

 UNOPS

# Minimum health and safety requirements for contractors

Version 1.0  
July 2021



## UNOPS Minimum Health and Safety Requirements for Contractors

This document describes the minimum occupational health and safety arrangements and performance expected from UNOPS contractors

Version 1.0 - 2021

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This version of the UNOPS Health and Safety requirements has been adopted for use in:

**School Repairs in Ukraine project.**

Sections in the Master Health and Safety Requirements that are not applicable have been deleted and special requirements needed have been added.

Adapting the Master Health and Safety requirements document has been done by:

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## Attachments:

- Register of interested parties (HS02)
- Hazard and Risk Assessment (HS05) (*UNOPS - HSSE module; Contractor provides as well*)
- Project emergency contact numbers (HS03) (*paper version on site*)
- Emergency drill record (HS04) (*Collect - UNOPS or Contractor*)
- Confined Space Permit (HS08) (*paper version on site*)
- Hot Works Permit (HS09) (*paper version on site*)
- Excavation Permit (HS10) (*paper version on site*)
- Lifting Permit (HS11) (*paper version on site*)
- Working at Heights Permit (HS12) (*paper version on site*)
- Weekly inspection of ladders/trestles (HS13) (*paper version on site*)
- Scaffold inspection checklist (HS14) (*paper version on site*)
- Weekly inspection of small tools (HS15) (*paper version on site*)
- Weekly inspection of lifting devices (HS16) (*paper version on site*)
- Legal register for health, safety and environment (HSE03)
- Check for compliance requirements for Health, Safety and Environment (HSE04)
- Site Induction register (HSE07) (*paper version on site*)

- Visitor Induction register (HSE08) (*paper version on site*)
- Incident report form (HSE09) (*UNOPS in Collect*)
- Incident review report (HSE10) (*UNOPS in Collect*)
- Guidelines
- Attachment 1 - Health and Safety measures under coronavirus epidemics. Managing COVID-19 risks on UNOPS construction sites.

# 1. DEFINITIONS

Baseline risk assessment	Baseline risk assessment is the assessment that identifies and documents all potential hazards, undesirable events, causes, consequences and inherent risk levels within a geographical area. It is carried out at the beginning before any work activities begin. Additional risk assessments should be carried out at key stages to address risks in greater detail and to make adjustments to the context and to changes that will have occurred.
Confined spaces	A workplace that has restrictions to movement (access and egress; and working space) and exposure to harmful substances (air with low levels of oxygen, or presence of harmful gases or substances).
Construction Manager	A competent person responsible for the management of the physical construction processes and the coordination, administration and management of resources on a construction site.
Construction Supervisor	A competent person responsible for supervising construction activities on a construction site.
Construction work	Any work in connection with the construction, erection, alteration, retrofitting, renovation, repair, demolition or dismantling of physical infrastructure.
Contract	The Instrument of Agreement, which includes the General and Particular Conditions, the Schedules and further documents (if any).
Contractor	The entity referred to as the "Contractor" in the Contract signed between UNOPS and a service provider.
Contractor's Equipment	All apparatus, machinery, vehicles and other items required for the execution and completion of the Works and the remedying of any defects, excluding the Temporary Works, Employer's Equipment (if any), plant, materials and any other items intended to form or forming part of the Permanent Works.
Contractor's Personnel	The Contractor's Representative and all personnel that the Contractor utilizes on the Site, which may include the staff, labour, agents and other employees of the Contractor and of each Subcontractor, and any other personnel assisting the Contractor in the execution of the Works.
Employee	Refers to someone engaged by an organization, regardless of their contract modality.
Fatal incident	A work-related injury or illness that results in death. This includes deaths of non-UNOPS people resulting from UNOPS activities.
Health and Safety Plan	A site, activity, work package or project-specific documented plan in accordance with UNOPS health and safety requirements.
Hot work	Any process that can be a source of ignition when flammable material is present or can be a fire hazard regardless of the presence of flammable material in the workplace (e.g., welding, soldering, cutting and brazing).

