bank requirements. Detailed training plan were prepared which includes the required training, delivery mode, target group and responsibility for

the implementation. Also, the cost estimations needed to implement this plan are incorporated into the assessment.

Chapter 5. Environmental and Social Risks and Impacts

The proposed Campus Network installation at Amoud University will be carried out within an existing academic institution, where the surrounding environment has already been modified by university development and daily campus activities. However, Amoud University is located within a forest zone, and the campus contains important vegetation and shaded areas that require careful protection during implementation.

5.1 Positive impacts

The proposed campus network installation is expected to generate important positive impacts for the University of Hargeisa. Improved internet connectivity will strengthen teaching, learning, research, administration, and access to digital education services. The project will support e-learning, online academic resources, digital libraries, student information systems, communication between departments, and improved access to national and regional education networks.

The sub-project will also improve institutional efficiency by enhancing connectivity between offices, classrooms, ICT rooms, laboratories, libraries, and administrative units. This will contribute to faster information sharing, improved academic service delivery, and better coordination within the university. In addition, students and staff will benefit from improved access to digital tools, online learning platforms, research databases, and communication services.

The project may also create short-term employment opportunities for technical workers, electricians, cable installers, and support staff during installation. It will also promote skills transfer through interaction between contractors, university ICT staff, and project technical teams. If implemented inclusively, the project can improve access to digital services for women, students with disabilities, and underserved departments within the university.

5.2 Environmental Risks and Impacts

The anticipated environmental impacts of the sub-project are expected to be **limited, site-specific, temporary, and manageable**, as the proposed activities will mainly involve installation of campus network infrastructure within the existing Amoud University compound. The likely impacts include minor dust, noise, and vibration generated from drilling, trenching, wall mounting, manhole construction, cable laying, equipment installation, and movement of materials. These impacts may

temporarily affect nearby classrooms, offices, ICT rooms, laboratories, walkways, and shaded student areas, particularly if works are carried out during lecture hours or other sensitive academic periods. Therefore, works should be carefully scheduled in coordination with the university administration, and noisy or dusty activities should be limited to agreed times.

The project may also generate small quantities of waste, including packaging materials, cable offcuts, plastic materials, damaged fittings, construction debris, and electronic waste from network equipment. If these wastes are not properly collected, segregated, stored, and disposed of, they could create poor housekeeping conditions, pollution risks, and health and safety hazards for students, staff, workers, and visitors. E-waste and any damaged electronic components should be handled separately and managed in line with the project's e-waste management procedures, while general construction waste should be removed from the site and disposed of through approved methods.

Minor ground disturbance may occur during trenching, cable routing, excavation for manholes, or installation of support structures. If excavated areas are left open, poorly compacted, or not reinstated immediately, this could result in localized soil erosion, dust generation, unsafe walkways, surface runoff problems, or damage to existing paved areas. The contractor should therefore minimize excavation, protect open trenches, backfill and compact disturbed areas promptly, and reinstate all affected surfaces, walkways, and access routes after completion of works.

Given the protected forest and natural vegetation setting of Amoud University, particular attention should be given to avoiding unnecessary disturbance to trees, natural vegetation, landscaped areas, grass cover, and shaded spaces used by students and staff. Cable routes and work areas should be selected to avoid tree cutting and damage to root zones wherever possible. Material storage, vehicle movement, trenching, and waste disposal should not take place in sensitive vegetation areas. Any unavoidable disturbance should be minimized, clearly justified, supervised, and followed by proper reinstatement or replanting where necessary. Overall, the environmental risks are manageable provided that the ESMP, good housekeeping practices, waste management measures, vegetation protection, and regular PIU and university supervision are effectively implemented.

5.3 Social risks and impacts

The main social and occupational health and safety risks associated with the sub-project are also expected to be **temporary, localized, and manageable**. These risks may include short-term disruption to classrooms, offices, laboratories, ICT rooms,

libraries, walkways, and administrative services during installation activities. Students, lecturers, staff, visitors, and university management may experience inconvenience due to temporary access restrictions, movement of materials, cable routing, drilling, trenching, or equipment installation. To minimize these impacts, the Contractor should coordinate closely with Amoud University, agree on a work schedule, provide advance notice to affected departments, and maintain safe alternative access routes throughout implementation.

Workers may be exposed to occupational health and safety risks during electrical works, drilling, wall mounting, working at height, lifting and carrying equipment, cable pulling, trenching, and use of hand tools or small machinery. These activities may result in injuries if safe work procedures, supervision, training, and appropriate personal protective equipment are not properly provided. The Contractor should therefore conduct site induction, toolbox talks, risk assessments, and daily supervision, while ensuring that workers use appropriate PPE such as safety shoes, helmets, gloves, reflective vests, eye protection, and fall protection where required.

Campus users may also be exposed to physical safety hazards if work areas are not properly controlled. Potential hazards include loose cables, open trenches, tools, ladders, debris, moving vehicles, stored materials, and restricted work zones. These risks should be managed through clear signage, barricading of work areas, covering or securing open trenches, proper housekeeping, safe storage of tools and materials, and separation of construction areas from student and staff movement routes. Special attention should be given to high-traffic areas, lecture periods, examination periods, and access routes used by students with disabilities.

Overall, the anticipated environmental, social, and occupational risks are expected to be **minor to moderate** and can be effectively managed through proper implementation of the ESMP. Key measures include careful work scheduling in coordination with Amoud University, protection of forested and vegetated areas, good housekeeping, proper waste and e-waste management, use of PPE, safe access arrangements, prior communication with campus users, enforcement of worker Codes of Conduct, and operation of a functional grievance redress mechanism. All works should be implemented in accordance with the World Bank ESF, WBG EHS Guidelines, national requirements, and Good International Industry Practice.

Chapter 6. Environmental and Social Management Plan (ESMP)

This chapter (6) presents the ESMP for proposed campus network installation sub-project at the University of Amoud. It outlines the key environmental and social risks, mitigation measures, monitoring requirements, responsibilities, and reporting arrangements to ensure the activity is implemented in line with national environmental legislation, the World Bank ESF, and relevant EA-RDIP instruments. The ESMP will guide the PIU, university administration, contractor, and supervising team in managing risks related to civil works, OHS, waste and e-waste, access disruption, stakeholder engagement, GRM, and GBV/SEAH prevention

6.1 Positive E&S Impacts

Table 3: shows the positive impacts for campus network activity

Impact	Enhancement measures	Monitoring Indicators	Frequency	Responsibility Implementation and Monitoring
Improved internet connectivity across the University of Amoud campus.	Ensure proper installation of fiber optic cables, routers, switches, access points, and network equipment according to approved technical standards.	Stable internet connection is available in targeted buildings and service areas.	During installation and after commissioning	Implementation: Contractor. Monitoring: PIU ESF and Connectivity Specialist
Improved access to digital learning resources	Prioritize connectivity in lecture halls, libraries, laboratories, offices, and student service areas.	Number of connected academic and administrative buildings; improved access to online learning platforms.	During rollout and quarterly after commissioning	Implementation: Contractor. Monitoring: PIU ESF and Specialists

Strengthened ICT infrastructure and network security	Install secure, scalable, and well-managed network infrastructure with proper configuration and access control.	Functional network management system; reduced connectivity interruptions; improved network security controls.	During commissioning and periodically	Implementation: Contractor. Monitoring: PIU ESF and Specialists
Inclusive access for students, staff, women, and persons with disabilities	Ensure consultation and equitable rollout of connectivity improvements across departments and user groups.	Participation of women, students, staff, and vulnerable groups in consultations; no unresolved exclusion-related grievances.	During planning and implementation	Implementation: Contractor. Monitoring: PIU ESF and Specialists

6.2 xNegative Environmental and Social impacts and their management plan

The table below (table 4) presents key environmental and social adverse impacts, associated activities, mitigation measures, monitoring indicators, and implementation and monitoring responsibilities.

