IN: Manipur Infotech eNabled Development Project

Environment and Social Management Plan (ESMP) for the Civil Works at IT-SEZ

February 2023

The Environment and Social Management Plan (ESMP) identifies the potential adverse impacts of the MIND Project and lists appropriate mitigation measures along with implementation responsibilities and timelines. The ESMP covers the following list of minor civil works within the IT SEZ: i) Data Centre on floor of a building with minor refurbishments, ii) Ground levelling of 27 acres (10.8 ha) of land including vegetation clearance, iii) Construction of internal roads within 27 acres, iv) Drains/channels for Conveyance of waste water and upgradation of storm water drains, v) Upgradation of an existing power station and extending powerline from an existing substation, vi) Extending telecom cables from main road to inside the park. These activities do not fall under the exclusion criteria included in Annex 1 and are thus eligible for support under the project.

The proposed project is in the valley area, at Mantripukhri, which is at the north of Imphal city within a longitude of 93°56'34.15"E and latitude of 24°50'36.06"N. The terrain is plain. The proposed construction location is at the altitude of 784 m in height from the sea level. The 500 m radius of the project site is dominated by agricultural land which covers 49% of the area followed by built-up land covering 46% of the area. Roads and water bodies cover 4% and 0.5% respectively. The Imphal River is 650 m from the site. The HFL of Imphal River is 788.4 m. The project site is free of grown trees. Mahabali sacred grove of an area of 5.05 ha is 5 km from the proposed project site. Langol Reserved Forest is at an approximate distance of 450 m from the western boundary of the site while Hangan RF is at 1.5 km from the NE boundary of the site. There are no economically vulnerable population, or those belonging to indigenous communities residing in or near the project area. The 27 acre (10.8 ha) of land for IT Park is free of any squatter/informal settlements and belongs to the DIT.

Environment and Social Management Plan (ESMP)

Key Activities	Key activities and Potential E&S Risks/ impacts	Relevant ESS	Mitigation Measures	Implementation Responsibility	Timeline
Pre-construction Stage					
Design and preparation of estimates for roads and drains	As the State has vulnerability to multiple disasters (earthquakes, landslides, floods), lack of disaster proof design may lead to damage during disasters and may prove hazardous. Improper design of drains may lead to stagnation and unhygienic conditions.	ESS1, ESS2, ESS3 and ESS4	Disaster mitigation features proposed by public works department will be followed. **Roads** • Soil tests will be conducted to understand the soil characteristics • Will conform to natural topography to reduce cut and fill and minimize changes • Use of sustainable, recycled raw materials will be explored **Drains** • Proper design including slope, cross section, lining to avoid silt accumulation, back flow etc. will be ensured. • Drains will be constructed according to the slope with proper outfall. Provision of cross drains as per requirement • Self-cleaning velocity slope will be maintained. • Use of sustainable raw materials will be encouraged • The drains will be closed	E&S Personnel of PMT & PMC	Design and estimation stage
Construction Stage					
Land levelling including vegetation clearance	Removal of plants/trees may lead to loss of important species. Improper disposal of removed vegetation and	ESS1, ESS2, ESS3 and ESS 4	• The site does not have any plants and trees of important species. The removed vegetation will be disposed of according to local municipality requirements. Excess soil (if any) will be used for	Contractor	Air quality monitoring during construction

Key Activities	Key activities and Potential E&S Risks/ impacts	Relevant ESS	Mitigation Measures	Implementation Responsibility	Timeline
	excess soil affects the surrounding environment. Dust emission, and exhaustion from vehicles may deteriorate air quality and noise may cause inconvenience to the workers and public. Possibility of injuries to workers or by passers,		construction or will be disposed in landfills as designated by local municipality. • Water sprinkling will be done to control dust emissions. Workers will wear masks. • Noisy equipment will be avoided to extent possible, and works will be planned during the daytime when least disturbance is possible. • First aid kit will be kept handy. Nearest hospital and ambulance numbers will be on display		
Construction of internal roads and drains	Dust emission from uncovered raw materials, vehicle exhaustions and construction work etc. cause inconvenience to the workers and public in the proximity. Noise from machines, vehicles, concrete mixers Waste generation during construction. Use of water from nearby sources for construction may cause stress on the resource	ESS1, ESS2 ESS4 and ESS10	• All the raw materials cement, sand will be covered during transport and storage. • Water sprinkling will be done to control dust emissions. Workers will wear masks. • Noisy equipment will be avoided to extent possible, and works will be planned during the daytime when least disturbance is possible. • Vehicles and machinery will be serviced as required and vehicles will have PUC • Any waste from the works will be disposed of regularly at designated sites by municipality. • The water available at the site (by municipality) will be used. In case of additional requirement, contractors will bring from outside or use from local source after necessary permissions.	Contractor	Air quality and noise monitoring during construction
Minor refurbishment	Dust emission and noise pollution altering air	ESS1, ESS2	• Wearing masks, sprinkling water will be done as necessary. Noise will be avoided, and works will be taken during daytime to the extent possible.		

