

Environmental and Social Review Summary

HyalRoute Fiber Optic Cable (FOC) Network Project

This Environmental and Social Review Summary (ESRS) is prepared by MIGA staff and disclosed prior to the date on which MIGA's Board of Directors considers the proposed issuance of a Contract of Guarantee. Its purpose is to enhance the transparency of MIGA's activities. This document should not be construed as presuming the outcome of the decision by MIGA's Board of Directors. Board dates are estimates only.

Any documentation that is attached to this ESRS has been prepared by the project sponsor, and authorization has been given for public release. MIGA has reviewed the attached documentation as provided by the applicant, and considers it of adequate quality to be released to the public, but does not endorse the content.

Country:	Republic of the Union of Myanmar
Sector:	Telecommunications
Project Enterprise:	Myanmar Fiber Optic Communication Network Co., Ltd. (MFOCN)
Environmental Category:	B
Date ESRS Disclosed:	September 26, 2016
Status:	Due Diligence

A. Project Description

The Project consists of the installation and maintenance of 4,500 km of underground fiber optic cable (FOC) backbone network (hereafter referred to as 'the Project') by Myanmar Fiber Optic Communication Network Co., Ltd. (MFOCN). MFOCN, the project company, is a subsidiary of HyalRoute Communication Group Ltd. (HyalRoute).

The Project is stage 1 of Phase II of a program to install underground FOC backbone network across Myanmar. Stage 1 is expected to be completed by the end of 2017. Bank of China (Hong Kong) Ltd. (BOC (HK)) has requested that MIGA provide a guarantee for its non-shareholder loan (including interest) to MFOCN to finance stage 1 of Phase II.

Installation of FOC involves digging a trench approximately 50 cm wide and 1.2 – 1.5 m deep, laying the FOC and then back filling the trench. In urban areas FOC is duct buried, and in urban outskirts and rural areas the FOC is directly buried. The FOC network includes the construction of 'core facilities', where FOC connects to communications equipment. Two types of core facilities will be built: Type A (200 m²) and Type B (60 m²). Both facilities will include a base transceiver station (BTS), electricity transformer, backup generator and an area reserved for telecommunication towers (if required). Type A core facilities will also have an equipment laydown area and accommodation for the maintenance teams. Core facilities have a dual purpose: i) to provide greater capacity for the operators in the telecommunication sector and ii) to improve both outdoor and indoor coverage for service providers.

B. Environmental and Social Categorization

This is a Category B Project according to MIGA's Policy on Environmental and Social Sustainability (2013) because the environmental and social risks and impacts associated with this Project are few in number, generally site-specific, largely reversible and readily addressed through mitigation measures.

The key potential environmental and social issues associated with the Project are labor and working conditions (including employee and contractor occupational health and safety) and pollution prevention and abatement (including hazardous materials management).

C. Applicable Standards

While all Performance Standards (PS) are applicable to this Project, based on available current information reviewed it indicates that the Project will have impacts which must be managed in a manner consistent with the following PS:

- PS1: Assessment and Management of Environmental and Social Risks and Impacts
- PS2: Labor and Working Conditions
- PS3: Resource Efficiency and Pollution Prevention
- PS4: Community Health, Safety and Security

PS 5 Land Acquisition and Involuntary Resettlement does not apply. The majority of the FOC backbone will be routed within the existing Rights of Way (RoW) along existing public utilities, such as roads, water pipelines and energy transmission and distribution lines. Prior to the start of construction MFOCN will acquire permits from the relevant Government authorities to install the FOC within the existing RoW. In the eventuality of having to install the FOC through private land, the FOC will be aligned to avoid physical infrastructure (i.e. there will be no physical displacement). Any potential damage to crops will be compensated based on an agreed rate with the participation of the village leaders and the crop owners before any trenching is carried out. Land for the core facilities is leased on a willing lessee/ willing lessor basis for a period of no less than 15 years unless otherwise mutually agreed. Regardless, MFOCN will establish a land acquisition/ compensation procedure in line with the requirements of PS 5. This is covered under PS 1 below.