Table 4: Simplified Environmental and Social Management Plan (ESMP)

Applicable ESS	Associated Project Activity	E&S Risk and Impact	Mitigation Measures	Responsibility for Implementation	Timing	Monitoring Indicators
ESS1: Assessment and Management of Environmental and Social Risks and Impacts						
ESS1	drilling, mounting, and cable installation	dust and noise	Schedule disruptive works outside class hours where possible; use dust suppression and good housekeeping; notify affected departments in advance.	Contractor monitored by the PIU ESF Team	Once in every week during implementation	Working hours, number of times dust is suppressed, distributed PPE's, number of workers trained for PPE usage.
ESS1	drilling, mounting, and cable installation	Dust generation affecting students, staff, workers, equipment and indoor air quality	Apply dust-control measures contained in the Contractor's ESMP; use light water sprinkling where appropriate; isolate indoor drilling areas; cover dust-generating materials; clean work areas daily; and promptly respond to dust complaints.	Contractor monitored by the PIU ESF Team	Once in every week during implementation	Number of working hours, number of times dust is suppressed, distributed PPE's, number of workers trained for PPE usage.
ESS1	Drilling, trenching, wall penetration, cable routing and movement of materials	Soil disturbance, erosion, sediment movement, unstable excavations and prolonged open trenches	Limit excavation to approved routes; minimize the width and duration of trenches; stockpile excavated soil safely; install erosion and sediment controls where necessary; backfill and compact trenches promptly; and restore affected surfaces.	Contractor monitored by the PIU ESF Team	Once in every week during implementation	Effectuated areas, trench geometrics, erosion controllers installed in the site, backfilled and compacted trenches.

Applicable ESS	Associated Project Activity	E&S Risk and Impact	Mitigation Measures	Responsibility for Implementation	Timing	Monitoring Indicators
ESS1	The whole phases of the project	Risk of unequal inclusion of women, students with disabilities, or underserved departments	Apply inclusive planning, stakeholder consultation, and equitable rollout of connectivity improvements, establish GRM mechanisms on the site.	Contractor monitored by the PIU ESF Team	Once in every Month during project implementation	Number of women, and students with disabilities benefits from the project, GRM availability, and complaints resolved.
ESS1	Construction machineries	The activity result in increased levels of vibration from construction machinery	works should be carefully scheduled to minimize disruption to lecture rooms, offices, laboratories, and other sensitive university spaces. Equipment should be well maintained, used only for the required duration and operated in a controlled manner to reduce disturbance to building users. Where necessary use hand drilling to avoid unnecessary vibration.	Contractor monitored by the PIU ESF Team		Avoidance of university working hours, and maintenance schedule for the equipments
ESS1	Storage and use of batteries, fuel, oil, lubricants or electrical components	Hazardous waste generation, accidental spills, soil contamination, fire risk or unsafe disposal	Implement hazardous-material and spill-prevention procedures; label and securely store hazardous materials; use drip trays where required; provide spill kits; train workers in spill response; clean spills immediately; and prohibit dumping, burning or informal disposal.	Contractor monitored by the PIU ESF Team	Throughout storage and use of hazardous materials	Quantity of hazardous wastes generated, available prevention measures, trained workers, transported and disposed quantities.

Applicable ESS	Associated Project Activity	E&S Risk and Impact	Mitigation Measures	Responsibility for Implementation	Timing	Monitoring Indicators
ESS1	Trenching and Fiber installation	Risk of damaging existing materials such as water supply pipes, paving stones and interlock pavements	Avoid areas of water supply systems, reinstall damaged pavements once work is done, and avoid effected unnecessary areas	Contractor monitored by the PIU ESF Team	Once in every week during the implementation phase	Number of effected infrastructure, re-installation of pavements alongside effected areas
ESS2: Labor and Working Conditions						
ESS2	delayed payment, underpayment or exclusion of women	Labor-related risks such as delayed payment, underpayment or exclusion of women	Apply LMP provisions; maintain transparent contracts and payment systems; encourage women's participation in relevant roles.	Contractor monitored by the PIU ESF Team		Monitor staff contracts, payment procedures and number of women involved in this activity.
ESS2	Misuse of resources, inequitable treatment, and weak payment accountability	risk of inequitable treatment, misuse of resources, or weak payment accountability	This risk should be mitigated through transparent procurement and payment procedures, clear contractual arrangements,	Contractor monitored by the PIU ESF Team		Workers contract, payment documentations, reported grievances.
ESS3: Resource Efficiency and Pollution Prevention and Management						

Applicable ESS	Associated Project Activity	E&S Risk and Impact	Mitigation Measures	Responsibility for Implementation	Timing	Monitoring Indicators
ESS3	Unpacking equipment, cable installation, minor demolition and general site activities	Generation of packaging, cable offcuts, plastics, paper, scrap materials and other solid waste	Implement the Solid and Liquid Waste Management Plan; provide labelled waste containers; segregate recyclable and non-recyclable materials; reuse or recycle suitable packaging; prevent littering; and transport residual waste to approved disposal locations.	Contractor; monitored by the PIU ESF Team	Daily, with weekly inspections during works	Segregated waste bins available in the site, and companies that will transfer the waste.
ESS3	Replacement, testing or damage of routers, switches, batteries, cables and other electronic equipment	Generation of electronic waste containing potentially hazardous components	Implement the E-Waste Management Plan; maintain an inventory of damaged or obsolete equipment; separate e-waste from general waste; store it in a secure, weather-protected area; and transfer it only to approved or authorized handlers.	Contractor, in coordination with the University ICT Unit; monitored by the PIU ESF Team	Throughout installation and commissioning	Segregated waste bins available in the site, and companies that will transfer the waste, number of induction trainings provided.
ESS4: Community Health and Safety						
ESS4	debris removal materials	The debris removal materials could create trip hazards, obstruct access routes, or reduce the overall safety and cleanliness of the campus environment	The contractor should ensure routine collection, segregation and safe removal of all debris from active work areas with particular attention to corridors, classrooms, offices and other shared spaces used by the university community.	Contractor, monitored by the PIU ESF Team	Once every week during implementation	Debris removal procedures, debris collected locations, segregation and contractor's authorized for collection.