Key Activities	Key activities and Potential E&S Risks/ impacts	Relevant ESS	Mitigation Measures	Implementation Responsibility	Timeline
s to the data centre	quality, causing inconvenience	ESS3 ESS 4 ESS10			
Extending power line, telecom cables	Possibilities of injuries	ESS2	• Necessary precautions will be taken to avoid any injuries, accidents	Contractor	
Labor camp Management (where relevant)	Possible issues due to lack of basic amenities like water and sanitation facilities and improper disposal of wastes and conflicts with local communities for resource use	ESS2, ESS3 and ESS4	• All basic facilities (water, sanitation etc.) will be provided • Wastes will be collected and treated/safely disposed • Labour registry will be maintained with all contact details • Orientation will be provided to workers for maintaining social harmony, and prohibition of ill social behaviours (alcohol, gambling, SEA/SH etc.)	Contractor	
Social harmony in the area	Social conflict may arise due to anti-social behaviour of the workforce such as gambling, alcoholism, and disrespect to local people	ESS4, ESS2 & ESS10	• Deployment of security personnel and fencing of construction sites. • Orientation of workers on the workers' code of conduct (CoC) and ensure its compliance by the workers. • Sensitization of workers on adherence to proper housekeeping practices at the worksites • Build awareness on mechanisms for grievance redressal among workers and nearby community members	E&S Personnel of PMT & PMC	

Key Activities	Key activities and Potential E&S Risks/ impacts	Relevant ESS	Mitigation Measures	Implementation Responsibility	Timeline
Occupational Health & Safety construction of civil work	Fatality or physical injuries from accidents during construction, cable installation, and servicing of IT infrastructure	ESS2	• Require mandatory use of safety measures and PPE such as masks, helmets, hand gloves, and rubber boots with proper training to workers in respect to working at heights • Provide safe drinking water for laborers and other facilities at the site • Prohibit child labour in all civil works activities by keeping records of their age which can be verified through government issued documentation • Maintenance of first aid box and use of PPE at site as per existing laws and regulations • Coordinate with the nearest hospital/ medical facility in case of emergency • Maintenance of record of infections, incidents, and accidents. Appropriate authorities to be informed of injuries or fatalities within 48 hours.	E&S Personnel of PMT & PMC	
SEA/SH-related Risks	The potential risks could be sexual harassment of female co-workers and communities, especially women, girls and children living around project sites facing any forms of SEA/SH/gender-based violence.	ESS2, ESS4	• Sensitization trainings and awareness building of workers and local communities on SEA/SH prevention and response. • Workers to sign and abide by the Code of Conduct (CoC) • Setup and build awareness among workers on Internal Complaints Committee (ICC) as mandated by the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 • Identifying GBV service providers to establish referral mechanism.	• E&S Personnel of PMT & PMC • Contractors and Firms	