PS 6 and PS 8 do not apply due the inherent flexibility within the Project to shift the alignment and location of the core facilities to avoid significant impact on biodiversity and cultural heritage. The screening process to ensure that the selection of the alignment and location of core facilities avoids impact on biodiversity and cultural heritage is discussed under PS 1 below. In addition, a chance finds procedure is in place, and will be applied in the event of discovering cultural heritage resources during trenching or construction of the core facilities.

PS7 is not considered applicable. Although various ethnic groups exist across Myanmar, the installation and maintenance of the FOC is not expected to result in the transformation, encroachment or degradation of indigenous (or ethnic minorities) lands or associated livelihoods. Regardless, MFOCN will establish a land acquisition/ compensation procedure, which will ensure that any affected ethnic minorities are adequately engaged as per the requirements of PS 7.

In addition, the following World Bank Group (WBG) Environmental, Health and Safety (EHS) Guidelines are applicable to this Project:

- General EHS Guidelines; and
- EHS Guidelines for Telecommunications.

D. Key Documents and Scope of MIGA Review

Due diligence consisted of appraising the technical, environmental, health, safety and social information submitted by MOFCN as well as any information available online about the Project and the telecommunications sector in Myanmar. A site visit was also undertaken in July 2016 which included meetings with representatives from MOFCN, its main contractor and visits to warehouse, existing core facility and FOC (both duct buried and direct buried) installed as part of Phase I.

The following documents were reviewed by MIGA:

- Initial Environmental Examination: 1000 Telecommunication Towers and 32,000 km fiber optic cable backbone national network project, Myanmar. ENVIRON 30 July 2015
- Feasibility Study on Myanmar National Fiber Optic Communication Network Infrastructure and its Related Ancillary Facilities Phase II – 1, MFOCN June 2016
- Myanmar Nationwide Direct-buried /duct fiber Optic Cable Communication Route Project - Technical Standard for design and construction. MFOCN, May, 2014
- HyalRoute Environment, Health and Security Management System
- Health, Safety, Security and Environment (HSSE) Management System for MFOCN

E. Key Issues and Mitigation

PS1: Assessment and Management of Environmental and Social Risks and Impacts

An Initial Environmental Examination (IEE) was completed for the entire FOC backbone network in Myanmar in July 2015 in accordance with Myanmar's Environmental Conservation Law, 2012 and Draft EIA Procedure, 2014. The purpose of the IEE was essentially to undertake a scoping study to identify the potential environmental and social (E&S) risk and impacts, and then to determine, based on the identified risks and impacts, whether a full E&S Impact Assessment (ESIA) would be required. In this case, the IEE determined that a full ESIA was not required, and instead, an Environmental Management Plan was prepared and attached the IEE.

As the specific location of the RoW and core facilities is unknown, the EMP provides a framework to avoid, minimize or mitigate potential environmental impacts likely to arise during installation and maintenance. The EMP will be updated to include social aspects and to set monitoring requirements, organizational and financial resources and an implementation schedule.

Prior to installing the FOC, the proposed route is surveyed by MFOCN surveyors. In addition to technical considerations, surveyors record E&S constraints along the route, and then when required, the route is altered to avoid areas of concern. Surveyors use MFOCN's technical standard for design

and construction to determine the appropriateness of a proposed route. The technical standard includes specifications on the minimum distances to be kept from structures (property line), trees and utilities. The technical standard will be updated to include additional E&S considerations such as ecologically important habitats (protected areas, wetlands) and physical cultural resources.

HyalRoute, the parent company drafted an Environment, Health and Security Management System to be implemented by its subsidiaries. This draft is currently under review by senior management. In turn, MFOCN has prepared a preliminary HSSE Management System for its operations, which will be updated to include an E&S policy as well as procedures and plans to support implementation of the system and the EMP. Procedures and plans to be developed will cover (i) emergency preparedness and response; (ii) waste management, (iii) pollution prevention and resource efficiency; (iv) worker health and safety, (v) contractor management, (vi) stakeholder engagement, (vii) grievance redress, and (viii) land acquisition and compensation.