Applicable ESS	Associated Project Activity	E&S Risk and Impact	Mitigation Measures	Responsibility for Implementation	Timing	Monitoring Indicators
ESS4	Trenching, construction, car movement and drilling machineries	Community exposure to physical hazards during installation	Mark work zones clearly; restrict unauthorized access; manage cables, ladders, and tools safely; restrict working hours during the off time where students and staff are outside of the university.	Contractor monitored by the PIU ESF Team	Once every week during implementation	Staff hired to protect the area for unauthorized access, warning signs available on the site, and demarcation of the working area.
ESS4	Delivery of equipment	Traffic and pedestrian safety risks during delivery of equipment	Schedule deliveries carefully; use designated loading/unloading points; provide traffic guidance where needed.	Contractor monitored by the PIU ESF Team	Once every week during implementation	Whether traffic guidance is provided or not, assigned loading/unloading points and arranged schedules for deliveries.
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources						
ESS6	Cable routing, excavation, equipment delivery and vehicle movement near trees, landscaped areas, asphalt roads and paved walkways	Damage to shade trees, tree roots, vegetation, asphalt roads and paved surfaces	Demarcate and protect vegetation and shaded areas; prohibit unauthorized tree cutting or pruning; reroute cables to avoid tree roots where feasible; restrict vehicles and excavation to approved areas; use protective measures during deliveries; and immediately reinstate vegetation, asphalt and paving affected by the works.	Contractor monitored by the PIU ESF Team	Once every week during implementation	Number of cleared and restored trees.
ESS10: Stakeholder Engagement and Information Disclosure						

Applicable ESS	Associated Project Activity	E&S Risk and Impact	Mitigation Measures	Responsibility for Implementation	Timing	Monitoring Indicators
ESS10	Planning and scheduling of installation activities across university buildings and common areas	Students, staff and departments may not receive timely information about the scope, timing and possible disruption associated with the works	Implement the Stakeholder Engagement Plan; disclose the work schedule, affected buildings, expected disruptions, safety precautions and contact information through notices, meetings and university communication channels.	Contractor and University Management, supported by the PIU ESF Team	Before mobilization and whenever the schedule changes	Disclosed information and adapted mechanisms, and GRM available for the stakeholders.
ESS10	Temporary closure or restriction of classrooms, offices, laboratories, walkways and student-use areas	Inadequate consultation may result in access difficulties, disruption, dissatisfaction and grievances among campus users	Consult affected departments before starting work; agree on suitable working hours; phase activities; provide safe alternative access; prioritize continuity of essential academic and administrative services; and promptly communicate any changes.	Contractor and University Management; monitored by the PIU ESF Team	Before and throughout works	Number of consultations held, participated categories, and available GRM.

Applicable ESS	Associated Project Activity	E&S Risk and Impact	Mitigation Measures	Responsibility for Implementation	Timing	Monitoring Indicators
ESS10	Stakeholder consultations and planning for access to improved digital services	Women, persons with disabilities, financially disadvantaged students and other vulnerable users may be excluded from consultation or may not benefit equitably from improved connectivity	Conduct inclusive consultations with women, students with disabilities, vulnerable students, faculty and administrative staff; provide accessible communication formats and venues; document their priorities; and incorporate reasonable accessibility and equitable-access measures into implementation.	University Management and PIU ESF Team, including the Social and GBV Specialists	During planning, installation and post-commissioning monitoring	Number of engaged vulnerable groups, resolved concerns, number of disadvantaged groups benefits from the connectivity service.
ESS10	Receipt and management of complaints from students, staff, workers and other campus users	Complaints relating to noise, dust, access, worker conduct, damage, service allocation or other project impacts may remain unresolved	Operate the project grievance redress mechanism; disclose all reporting channels; maintain a grievance register; acknowledge, assess and resolve complaints within agreed timelines; provide appeals or escalation options; and communicate outcomes to complainants.	Contractor and University Management, overseen by the PIU ESF Team	Before mobilization and throughout implementation	Number of complaints received and resolved, and mechanisms for reporting complaints.

Applicable ESS	Associated Project Activity	E&S Risk and Impact	Mitigation Measures	Responsibility for Implementation	Timing	Monitoring Indicators
ESS10	Worker interaction with students, staff and other university stakeholders	SEA/SH-related grievances may not be reported because of fear, stigma, confidentiality concerns or lack of knowledge of available services	Provide confidential, safe and accessible SEA/SH reporting options; disclose referral pathways without requiring survivors to publicly identify themselves; train designated grievance personnel; protect confidentiality; and manage cases according to survivor-centered principles.	PIU GBV Specialist, Contractor and designated GRM personnel	Before mobilization and throughout works	Weather confidential accessible reporting mechanisms is provided, complaints received, resolved versus and unresolved complaints, weather there is a designated person or not.
ESS10	Monitoring of installation progress, commissioning and early operation of the improved network	Stakeholder concerns, unintended impacts or dissatisfaction with service access may not be captured after installation	Conduct regular coordination meetings with university management and affected user groups; document feedback; monitor commitments and corrective actions; communicate progress; and undertake post-commissioning consultations on accessibility, service quality and outstanding grievances.	University Management and PIU ESF Team, with participation of the PIU M&E and Connectivity Specialists	Monthly during works and quarterly following commissioning	Number of coordination meetings held, participated stakeholders, resolved concerns and corrective actions taken.

Chapter 7. Monitoring and Reporting

This chapter (7) outlines the monitoring arrangements for the activity including monitoring types, responsible institutions and personnel, implementation stage, frequency, and compliance reporting requirements.

7.1 Objectives of Monitoring

The objective of this section (7.1) is to ensure that the mitigation measures proposed in the ESMP are effectively implemented by the Contractor and to identify any environmental or social issues that arise during the campus network activities.

Regular field visits would be conducted by the ESF team (Environmental, Social and GBV specialists) to ensure compliance with guidelines of ESMP that are prepared in accordance with the WB standards and OHS guidelines and national regulations. The Contractor will be responsible for implementing the mitigation measures outlined in the ESMP through preparing and implementing a specific Contractor Environmental and Social Management plan (C-ESMP) that clearly identifies the specific mitigation and enhancement measures for each impact, and the PIU will conduct frequent monitoring activities to check the compliance. The PIU ESF team will be responsible for monitoring and reporting, this will be achieved through collecting, verifying, and collating information, integrating the M&E reports, and submitting to the World Bank the monthly, quarterly and after sub-project completion reports.

