National Environment Management Authority

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P O BOX 67839-00200, Nairobi, Kenya.
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RE: ENVIRONMENTAL IMPACT ASSESSMENT STUDY REPORT FOR THE PROPOSED CONSTRUCTION / INSTALLATION & OPERATION OF AN OPTIC FIBER CABLE (OFC) & RELATED SERVICES ALONG ISIOLO–MANDERA ROAD

Pursuant to Section 59 of the Environmental Management and Coordination Act (CAP 387), the National Environment Management Authority (NEMA) has received an Environmental Impact Assessment Study Report for the above proposed project.

The proponent, ICT Authority, proposes to install and operate a high-speed optic fiber cable including 741.75 km backbone network (main route), 62.018 km metro networks (urban areas), and 194.517 km access network connecting a total of 341 institutions consisting of Government institutions, health facilities, schools, Technical Vocational Education and Training (TVETs) and community centres along the Isiolo–Mandera Road.

The route corridor extends in a northerly-easterly direction from Isiolo Town (Isiolo County), passing through Meru, Garissa, Wajir and Mandera Counties in North Eastern Kenya.

The following are the anticipated impacts and proposed mitigation measures:

IMPACTS	MITIGATION MEASURES
Terrestrial Habitat Alteration	• Use existing utility and transport corridors (road reserves) to avoid critical habitats. • Avoid construction activities during breeding seasons and sensitive periods. • Develop a Biodiversity Management Plan (BMP) where required. • Re-vegetate disturbed areas using native plant species.
Waste and effluent	• Use returnable glass water bottles to reduce plastic waste. • Train workers on proper waste handling/segregation. • Provide labeled hazardous/non-hazardous waste containers. • Engage only NEMA-licensed waste handlers for hazardous/oil waste. • Prohibit waste discharge into drains, natural areas, or watercourses. • Store fuels/oils in secure, bunded, lined areas to prevent spills. • Ensure adequate toilet facilities to prevent open defecation.
Emissions to Air	• Conduct regular air quality monitoring. • Wet or chemically treat exposed earthworks; stabilize surfaces post-construction (e.g., vegetation/ground cover). • Regularly wet construction access routes to reduce dust and improve safety. • Minimize material drop heights where feasible. • Maintain construction equipment and generators to reduce emissions. • Provide workers with PPE (including dust masks as needed). • Inform the community of construction schedules.
Noise and Vibration	• Enforce best driving practices (drivers to avoid unnecessary acceleration/braking). • Restrict work to authorized hours (no night work; limit work near offices/schools to weekends). • Reduce noise/vibrations (soundproofing, use low-noise equipment, mufflers, enclosures). • Provide workers with PPE (including earmuffs where needed).
Sexual Exploitation and Abuse, and Sexual Harassment and Gender-Based Violence (SEA/SH/GBV)	• Maintain a lean, trained, and well-supervised workforce to minimize risks. • Enforce worker code of conduct. • Conduct pre-construction gender-sensitive subproject site mapping (to identify high-risk zones). • Include strict SEA/SH/GBV clauses in contracts (e.g. mandatory training, zero tolerance, etc.). • Engage non-state actors e.g. Caritas Isiolo, Wajir Peace, and FCDC, etc. as independent monitors for remote sites. • Train contractors/supervisors on complaint response and escalation protocols. • Publish annual SEA/SH reports (e.g. case statistics, resolution rates, etc.) for transparency. • Promote social inclusion (prioritize vulnerable and marginalized groups recruitment).
Labour and Working Conditions Including Occupational Health and Safety	• Implement fair and transparent hiring processes. • Provide contracts in local languages outlining rights, fair terms, and working conditions. • Conduct regular health and safety training and toolbox talks. • Supply and maintain PPE (e.g. gloves, masks, helmets, boots, goggles, etc.). • Enforce good housekeeping (e.g. clean worksites, safe tools, debris removal, etc.). • Ban alcohol/drug use. • Provide adequate toilets, drinking water, and first-aid kits. • Secure WIBA and Contractor All-Risks insurance. • Maintain worker grievance mechanisms.
Traffic Congestion, Hazardous Driving Conditions and Obstruction of Access	• Obtain road authority wayleave before commencing public road works • Develop site-specific Traffic Management Plan (TMP), as necessary, addressing: Peak hour restrictions (6:30-9:00 & 15:30-18:00); Alternative route provisions; Pedestrian safety measures; and Hazard zone demarcation (signage, barriers, lighting). • Limit excavations to 24–48 hour completion windows. • Use directional drilling for crossings (1.8-2m depth, 15-30m spans). • Maintain clear roads (e.g. ensure debris removal, proper equipment storage, etc.). • Restrict vehicle operation to trained personnel. • Implement traffic control measures as appropriate. • Conduct utility mapping before urban/metro excavations. • Employ wireless microwave and satellite solutions in hilly terrain and long-distance spans.