MFOCN will appoint at least one qualified person to be an E&S coordinator, responsible for implementing the company's E&S management system.

MFOCN includes E&S terms in its agreements with key contractors. The terms will be reviewed for consistency with MIGA's PS. MFOCN's supervisors monitor compliance of the contractors. The role of the supervisors will be expanded to include monitoring of health, safety and environmental aspects.

PS2: Labor and Working Conditions

MFOCN employs 438 full-time employees and all have an employment contract that is in line with Government of Myanmar Labor laws which also includes relevant aspects of PS2. The employment contract amongst others includes specifications on remuneration, work hours, overtime, leave days, medical treatment, resignation, dismissal offenses and freedom to unionize. The project company restricts employment to those aged 18 and over.

MFOCN provides accommodation to both its local and foreign employees. In Yangon and Nay Pi Taw, company accommodation is optional. In remote areas, where there is need to have maintenance teams on standby, accommodation is included within type A core facilities.

MFOCN has a training plan in place composed of an induction to newly hired employees which includes an overview of the company and HR related topics such as how to raise a grievance and job-related training which is the responsibility of each department.

At peak installation of FOC, there may be between 8,000 to 10,000 workers hired by the main contractor. The geographic spread combined with the large number of workers represent a significant challenge for the management of labor and working conditions among contractor staff. MFOCN will ensure that workers are provided with appropriate personal protective equipment and health and safety training for the type of work in which they are engaged.

MFOCN will update its agreements with key contractors to include terms regarding labor and working conditions, which are consistent with national and MIGA requirements. MFOCN will monitor compliance with those terms, and will seek improvement in the event that non-compliance is identified.

In addition, MFOCN will put in place an HR policy and procedures that addresses items such as non-discrimination and equal opportunity, grievance mechanism, occupational health and safety and management of accommodation and provision of basic services.

PS3: Resource Efficiency and Pollution Prevention

MFOCN will develop and implement procedures for resource efficiency and pollution prevention during installation and maintenance of the FOC and core facilities that are in line with MIGA's PS and the relevant Government of Myanmar laws and regulations.

The key potential pollution issues are associated with hazardous materials handling, storage and disposal (i.e. diesel and lead-acid batteries). While MFOCN's core facilities primarily rely on power from the electric grid, they also have a backup generator for the core facility and use lead-acid batteries in the BTS. MFOCN will establish a procedure for the proper use and maintenance of the power generators which includes spill contingency plan and cleanup practices.

Waste will be kept temporarily on site during installation of FOC and construction of core facilities and sent to MFOCN by the contractor for accountability and proper disposal. MFOCN will establish a waste management procedure that includes but is not limited to the recycling or disposing of lead-acid batteries.

The main source of air emissions is from internal combustion engines (of vehicles and power generators). Measures to minimize air emissions will be incorporated in the existing vehicle management plan.

MFOCN will update its agreements with key contractors to include terms on pollution prevention and abatement in line with the requirements of PS 3. MFOCN will monitor compliance with those terms and will seek improvement in the event that non-compliance is identified.

PS4: Community Health, Safety and Security

Potential impacts to community health, safety and security will be highest during construction due to increased traffic movement of both light and heavy vehicles along densely populated roads. MFOCN has a vehicle management plan that prescribes minimum requirements on vehicle condition and safe driving practices. Project activities during operations present minor risk to communities.

MFOCN does not plan to employ security personnel.

F. Environmental Permitting Process and Community Engagement

MFOCN has obtained the following permits:

- Investment Permit from the Myanmar Investment Commission which was provided after screening MFOCN's proposal by a team composed of relevant Government Authorities, including Ministry of Environmental Conservation and Forestry (MOECAF)
- Approval letter for FOC network construction from the Ministry of Communications and Information Technology (MCIT); and

- Network Facilities Service (Class) License from the MCIT.

MFOCN regularly engages with stakeholders. Stakeholder groups include Government agencies, regional authorities, Non-Governmental Organizations (NGOs) active in Myanmar, local communities in the proximity of the FOC route and telecommunication operators. A plan for ongoing stakeholder engagement and grievance redress will be developed.