Monitoring will help to:

- Proper management and mitigation of E&S impacts.
- Ensure contractor management through continuous monitoring
- Check the efficiency and quality of the Environmental Audit (EA) processes;
- Establish the reliability and credibility of the EA for the sub-project (as well as the quality of experts providing EA services)
- Provide the opportunity to report the results on safeguards and impacts and proposed mitigation measures implementation.

7.2 Internal Monitoring and Reporting

Internal Monitoring shall begin once E&S sub-project documents (E&S screening report and ESMP) are approved and disclosed. This ensures that the:

- Mitigation measures identified in the planning phase (contained in the ESMP report) and incorporated in the sub-project design and cost are being implemented.
- These mitigation measures are maintained throughout the construction phase, and where applicable in the operation phase, and to the decommissioning of sites, facilities and equipment;

- Additional remedial actions are identified (including corrective measures or redesign of mitigation measures), where relevant.
- Reporting mechanisms are ensured to be in place and continuous throughout the project cycle.

The monitoring by MICT PIU shall actively and effectively monitor the contractors engaged in the implementation of campus network and covers other areas such as adherence to the environmental and social clauses and principles. The C-ESMP that is prepared is also monitored.

The monitoring results will be analyzed, and the monitored information and recommended actions will be compiled for the attention and action of the respective implementing agencies. The monitoring report will be formalized with the agreed actions and timeframes and submitted to the PIU PC and the Bank.

7.3 World Bank Supervision

The Bank will provide the second line of monitoring compliance and commitments made in the ESMP through implementation support missions. The Bank will undertake monitoring during its scheduled biannual implementation, support missions or other missions specific to this sub-project. The contractor will be required to submit the monthly, quarterly monitoring reports and sub-project completion reports to the PIU will consolidate and summarize these reports and submit to the Bank as part of its reporting to the Bank and the Bank supervision missions will review these reports and provide feedback.

Chapter 8. ESMP Monitoring and Compliance Reporting

This chapter (8) presents the reporting arrangements for monitoring ESMP implementation and compliance during the Campus Network Installation Sub-project. It outlines the key reports to be prepared, their contents, reporting frequency, and responsible parties. The purpose is to ensure regular tracking of environmental, social, health and safety performance, timely reporting of incidents and grievances, and implementation of corrective actions where non-compliance is identified.

Table 5: ESMP monitoring and compliance reporting

Title of the Report	Contents of the Report	Frequency of Report preparation	Report to be Prepared by
EHS Monitoring report to PIU	Compliance status of the subproject with the E&S mitigation and monitoring measures. The report shall cover: Environmental incidents; Health	Weekly	Weekly

	and safety incidents, identification of child and forced labor; Health and safety supervision; Usage of PPEs by workers; Highlights of inspections; Training conducted, and workers participated; workers grievances submitted and their response status.		
ESMP report to PIU	Compliance status of overall subproject with ESMP requirements	Monthly	Contractor
Incident and accident report	Incident investigation reports for all major incidents covering details of the incident, root cause analysis, and actions taken to prevent and address future recurrence of a similar event	Initial Notification report for severe incidents within 24 hours. Detailed Investigation Report within ten days	contractor
Incident report from PIU to WB	Incident investigation reports for all major incidents covering details of the incident, root cause analysis, and actions taken to prevent and address future recurrence of a similar event	Initial investigation report for severe incidents within 48 hours. Detailed Investigation Report within 21 days	PIU
Consultations reports	Consultation activities documented the engagement objectives, stakeholders consulted, locations and dates of meetings, and key issues raised by communities and authorities. The report summarizes consultation methods used, concerns and feedback received, agreed mitigation measures, and how stakeholder inputs were integrated into sub-	Monthly	contractor

	project design and ESMP implementation, including records of participation and outcomes.		
Progress report on Capacity Building plan	Capacity building targeted sub-project staff and local workers, covering E&S management, OHS, community safety, GRM, Code of Conduct, waste management, and emergency response. Training will be delivered through toolbox talks and on-site briefings before and during construction, led by the Contractor's E&S and OHS focal persons. Attendance was recorded with gender disaggregation, and the activities improved ESMP compliance and site safety.	Weekly	contractor
GRM progress report	The training will cover GRM processes, roles, and timelines for communication through site briefings and community awareness sessions, with designated focal persons Weekly contractor responsible for grievance management. Also, the Grievance logging, tracking, and resolution process in a timely manner.	Weekly	contractor

Chapter 9. Institutional Implementation Arrangements and Responsibilities

Institutional implementation arrangements and responsibilities are summarized in this table (6). It highlights key institutions involved in this activity and their respective responsibilities. MICT, through the PIU, holds overall responsibility for project coordination and implementation oversight. The World Bank provides technical backstopping and monitors compliance with project requirements, while the contractor is responsible for implementing the activity in accordance with national legislation and World Bank.

Table 6: Institutional Implementation arrangements and responsibilities

Institution Entity	Role
MICT/PIU	The PIU will be responsible for the overall implementation of the sub-project; the PIU ESF specialists will be responsible for overall supervision and monitoring of the sub-project implementation. Specifically, the PIU GBV, Environmental, and Social Specialists are responsible for managing the E&S risks of the sub-project and responsible for monitoring the implementation of this ESMP. The PIU will monitor contractor and subcontractor E&S performance and ensure the contractor monitors its own and all subcontractors' E&S performance throughout construction, including mobilization, the main construction phase, and demobilization. all contractors engaged on the sub-project are required to operate in a manner consistent with the requirements of the ESSs, including the specific requirements The PIU will be responsible for the: • The PIU ESF specialists will be responsible for overall supervision and monitoring of the sub-project implementation. Specifically, the PIU GBV, Environmental, and Social Specialists are responsible for managing the E&S risks of the sub-project and responsible for monitoring the implementation of this ESMP. • Responsible for the overall coordination and implementation of the project. • Ensure that the ESMP is included in bidding documents and contractor contracts.

	• Supervise implementation of the ESMP throughout the different project activities. • Ensure that the contractor prepares and implements site-specific method statements or Contractor ESMP where required. • Monitor compliance with the World Bank Environmental and Social Standards, national requirements, and Good International Industry Practice. • Review contractor reports, incident reports, grievance records, waste disposal records, and OHS performance. • Coordinate corrective actions where non-compliance is identified. • Submit ESMP implementation updates and required reports to the World Bank. Specific requirements for PIU ESF team, particularly GBV and Social specialist: • Provide technical support for implementation of the ESMP. • Conduct site inspections and monitor environmental, social, occupational health and safety, labor, waste management, stakeholder engagement and grievance redress measures. • Support the contractor in understanding ESMP requirements. • Review contractor E&S documentation, including toolbox talk records, PPE records, waste disposal records, incident logs, grievance logs and corrective action plans. • Ensure that risks related to dust, noise, e-waste, electrical safety, access restriction, worker safety, and office-user safety are properly managed.
Contractor	The contractor is responsible for complying with requirements for all field activities covered by this ESMP, the contractor is also responsible to ensure that all its sub-contractors follow the ESMP and other ESF instruments that apply to this sub project. The contractor will have contractual clauses specifying compliance with the mitigation measures listed in the ESMP and in the WBG's EHS Guidelines, in addition to