Temporary Loss of Access to Productive Assets	• Apply Project's Resettlement Policy Framework (RPF) for any asset/resettlement cases. • Provide 7-day advance notices to affected businesses/residents. • Maintain continuous access to information for occupants. • Use reinforced temporary bridges for property entrances. • Restore all surfaces to original or better condition. • Complete residential reinstatements to owner satisfaction. • Limit private property excavations to 08:00-17:00 (with safeguards if unavoidable). • Clear drainage systems after completing installation. • Remove excess materials promptly. • Properly dispose all cleared vegetation. • Assume full liability for damage remediation.
Impact on Disease Transmission	• Enforce worker code of conduct. • Conduct HIV/AIDS awareness campaigns via partners. • Install safe–sex billboards and provide free condoms.
Conflicts with Local Communities	• Involve local Chiefs/Ward administrators in unskilled labor recruitment. • Implement government gender/social inclusion policies. • Provide local language interpreters for engagements. • Publicize Project GRM through multiple channels (e.g. media, meetings, local languages, etc.) • Maintain multiple GRM access points.
Insecurity	• Include security provisions in bidding documents with allocated budget. • Require contractor–prepared Security Management Plan (C-SMP) aligned with the Project's SMP. • Adopt multi-agency security framework throughout project implementation.
Hazardous Materials and Waste	• Procure electronics compliant with international hazardous material restrictions. • Establish lead-acid battery management (storage/transport/recycling via licensed facilities). • Develop used equipment take-back programs (computers/phones/batteries). • Implement e-waste collection, recycling and disposal.
Labour and Working Conditions (Including OHS)	• Train workers on Electro-magnetic Frequency (EMF) hazard identification and safe work practices. • Implement action plans when exposures exceed International Commission on Non-Ionizing Radiation Protection (ICNIRP) and the Institute of Electrical and Electronics Engineers (IEEE) thresholds.
Digital Gender-Based Violence (DGBV)	• Provide survivors with needed response services, when and where they need it, including social, health and justice responses. • Prevent DGBV through targeted laws and policies, enhancing digital literacy, and safety and privacy centered technology.
Insecurity (Theft of ICT devices)	• Enhance physical security by installing secure storage, robust locks, and alarm systems. • Use passwords, encryption, and tracking software to assure device security. • Promote community awareness and reporting of suspicious activities to prevent theft. • Maintain detailed records of ICT equipment and develop a database. • Promptly report any theft to police for investigations and potential recovery of stolen items.
Cybersecurity Risks	• Deploy qualified IT professionals to manage government ICT infrastructure. • Utilize cloud systems for automated backups and enhanced cyber protection. • Implement approved physical and cybersecurity protocols for all equipment and systems.
Fire Hazards	• Install an automatic fire alarm system for buildings. • Provide firefighting equipment and hydrant points. • Display fire evacuation procedures and emergency response plans at all buildings. • Regularly maintain fire, electrical, and first aid equipment. • Provide sufficient emergency exit points and marked fire assembly points.

A full report of the proposed project is available for inspection during working hours at:

1. **Principal Secretary,**
    State Department for Environment and Climate Change,
    Ministry of Environment
    Climate Change and Forestry,
    NHIF Building, 12th Floor, Ragati Road, Upper Hill
    P. O. Box 30126 – 00100, NAIROBI.

2. **Director General,**
    National Environment
    Management Authority (NEMA)
    Popo Road, off Mombasa Road,
    P.O Box 67839-00200, NAIROBI

A copy of the EIA report can be downloaded at **www.nema.go.ke**

NEMA invites members of the public to submit oral or written comments within thirty (30) days from the date of publication of this notice to the Director General, NEMA to assist the Authority in the decision making process for this project. Kindly quote ref. No. **NEMA/ENVIS/SR/00198.**

Comments can also be e-mailed to **info@nema.go.ke**

Dr. MAMO .B. MAMO EBS
DIRECTOR GENERAL