Key Activities	Key activities and Potential E&S Risks/ impacts	Relevant ESS	Mitigation Measures	Implementation Responsibility	Timeline
Post construction					
Disposal of construction debris, labor camp wastes	Disposal of waste from construction and labor camps site to keep it clean and restore the site	ESS1, ESS3	• The wastes will be disposed of in designated landfills by Municipality or will be reused in the construction. • The sites will be restored to the original condition to the extent possible	Contractor	
Operation Phase					
Generation of e waste	The e waste will pollute the environment if not disposed of properly	ESS3	• The e waste generated will be disposed of through registered recyclers in the state through auction/sale as appropriate	Dept	
Solid and liquid waste disposal	The solid waste if not properly disposed will create unhygienic conditions	ESS3	• Separate bins will be maintained for waste disposal and waste will be segregated and safely disposed. The liquid waste disposal drains will be maintained regularly by cleaning	Dept	
Use of water and energy	The project activities are likely to trigger use of energy and water	ESS3	• Energy efficient lighting and cooling equipment will be used. • Use of renewable energy will be explored • Best practices will be promoted among employees for sustainable use of resources	Dept	
Occupational health and safety	Accidents during natural disasters, occupational health issues	ESS2	• Appropriate trainings/orientations will be conducted on occupational safety and mock drills will be conducted for awareness on emergency response actions, including Life and Fire Safety.	Dept	

Monitoring and Reporting Plan

Project oversight at the State level will be led by a Project Steering Committee (PSC). The CCML (PMT) under the aegis of DIT will provide overall monitoring, reporting, and benchmarking of the performance under the project. The PMT will develop monitoring template to be used for monitoring the progress on implementation of E&S measures (ESMP, LMP, SEP and ESCP). The routine data will be collected from Project Management Consultancy (PMC) and other

agencies as per this Performa. The PMT will also monitor the E&S indicators related to gender and citizen engagement specified in the results framework (refer to the PAD).

The E&S experts of PMC will carry out implementation performance monitoring and will submit the implementation of an environment and social performance report on a semi-annual basis to the PMT. The E&S specialists under PMT will compile the compliance reports received from the PMC and submit a consolidated compliance performance report to the World Bank on a semi-annual basis during construction and semi-annual basis during operation. The Monitoring reports will be disclosed on the official project website. The regular monitoring report will cover the ESHS performance of the project, status of implementation of environmental and social mitigation measures, trainings on E&S, stakeholder engagement activities, functioning of the grievance mechanism, and prevention and response to SEA/SH, among others.

Annexure 1: Exclusion Criteria

To avoid and/or minimize risks and impacts of the project activities, certain activities are not eligible for support under the project due to the potential for causing high social and environmental risks and impacts that are diverse, irreversible, or unprecedented are excluded. These activities are:

- Activities that are not consistent with the legal/ regulatory framework of Manipur and the country.
- Activities that may cause long term, permanent and/or irreversible adverse impacts to natural, critical habitats and biodiversity
- Activities that have a high probability of causing serious adverse effects to human health and/or the environment (e.g., construction of major civil structures covering ecologically sensitive area)
- Activities that may cause loss of trees in larger number covering wider forest area.
- Activities that may involve in generating large volume of e-waste casing significant irreversible adverse impacts to human health and natural resources.
- Activities that involve land acquisition and/or involuntary resettlement including resettlement or eviction of squatters/ non-titleholders
- Activities which put permanent restrictions on access/ usage of resources.
- Activities that may involve significant permanent resettlement or large land acquisition or adverse impacts on cultural heritage.
- Activities in “Disputed areas”
- Any activity that involves child labour (persons under 14 years of age in any activity and persons above 14 years and under 18 years of age in hazardous activities).
- Activities that may cause long term, permanent and/or irreversible adverse impacts to natural, critical habitats and biodiversity
- Activities that pose significant risks/impacts to indigenous people or other vulnerable minorities, cultural tribal resources or requiring free prior informed consent (FPIC) from IP.

Annexure 2: Environmental and Social Screening Checklist

Proposed Sub- Project:

Location:

Environmental Screening Checklist

Resource Use				
Sl. No	**Proposed Resources**	**Area/ Quantity**	**Unit**	**Details**
(i).	Land Area proposed to be used: Location wise (in sq km / sq m)			
(ii).	Estimated energy consumption for the project activities			
(iii).	Estimated usage of water quantity for the project: Ground Water and Surface water?			