	national requirements and to indicate measures taken in cases of non-compliance. The contractor is also responsible for the actions of any subcontractors they may engage. Sub-contractors also have to comply with all E&S Standards as laid out in this ESMP. Contractor's responsibilities include: • Ensuring that all operations comply with the ESSs and mitigation measures laid out in this ESMP, for which the contractor is responsible and will develop and implement a Construction ESMP (C-ESMP). • Ensuring that the control measures provided for in the ESMP are both understood and implemented by site personnel. • Complying with accident and incident reporting as laid out in the ESMF. All severe incidents must be reported to MICT/PIU within 24 hours of occurrence. • Setting up plans for action to be taken in the event of spills or leakages of hazardous materials, and other environmental emergencies. • Monitoring the C-ESMP implementation, against the monitoring indicators laid out in the ESMP Table. • Organizing and participating in Community Consultative Meetings with an approach to adaptive sub-project management as necessary. • Identifying additional significant matters pertaining to environmental and social compliance. • Liaise with MICT/PIU on the need for corrective action in the event of unexpected environmental or social issues emerging during operations. • Communicating with all staff regarding E&S compliance requirements and other matters of importance. • Identifying additional environmental mitigation or corrective measures that are deemed to be necessary during sub-project implementation. • Preparing reports on all aspects of E&S compliance. • Maintaining lists of all workers, including their age and gender. • Maintaining and adequately operating a workers'
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	GRM. • Prepare and implement an OHS Plan and provide related and frequent training to all workers. • Ensure signing of the code of conduct by every worker, covering issues of Sexual Harassment, Gender-Based Violence (GBV) and Sexual Exploitation and Abuse. • Implementing the Security Management Plan (SMP). • The contractor is obliged to implement this ESMP, operationalized through the C-ESMP with all risk mitigation measures assigned to it. • The PIU should require contractors to report on an agreed frequency their E&S performance and metrics (which shall include relevant information and data from subcontractors, as applicable). Timely reporting of E&S performance and results enables the client to identify opportunities for improvement, prevent poor performance issues, and assist contractors if remedial action is to be taken. • Given that the majority of the anticipated environmental and social risks and impacts will occur during the construction phase, the contractor will be contractually bound to prepare and implement a C-ESMP consistent with the associated E&S instruments. The implementing entities will ensure the C-ESMPs summarize the context, interested parties, compliance requirements, checks for compliance, risks and opportunities, activity-specific environmental and social objectives and specific targets, training plans, inspections, peer reviews and other monitoring actions and incidents as discussed. The C-ESMPs will inform the actions expected from the respective contractors and others.
University of Amoud	The University of AMoud Will assign focal person for this sub-project. The focal person will support the PIU and the Contractor to ensure effective coordination and smooth implementation of project activities within the university campus. The focal person will serve as the main liaison between the University, PIU, Contractor, and stakeholders;

	facilitate site access; support work scheduling to minimize disruption; assist in stakeholder engagement, information disclosure, and grievance referral; support monitoring visits; and coordinate official communication from the university.
Contractor E&S Risk Management or Environmental Health and Safety (EHS) Specialist:	The contractor will deploy an E&S or EHS Specialist to ensure operationalization of this ESMP and adequate implementation of the C-ESMP, including monitoring, supervision and reporting on mitigation measures. The key tasks of the Specialist are to; • Ensure PPE for workers is available and workers are trained in its use and comply with it • Provide OHS training to all workers, based on the OHS Plan • Ensure health and safety of all workers at the construction site • If necessary, stop the works to ensure safety • Maintain records of accidents and incidents and ensure appropriate reporting of incidents to the supervision consultant and MICT/PIU • Ensure waste management procedures are followed closely • Ensure availability of water and sanitation facilities for all workers at site and at the campsite • Conduct toolbox talks for workers • Train all workers in the CoC and ensure that CoC is signed by every worker • Liaise closely with the supervision consultant and PIU on training workers on GBV issues, as well as community awareness on GBV • Maintain workers' lists indicating age and gender • Liaise closely with the supervision consultant and MICT/PIU on the implementation of Sub-project GRM • Maintain records of workers' GRM
World Bank	The Bank will be responsible for the final review and clearance of environmental and social assessment instruments; Where possible conduct supervision missions to check on the performance of university campus network and assess its compliance to agreed grant covenants and environmental and social instruments; and Recommend measures for improving the performance.

Coordination and Reporting	The PIU will lead coordination of the Campus Network Installation Sub-project in collaboration with Burao University management, the university focal person, the Contractor, and the World Bank. The Contractor will coordinate daily site activities with the PIU and university focal person, provide advance notice of works, and ensure that access restrictions, deliveries, noisy activities, and safety measures are properly communicated. The Contractor will submit regular EHS/ESMP reports covering progress, OHS, waste and e-waste, incidents, grievances, trainings, non-compliance issues, and corrective actions, while the PIU will verify implementation through site inspections, consolidate reports, and submit required updates to the Project Coordinator and World Bank.
ESMP contractual requirement	The ESMP shall form part of the bidding documents, contractor contracts, and subcontracting arrangements for the Campus Network Installation Sub-project. The Contractor will be required to comply with all mitigation, monitoring, reporting, OHS, labor, waste management, e-waste, GBV/SEAH, GRM, and community safety requirements outlined in this ESMP, the EA-RDIP ESMF, World Bank ESSs, WBG EHS Guidelines, national regulations, and GIIP. Before works commence, the Contractor shall prepare and implement a site-specific C-ESMP, assign responsible E&S/OHS personnel, ensure all workers and subcontractors comply with ESMP requirements, and submit regular compliance reports to the PIU. Any non-compliance, incident, accident, or grievance shall be reported and addressed through agreed corrective actions and within the required reporting timelines.

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9.1 E&S Performance Meetings

Regular meetings with the PIU/MICT Project Coordinator; the PIU GBV/SEAH Specialist, the PIU Environmental Specialist; the PIU Social Specialist; the Supervising Engineer; the Contractor's Project Manager; the Contractor's E&S/OHS Officer; and the Contractor's GBV/SEAH focal point (where applicable) are essential to ensure contractor performance is satisfactory and that project specifications are being met. Additional participants may be invited as needed, including representatives from the university, local authority representatives

and community liaison/GRM focal points to address site-specific community health and safety or access-related issues. The PIU will share performance-monitoring results at weekly meetings with the contractor to effectively drive improved performance. The PIU ESF specialists who control contractor performance and conduct monitoring of staff also need to be clarified and understood by contractors (for example, who gives instructions to stop work or proceed but with modifying the approach, scope, equipment, and so forth). The PIU should ensure that contractors employ qualified E&S personnel to oversee E&S performance, and that contractor staffing and resources are commensurate with the magnitude and timing of work and potential E&S risks. The PIU should also approve documentation, including training programs, to ensure all staff are aware of E&S commitments and their part in meeting them.