MIGA supports its clients (as defined in MIGA Policy on Environmental and Social Sustainability) in addressing environmental and social issues arising from their business activities by requiring them to set up and administer appropriate grievance mechanisms and/or procedures to address complaints from Affected Communities. In addition, Affected Communities have unrestricted access to the Compliance Advisor/Ombudsman (CAO), the independent accountability mechanism for MIGA. The CAO is mandated to address complaints from people affected by MIGA-guaranteed business activities in a manner that is fair, objective, and constructive, with the goal of improving environmental and social project outcomes and fostering greater public accountability of MIGA. Independent of MIGA management and reporting directly to the World Bank Group President, the CAO works to resolve complaints using a flexible, problem-solving approach through its dispute resolution arm and oversees project-level audits of MIGA's environmental and social performance through its compliance arm. Complaints may relate to any aspect of MIGA-guaranteed business activities that is within the mandate of the CAO. They can be made by any individual, group, community, entity, or other party affected or likely to be affected by the environmental or social impacts of a MIGA-guaranteed business activity. Complaints can be submitted to the CAO in writing to the address below:

*Compliance Advisor/Ombudsman
International Finance Corporation
2121 Pennsylvania Avenue NW
Room F11K-232 Washington, DC 20433 USA
Tel: 1 202 458 1973
Fax: 1 202 522 7400
E-mail: cao-compliance@ifc.org*

G. Availability of Documentation

The following documentation is available electronically as a PDF attachment to this ESRS at www.MIGA.org:

- Initial Environmental Examination – 1000 Telecommunication Towers and 32,000 km Fiber Optic Cable Backbone National Network Project Myanmar – September 2015

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Annex 1: Environmental and Social Action Plan

#	Action	Deadline
PS 1: Assessment and Management of Environmental and Social Risks and Impacts		
1	Appoint at least one qualified person to be an E&S coordinator. Prior to appointment submit to MIGA a Job Description (or Terms of Reference) for the E&S Coordinator. Reporting directly to the Operations Manager.	Within 7 days of the Effective Date of the Contract of Guarantee
2	Expand the role of supervisors to include monitoring of health, safety and environmental aspects and provide adequate E&S training.	Within 90 days of the Effective Date of the Contract of Guarantee
3	Put in place an E&S policy and revise and update the Environmental and Social Management System (ESMS) to be in line with MIGA's PS and establish procedures and plans on: (i) emergency preparedness and response; (ii) waste management (including management of lead acid batteries), (iii) pollution prevention and resource efficiency (including oil spill cleanup); (iv) contractor management, (v) stakeholder engagement, (vi) grievance mechanism for communities and interested parties and (vii) land acquisition and compensation.	Within 120 days of the Effective Date of the Contract of Guarantee
4	Update MFOCN's technical standard to include additional E&S considerations for route selection, such as ecologically important habitats (protected areas, wetlands) and physical cultural resources.	Within 60 days of the Effective Date of the Contract of Guarantee
5	Review and update MFOCN's agreement with contractors to ensure that E&S terms are incorporated. E&S terms should be in line with the MFOCN's ESMS, procedures and plans and MIGA's PS requirements. Provide MIGA the relevant sections.	Within 120 days of the Effective Date of the Contract of Guarantee
6	Engage an E&S Consultant to support implementation of ESMS, carry out capacity building of appointed E&S staff and monitor E&S performance in line with MIGA's PS requirements.	Within 30 days of the Effective Date of the Contract of Guarantee

#	Action	Deadline
PS 2: Labor and Working Conditions		
7	Put in place an HR policy and update or establish HR procedures to reflect MIGA's PS requirements on: (i) non-discrimination and equal opportunity, (ii) grievance mechanism for staff, (iii) occupational health and safety and (iv) management of accommodation and provision of basic services	Within 120 days of the Effective Date of the Contract of Guarantee
8	Review and update MFOCN's agreement with contractors to ensure that labor and working conditions terms are included in line with MFOCN's HR Policy and procedures and MIGA's PS.	Within 120 days of the Effective Date of the Contract of Guarantee