Baseline Environmental Conditions				
Sl.no	**Environmental Aspects**	**Yes**	**No**	**Details**
1	Is the project site located on or adjacent to any of the following (Mention distance to these features in meters/kilometres)			
i)	Eco-sensitive Areas			
ii)	Cultural Heritage site, Protected monuments			
iii)	Natural Forests / Protected Areas Is the project in an eco- sensitive or adjoining an eco-sensitive area? If Yes, provide details.			
iv)	Any other Wetlands?			
v)	Any Natural Habitat areas, areas with natural features?			
vi)	Any other Sensitive Environmental Components?			
vii)	Any Residences, schools, hospitals, sensitive receptors?			
viii)	Any culturally – socially important paths, areas/ religious occupancies, burial grounds,tourist or pilgrim congregation areas, etc?			
ix	Any Drinking water source, upstream and downstream uses of rivers, etc?			
x	Any Low-lying areas prone to flooding?			
xi	Details of water quality at intake point			
xii	Any areas affected by other disasters?			

2	Is the site in Critical / Over Exploited condition?			
3	Is the area disaster-prone? If yes; list all disaster zone categories applicable			
4	Describe the soil and vegetation on site			
5	Is the site area and condition suitable for proposed development?			
6	Describe existing pollution or degradation in the site(s)			
7	Any other remark on baseline condition?			

Anticipated Environmental Impacts				
Sl.no	**Impacts**	**Yes/ May create**	**No**	**Details**
1.	Will the proposed project cause the following on Land / Soil?			
i)	Substantial removal of Top Soil (mention area in sqm)			
ii)	Any degradation of land / eco-systems expected due to the project?			
iii)	Loss or impacts on cultural/heritage properties			
iv)	Does the project activity involve cutting and filling/ blasting etc?			
v)	Will the project cause physical changes inthe project area (e.g., changes to the topography) due to earth filling, excavation, earthwork or any other activity?			
vi	Will the project / any of its component contaminate or pollute the Land?			
2	Will the subproject or its components cause any of the following impact on Water sources			
i	Will the activities at the site(s) impact water quality (surface or underground) and water resource availability and use?			
ii	Impacts on Water Resources			
iii	Pollution of Water bodies/ground water nearby or downstream			
iv	Will the project affect the River /cannel flow pattern, stream pattern or any other irrigation canal?			
v	Will the project result in stagnation of water flow or pondage or weed growth			

3	Will the subproject or its components cause any of the following impacts on Biodiversity or the neighborhood			
i	Will the project necessitates cutting of Trees / Loss of Vegetation?			
ii	Will the project result in Health & Safety Risks in the neighborhood including the release of toxic gases, accident risks?			
iii	Potential risk of habitat fragmentation due to the clearing activities? (e.g. Hindrance to the local biodiversity like disturbing the migratory path of animals/ birds etc.)			
iv	Potential Noise and Light Pollution or disturbance to surrounding habitats/communities			
v	Potential disruption to common property, accessibility, traffic disruptions, conflicts or disruption to the local community within the subproject area			
4	Will the subproject or its components cause pollution due to releases during various project activities			
i	Will the project cause or increase air pollution or odour nuisance?			
ii	Will the project generate or increase noiselevels which will impact surrounding biodiversity or communities?			
iii	Will the project generate or increase visual blight or light pollution?			
iv	Will the project cause water pollution? (of waterbodies/ groundwater)?			
v	Will the project involve dangerous construction activities which may be a safety concern to workers/ host communities			

Suggested Environmental Enhancement Measures				
	Enhancement Measures	**Yes**	**No**	**Details**
14	Has the subproject design considered the following enhancement measures?			
i)	Energy conservation measures/ energy recovery options incorporated in subproject design			
ii)	Considered waste minimization orwaste reuse/recycle options			
iii)	Rainwater harvesting, water recycling and other water resource enhancement measures			
iv)	Considerations for extreme events,			

	drought, flood, other natural disasters			
v)	NOC for water withdrawal			

Social Screening Checklists

Screening Questions	Not known	Yes	No	Details
What is the demographic of the population (e.g., ethnicity, religion) in the project area?				
Land related Impacts				
Will the sub-project include any new physical construction work?				
Does the sub-project include upgrading or rehabilitation of existing facilities?				
Is the proposed sub-project likely to lead to loss of housing, other assets, resource use or incomes?				
Is the site chosen for this work free from encumbrances and in possession of the relevant government agency?				
Is land acquisition likely to be necessary?				
Is the ownership status and current usage of land known?				
Will there be loss of housing?				
Will there be loss of crops, trees and other fixed assets through land-use related changes?				
Loss of Livelihood				
Are non-title holders/people (squatters or encroachers) present on the site living/ or doing business who are likely to be partially or fully affected because of the civil works? (Is the land free of squatter/informal settlements or other encumbrances?)				
Will there be any permanent or temporary loss of incomes and livelihood? If so, for what period?				
Any estimate of the likely number of those affected by the project? If yes, approximately how many?				
Are any of the people likely to be affected economically vulnerable, belonging to indigenous communities or vulnerable to poverty risks? If yes, how?				
Community Health and Safety				
Will people lose access to facilities, services or natural resources during the construction period?				