9.2 Review and Approval of Contractor Site-Specific E&S plans

The PIU is responsible for its contractors, meeting all of the sub-project's E&S requirements, it is essential for them to review and approve sub-project E&S management plans and procedures. These might include such plans as working within boundaries (footprint management), protection of biodiversity, land clearing and erosion control, traffic management, labor sources and methods of recruitment of workers, worker accommodation, noise and dust control, and possibly others. Where an E&S Management Plan has not been approved, no works will commence in the area.

9.3 Kickoff Meeting

Prior to early work activities, the PIU should hold a kickoff meeting with the contractor prior to arriving at the site. Timing of mobilization based on logistical issues, resources, and so forth should be considered in the planning. The PIU and contractor sub-project managers and major subcontractors should participate in these meetings. The purpose is to review planned activities and schedules, review E&S requirements (among others), review the roles of the various parties in implementing and monitoring mitigation measures, and agree on sub-project-specific induction and training content. These meetings (Kickoff and E&S performance) should include a discussion about control of access to the site, use of security forces if applicable, and how to best coordinate the PIU's security management system and E&S activities at both the base camp (accommodation site) and any remote construction sites. Both MICT and contractor E&S representatives should be present to reiterate all E&S commitments and establish initial compliance points and coordination requirements during site establishment.

Chapter 10. Reporting of ESMP Compliance

The effective implementation of this Environmental and Social Management Plan (ESMP) and the Contractor's Environmental and Social Management Plan (C-ESMP) is highly dependent on the capacity, awareness, and commitment of contractors' personnel, sub-project workers, surrounding communities, and other relevant stakeholders. To ensure compliance with environmental and social requirements and to promote safe and responsible sub-project execution, targeted capacity-building and training activities will be undertaken throughout the sub-project lifecycle, with a strong emphasis on the pre-construction phase.

- Training workshops will be conducted to enhance understanding of the sub-project's environmental and social obligations, raise awareness of potential risks, and strengthen the ability of site personnel to effectively implement mitigation measures. Particular attention will be given to workers directly involved in construction and site operations, as they play a critical role in managing day-to-day environmental, social, health, and safety risks.
- All on-site workers will receive mandatory training prior to the commencement of construction activities. The training will be provided by the contractor's technical leads. These training sessions will be delivered by qualified personnel and will be included in the contractor's budget as part of contractual obligations. Refresher training will be provided as needed during implementation to reinforce compliance and address emerging risks.
- At a minimum, the training program for construction workers will cover the following topics:
- Occupational Health and Safety (OHS) requirements, including hazard identification, use of personal protective equipment (PPE), and safe work practices.
- Environmental and social mitigation measures to be applied in accordance with the ESMP and C-ESMP.
- Prevention of Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH), including adherence to Codes of Conduct.
- Prevention, reporting, and management of workplace accidents, as well as the preparation and implementation of emergency response and preparedness plans.
- Roll-out and use of the Grievance Redress Mechanism (GRM) for workers and surrounding communities.
- Proper segregation, handling, transportation, and final disposal of solid and construction waste.

Chapter 11. Stakeholder Engagement

Stakeholders were identified based on open and transparent engagement. The engagement was inclusive and aimed to identify the level of interest of stakeholders for this activity, provide information about the activity's nature and carefully consider the raised comments and issues from stakeholders. The process of identifying stakeholders went through brainstorming and consulting with university management to support mapping the key stakeholders. Key groups included; university students, staff, management and the owners of the small businesses inside the campus.

11.1 Subproject stakeholders

The key stakeholders for the sub-project include the University of Amoud management, students, staff, and other campus users. The university management was identified as a key stakeholder and was involved in the initial discussions and planning of the activity. University students, academic staff, and administrative staff are the main beneficiaries of the campus network installation, as they will directly benefit from improved digital connectivity and access to online services. Other relevant stakeholders include small business owners operating within the campus as their activities may be temporarily affected during installation works. The small business owners provide refreshments and services to students during break times.

Stakeholder identification was aligned with the scope of this work and the requirement to consider gender, accessibility, and social dynamics.

11.2 Methods of Stakeholder Engagement

The stakeholder engagement methodology was conducted through face-to-face workshops, where different categories of stakeholders participated, including university management, students, staff, small business owners, and other campus users. During the sessions, the PIU presented and explained the nature of the project, its scope, planned sub-activities, implementation duration, expected environmental and social risks and impacts, and anticipated benefits. The workshops also provided an open space for participants to share feedback, raise questions, provide comments, and express any concerns related to the proposed activities. The PIU responded adequately to the issues raised and documented the discussions through recorded meeting minutes and signed attendance lists.

11.3 Stakeholder Feedback and Key Issues Raised

This subsection (10.3) summarizes the key feedback, concerns, and issues raised during stakeholder consultations conducted for the Amoud University Campus

Network Sub-project. The consultations provided an opportunity for university representatives, students, staff, and other relevant stakeholders to share their views on the proposed activities, existing connectivity challenges, potential risks, expected benefits, and mitigation measures. The feedback received has been considered in the ESMP and will guide project implementation, communication, monitoring, and grievance management.

Table 7: stakeholder feedback and key issues raised

Key feedbacks and issues raised on the stakeholder meeting	PIU respond
Internet connectivity is generally poor across the campus.	The PIU acknowledged the concern and clarified that the Campus Network project is designed to improve reliable, secure, and high-capacity internet connectivity across Amoud University.
ICT students already use digital systems for assignment submission, attendance tracking, and student performance monitoring.	The PIU noted that improved campus connectivity will strengthen existing digital academic systems and support wider use of e-learning, student management, and academic performance platforms.
An alternative or backup plan should be included in the design as a redundancy measure.	The PIU confirmed that the technical design should consider redundancy, backup connectivity, and system reliability to reduce service interruptions.
The project should be implemented as early as possible.	The PIU acknowledged the urgency and noted that implementation will proceed following completion of required technical, procurement, and environmental and social safeguard procedures.

Chapter 12. Capacity Building and Training

Effective implementation of the ESMP and C-ESMP will depend on the capacity, awareness, and commitment of the contractor's personnel, sub-project workers, surrounding communities, and relevant stakeholders. To ensure compliance with environmental and social requirements and promote safe implementation, targeted training and capacity-building activities will be conducted throughout the sub-project lifecycle, with particular focus on the pre-construction, and construction phase.

Training workshops will be organized to strengthen understanding of the sub-project's environmental and social obligations, potential risks, and required mitigation measures. Special attention will be given to workers directly involved in construction and site activities, as they are responsible for managing day-to-day environmental, social, health, and safety risks.

All site workers will receive mandatory training before construction begins. The training will be delivered by qualified personnel and included in the contractor's budget as part of contractual requirements. The PIU will provide Refresher training to contractor's technical leads, where necessary, to reinforce compliance and address emerging risks.

At a minimum, the training program will cover Occupational Health and Safety requirements, including hazard identification, PPE use, and safe work practices; implementation of environmental and social mitigation measures under the ESMP and C-ESMP; prevention of GBV/SEA/SH and compliance with Codes of Conduct; accident prevention, reporting, and emergency preparedness; and the use of the Grievance Redress Mechanism for workers and surrounding communities.

The training will also cover proper segregation, handling, transportation, and final disposal of solid and construction waste as well as E-waste. These objectives will be achieved through targeted induction workshops for all sub-project workers at the beginning of the construction phase to ensure they understand their environmental, social, health, and safety responsibilities before starting site activities. Periodic refresher training will be conducted during implementation to reinforce compliance, address emerging risks, and incorporate lessons learned.

In addition to worker training, surrounding communities and nearby stakeholders will be engaged through structured awareness-raising sessions. These sessions will improve community understanding of sub-project processes, rights, safeguards, and available reporting channels. Particular attention will be given to the Community Grievance Redress Mechanism, including how grievances can be submitted, addressed, and resolved confidentially and accessibly, as well as

GBV/SEA/SH prevention and response measures, including available support services and referral pathways.

Table 8: capacity building plan

Training Name	Description about the training	Delivery method	Target group	Responsible person	Time frame	Cost Estimate (USD)
Induction training	A general E&S induction training for all workers, specialized workers will be delivered to the staff. The training will cover all aspects of the project ESMF, LMP, ESMP, SEP and GRM.	face-to-face	The contractor	PIU ESF team	Prior to the commencement of activities.	200
OHS standards	H&S Standards for workers, Monitoring Occupational Health and Safety (OHS) Leadership, Management Safety performance assessment Hazard Analysis and Control Hazard Communication. Program Effective Accident Investigation, Conducting Health and Safety Audits Job Hazard Analysis, Occupational	Face-to-face Training	Contracted workers in Sub-project locations	Contractor's Technical leads	Prior to the commencement implementation phase	1,400

	Health Risk Assessment Work Stress Risk, Assessment Electrical Safety Fire Safety, Fall Protection Plan and Fleet Safety Management					
GBV Action Plan	Training of all Technical Leads in the GBV Action Plan	Face-to-face Training	Communities in sub-project areas	PIU ESF team	implementation phase	1000
E-waste management training	Training for all technical leads, workers and university staff	Face-to-face	Technical leads and university staff	PIU environmental specialist	Pre-implementation phase	400

Chapter 13. Implementation Budget

The budget items for the implementation and management of this ESMP will be part of the sub-sub-project Contractor costs, while the PIU budget for the ESMP activities are summarized in the table below. Table 9 The PIU Budget for ESMP Monitoring and Training for the EARDIP sub-project.

Table 9: ESMP Monitoring implementation budget

No	Item description	Frequency	Estimated cost (USD)
1	Community consultation meeting with 30 participants	Twice per week	1000
2	Capacity building	Lump sum (LS)	3000
3	GRM	Lump Sum	1000
4	Monitoring & Evaluation	Twice per week 2	2500
		Total	7,500

Chapter 14. Grievance Redress Mechanism

14.1 Grievance Redress Mechanism Overview

The Grievance Redress Mechanism (GRM) for the University of Amoud campus network will be implemented in line with the EA-RDIP GRM Manual. It provides a clear, accessible, transparent, and timely process for receiving, reviewing, and resolving complaints from project-affected persons, community members, and workers related to construction activities at the MICT premises.

14.2 Grievance Reporting Channels

Grievances may be submitted through several accessible channels, including suggestion boxes placed at the construction site entrance and the MICT main building, in-person reporting to the Contractor's Social/EHS Officer or university focal point, the project hotline or WhatsApp number, and the dedicated project grievance email.

14.3 Grievance Resolution Levels

At the site level, the Contractor and PIU Site Engineer will address minor complaints such as dust, noise, access disruption, and worker conduct, preferably within 48 hours, while maintaining a daily grievance log. If unresolved, the complaint will be escalated to the PIU Grievance Redress Committee, which includes relevant PIU specialists and community representatives. Further unresolved cases may be referred to MICT leadership or the judiciary where necessary. In addition, communities and individuals affected by a World Bank-supported project may submit complaints through the project of GRM, the World Bank Grievance Redress Service, or the World Bank Inspection Panel where applicable.

14.4 Management of GBV/SEA/SH Grievances

Grievances related to Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH) will be handled confidentially and in a survivor-centered manner. The Contractor will not investigate GBV/SEA/SH cases. Any such complaint must be immediately referred to the PIU GBV Specialist for appropriate handling. Survivors will be linked promptly to the established referral pathway, including medical, psychosocial, and legal support, in accordance with the EA-RDIP GBV Action Plan.

14.5 Workers' GRM

A separate grievance mechanism will be available for contracted workers and daily laborers to report concerns related to wages, occupational health and safety, working conditions, and worker conduct without fear of retaliation. All workers will be informed about the workers' GRM during induction and throughout implementation.

14.6 Community Grievance Redress Mechanism

A Community Grievance Redress Mechanism will be established to receive, record, review, and resolve concerns or complaints related to the Campus Network Installation Project. The GRM will be accessible to students, lecturers, university staff, visitors, nearby service providers, and other affected persons. Complaints may relate to access disruption, dust, noise, vibration, safety risks, waste management, worker conduct, damage to property, labor issues, or GBV/SEAH concerns. Grievances can be submitted through the PIU, university focal person, contractor representative, suggestion boxes, phone contacts, email, or other project-approved channels. All complaints will be handled fairly, confidentially, and without retaliation, with special procedures for GBV/SEAH cases using a survivor-centered approach. The contractor and PIU will maintain a grievance log, track resolution progress, provide feedback to complainants, and include GRM updates in regular monitoring reports.

Project GRM Contacts

- Complaints may be submitted through the following channels:
- Hotline: 9088
- Email: grm@eardipsomaliland.org
- Focal Person: Muna Ibrahim Ahmed, Social Specialist
- WhatsApp: +252 63 3335218
- Suggestion boxes installed at site, and PIU office at MICT office (Road 1)

Chapter 15. Conclusion and Recommendations

15.1 Conclusion

The proposed Campus Network Installation Project at Burao University is expected to bring important educational and institutional benefits by improving internet connectivity, supporting e-learning, strengthening research activities, enhancing communication between students and lecturers, and improving digital access across the campus. The sub-project will be implemented within the existing university premises and is not expected to cause land acquisition, physical or economic displacement, loss of livelihoods, major biodiversity impacts, or community conflict.