Would elements of project construction pose potential safety risks to local communities, commuters or pedestrians in the project area?				
Will any social or economic activities be affected through land-use related changes?				
Is the project area located near schools, clinics, hospitals, places of worship or other similar community buildings?				
Are there any GBV prevention and response actors (NGOs, government notified shelter homes, police stations, etc.) in project area of influence?				
Is the project site in a populated area and/or with high vehicular traffic volume?				
Is there sufficient street-lighting, use of video or CCTV for monitoring public spaces in the project location? Are there any isolated areas in the project location with no/ limited surveillance?				
Does the project site have any barriers/obstacles that may hamper mobility, such as level changes between traffic lane and accessible path, slippery surface, etc.? Does the project site provide adequate lighting, parking and requisite basic services for safety of users 24/7? Are there accessible parking bays reserved for persons with disabilities with adequate signage in the project area?				
Labour Influx				
How many workers are estimated to be required/used for the project, with what skill set, and for what period?				
Is the requisite skillset for workers available in the local workforce? Is the project likely to require workers to be brought in from outside the project area?				
Will the project require accommodation or service amenities to support the workforce during construction?				
In case there would be incoming workers, are they likely to be from a similar or different socio-economic, cultural, religious or demographic background as compared to the local population?				
Given the characteristics of the local community and possibility of influx of labor, are there any adverse impacts that may be anticipated?				
Indigenous Communities				

Is there presence of indigenous people within the direct influence area of the subproject?				
Are there other ethnic minorities that have been marginalized from the mainstream in the project site?				
Are there vulnerable households or households with vulnerable persons within the beneficiary community?				
Cultural Heritage				
Is there a cultural heritage site/structure within or adjacent to the proposed subproject site?				
Would the subproject involve excavation and there is a high probability of encountering buried archaeological artifacts or objects paleontological value on the project site?				

Estimates of Specific Impacts

		Details Required
1.	Private land required (sq. m)	
2.	Total no. of households affected (temporary, permanently)	
4.	Government land required	
5.	No. of houses affected (temporary, permanently)	
6.	No. of shops affected (temporary, permanently)	
7.	No. of street-vendors affected (temporary, permanently)	
8.	No. of utilities affected (temporary, permanently)	
9	Other construction-related temporary or permanent impacts	
10.	Specific impacts on vulnerable groups (female- headed households, squatters, people with disabilities, etc.)	
11.	No. of workers to be brought from outside the project area	
12.	Accommodation or service amenities required to support the workforce during construction	

Eligibility Criteria

Criteria Question	**Answer (Yes/No)**
1. Does the subproject contravene any legal and regulatory obligations?	
2. Is the subproject going to encroach into national parks of protected area, including their buffer zone, wet land and special area for protecting biodiversity?	
3. Is the subproject going to displace, modify or restrict/block access to cultural heritage sites, historical monuments, religious structure and other sites considered sacred by the local community?	
4. Is the subproject going to convert or degrade critical natural habitats and critical habitats?	
5. Would the subproject involve clearing of trees in larger number covering wider forest area?	
6. Would the subproject involve in generating large volume of e-waste casing significant irreversible adverse impacts to human health and natural resources.?	
7. Would the subproject require the acquisition of any private land by any government body/unit?	

8. Will the subproject pose significant risks/impacts to indigenous people or other vulnerable minorities, cultural tribal resources or requiring free prior informed consent (FPIC) from IP	
9.Would the subprojects result in the exclusion/restriction of certain groups including IP who are traditional users, from accessing an otherwise open-access resource which they have traditionally accessed such as public forests, lakes, etc.?	

Note: If the answer of at least one of the questions above is "Yes", then the subproject is not eligible for financing under the Bank funded project.