The environmental and social risks identified are moderate, site-specific, temporary, and manageable. Key risks include dust, noise, vibration, limited soil disturbance, solid waste, e-waste, hazardous waste, occupational health and safety risks, temporary access disruption, traffic and pedestrian safety risks, labor-related risks, GBV/SEA/SH risks, cybersecurity concerns, and potential grievances from campus users. These risks can be effectively managed through the implementation of the ESMP, C-ESMP, Labor Management Procedures, Stakeholder Engagement Plan, Grievance Redress Mechanism, GBV/SEA/SH measures, proper scheduling of works, and regular supervision by the PIU, university administration, and contractor.

15.2 Recommendations

The contractor should prepare and implement a site-specific C-ESMP before the commencement of works, covering dust and noise control, waste and e-waste management, hazardous material handling, occupational health and safety, traffic management, emergency preparedness, labor management, GBV/SEA/SH prevention, and community health and safety measures.

The contractor should assign at least one qualified Environmental, Health and Safety Officer to oversee daily implementation of the C-ESMP, monitor site safety, conduct toolbox talks, ensure PPE use, manage waste and hazardous materials, report incidents, and coordinate with the PIU ESF team.

All installation works should be closely coordinated with Burao University management to minimize disruption to classrooms, offices, walkways, student service areas, and academic activities. Works should be scheduled during less busy hours where possible, and affected users should be informed in advance.

Waste, e-waste, and hazardous materials should be segregated, safely stored, documented, transported, and disposed of through approved channels. Burning,

dumping, informal recycling, or uncontrolled disposal should be strictly prohibited.

All workers should receive induction training before starting work, including training on OHS, PPE use, safe work procedures, waste management, emergency response, Codes of Conduct, GBV/SEA/SH prevention, and workers' GRM.

The GRM should remain accessible and functional throughout implementation. Complaints from students, staff, workers, small business owners, and other campus users should be recorded, tracked, and resolved within agreed timelines. GBV/SEA/SH-related complaints should be handled confidentially and referred immediately to the PIU GBV Specialist through the established referral pathway.

The Contractor shall include at least one qualified Environmental, Health, Safety and Social (EHSS) Officer as a key requirement before commencement of works. The EHSS Officer will be responsible for the day-to-day implementation of the C-ESMP, including supervision of occupational health and safety measures, environmental and social mitigation measures, PPE compliance, toolbox talks, waste and e-waste management, hazardous material handling, incident and accident reporting, workers' GRM, emergency preparedness, and coordination with the PIU ESF team. The EHSS Officer should have relevant experience in construction site safety, environmental and social risk management, and implementation of World Bank ESF requirements.

The PIU ESF team should conduct regular monitoring and ensure that the contractor submits weekly and monthly E&S compliance reports. Corrective actions should be issued promptly where non-compliance is observed. Overall, the project should proceed subject to full implementation of the ESMP, C-ESMP, EA-RDIP ESMF requirements, and applicable World Bank Environmental and Social Standards.

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15.3 Annex 2: Pictorial images for stakeholder engagement and visited sites at the university campus



15.4 Annex 3: chance finding procedures

This procedure was developed in accordance with the World Bank's ESS 8 (to protect cultural heritage from the impacts of sub-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 cultural heritage).

This procedure is included as a standard provision in the implementation of civil activities under EA-RDIP contracts to ensure the protection of cultural heritage (Archaeological and Historical Sites). All implementers / contractors will be required to observe this procedure as documented hereafter.

Excavation in sites of known archaeological interest should be avoided. Where this is unavoidable, prior discussions must be held with the PIU and the World Bank in order to undertake pre-construction excavation or assign an archaeologist to log discoveries as construction proceeds. Where historical remains, antiquity or any other object of cultural or archaeological importance are unexpectedly discovered during construction in an area not previously known for its archaeological interest, the following procedures should be applied.

- *Stop construction activities;*
- *Delineate the discovered site area;*
- *Secure the site to prevent any damage or loss of removable objects. In case of removable antiquities or sensitive remains, a full-time guard should be present until the responsible authority takes over;*
- *Notify the responsible foreman/archaeologist, who in turn should notify the PIU and the World Bank and local authorities (within less than 24 hours);*
- *The significance and importance of the findings will be assessed according to various criteria relevant to cultural heritage including aesthetic, historic, scientific or research, social and economic values;*
- *Decision on how to handle the finding will be reached based on the above assessment and could include changes in the sub-project layout (in case of finding an irrevocable remain of cultural or archaeological importance), conservation, preservation, restoration or salvage;*
- *Implementation of the decision concerning the management of the finding;*
- *Construction work can resume only when permission is given from the respective authorities, PIU and World Bank after the decision concerning the safeguard of the heritage is fully executed;*
- *In case of delay incurred in direct relation to archaeological findings not stipulated in the contract (and affecting the overall schedule of works), the contractor may apply for an extension of time. However, the contractor will not*

be entitled for any kind of compensation or claim other than what is directly related to the execution of the archaeological findings works and protections.

15.5 Annex 4: Contractors Environmental and Social Management Plan (C-ESMP) contents

<i>a) Sub-project Background Information</i> <i>b) General Information</i> <i>c)Contractors Environment, Social , Health and safety Policies</i> <i>d)Licenses and Permits to be acquired</i> <i>e) Personal Protective Equipment/welfare requirements</i> <i>f) Scope of ESMP and HSMP</i> <i>g) Objectives of the ESMP and HSMP</i> <i>h) Sub-project Description and Baseline Information</i> <i>i)Site and Work Activities</i> <i>j) Analysis of Legal Provisions</i> <i>k) Resource Roles and Responsibilities of Sub-project Background Information</i>	<i>q) Noise and Vibration Management Plan</i> <i>r) Hazardous Prevention and Control Plan</i> <i>s) Solid and liquid Waste Management Plan</i> <i>t) Health and Safety Management Plan</i> <i>u) Gender Based Violence, Sexual Exploitation Prevention and Response Plan</i> <i>v)Program Induced Labor Influx</i> <i>w) Workers Accommodation Plan</i> <i>x)COVID-19, HIV/AIDS and Drug Abuse Prevention</i> <i>y) Security Plans</i> <i>z) Employees and Employers Code of Conduct</i> <i>aa) Logistic Risks Management Plan</i> <i>bb) Grievance Redress Mechanism</i> <i>cc)Traffic Management Plan</i> <i>dd) Emergency Preparedness and Response Plan</i> <i>ee) Material Borrow pits/Quarry Management Plan</i> <i>ff) Biodiversity Management Plan</i> <i>Gg) Erosion and Sediment Control Plan</i>
<i>b) General Information</i> <i>c)Contractors Environment, Social , Health and safety Policies</i> <i>d)Licenses and Permits to be acquired</i> <i>e) Personal Protective Equipment/welfare requirements</i> <i>f) Scope of ESMP and HSMP</i> <i>g) Objectives of the ESMP and HSMP</i> <i>h) Sub-project Description and Baseline Information</i> <i>i)Site and Work Activities</i> <i>j) Analysis of Legal Provisions</i> <i>k) Resource Roles and Responsibilities of</i>	