Working at height	Carrying out an activity in a position where the person can fall to a lower level. The position may be above or below the ground. It includes being on work platforms, ladders or near edges.
Incident	Undesired event which resulted in or had the potential to result in death, injury, property/equipment damage or environmental or social impacts.
Inclement weather	Any weather event that has the potential to negatively impact health and safety, e.g., wind of speed greater than 30 km/h (20mph), electric storms within a 10 km radius, or rainfall in excess of 40 mm/h.
Lost time injury or illness	A work related injury or illness that results in a person not being able to perform his/her duties for at least seven (7) consecutive days, including days not normally worked such as weekends.
Health and Safety Practitioner (Advisor, Specialist or Analyst)	A competent person appointed to be responsible for assisting the Construction Manager to address the health and safety aspects on the construction Site.
Portable equipment	Equipment that is not fixed at a particular workstation but may easily be moved from one (1) location to the next. Grinders, drills and welding machines are examples of portable electrical equipment. Auxiliary equipment, such as extension leads, plugs and sockets, used with portable tools is also classified as portable equipment.
Personal Protective Equipment (PPE)	Clothing or equipment used by individuals to protect themselves from hazards in the workplace. Examples include work suits, hard hats, full body harnesses and face shields.
Site	The places where the Temporary Works and Permanent Works are to be executed, to which plant and materials are to be delivered as shown on the Schedule of Site Plan, and any other places as may be specified in the Contract as forming part of the Site.
Site conditions	Any conditions in relation to the Site including: <ul style="list-style-type: none"> <li>a. the form and nature of the Site, including ground surface conditions, sub-surface geology and conditions, and all other physical conditions and characteristics on, above, or below the surface which may affect the performance by the Contractor of its obligations under this Contract;</li> <li>b. the general and local conditions for environment, meteorological, seismic activity, hydrological, hydrographic, climatic conditions, ocean and sub-sea conditions;</li> <li>c. the extent and nature of the work and goods necessary for the execution and completion of the Works and the remedying of any defects;</li> <li>d. the laws, procedures and labour practices of the country; and</li> <li>e. the availability and quality of both permanent and temporary access, accommodation, facilities, personnel, labour, power, transport, water, waste disposal, storage or materials and all other services and utilities, necessary for the performance of the Works in accordance with the Contract.</li> </ul>
Subcontractor	Any person named in the Contract as a subcontractor, or any person appointed as a subcontractor or supplier of materials or plant, including any Nominated

	Subcontractor or Permitted Subcontractor, for a part of the Works, and the legal successors in title to each of these persons.
Technical Coordinator	For the purposes of these requirements, the Technical Coordinator is the UNOPS personnel that leads teams in delivering work packages and reports to the Project Manager. The technical coordinator role is usually assigned to the UNOPS Site Supervisors, Site Engineer or Construction Manager.
Works	The Permanent Works and the Temporary Works, or either of them as appropriate, and all other tasks which the Contractor shall do to fulfil its obligations under the Contract.
Works information/ Scope of work	The works or services to be performed or provided by the Contractor or service provider.

## 2. INTENDED PURPOSE AND HOW TO USE THIS DOCUMENT

- 2.1. The purpose of these requirements is to establish the minimum occupational health and safety (HS) performance level that applies to UNOPS work and UNOPS workplaces. It applies to activities performed by UNOPS contractors and subcontractors. Those bidding for UNOPS work must consider these requirements when pricing their work and consequently ensure that their HS system meets or operates above these requirements if they are contracted to carry out work on behalf of UNOPS.
- 2.2. Contractors are required to ensure that their project personnel and Subcontractors are made aware of and fully comply with these UNOPS HS requirements, and/or country-specific legal requirements (the most stringent will apply in all cases).
- 2.3. This document is adapted for each specific procurement process because there may be some sections that do not apply to the specific work that a contractor is bidding for or some specialized requirements that are unique to the work to be performed may be missing. Therefore it is important to ensure that prospective contractors are using the document that has been adapted for the project and provided as part of the procurement documents.

## 3. GENERAL PRINCIPLES

- 3.1. The HS requirements describe the minimum requirements that must be in place to comply with the UNOPS HS policy.
- 3.2. UNOPS shall prepare an HS Plan for the project. Potential contractors shall include an HS Plan in their bid or proposal to address the HS requirements for the work they would be proposing to undertake for UNOPS. After the Contract is issued, the Contractor shall ensure that their Plan is updated to include the specific conditions at Site, the equipment to be brought to Site, and the competencies of the workforce they hired for the Works. The Plan shall also be aligned to the overall project HS Plan prepared by UNOPS and shall be submitted to UNOPS for approval within 21 days of the Commencement Date. See [Section 7](#) for more details about the Contractor's HS Plan.
- 3.3. Breaches of HS shall be addressed in line with the Terms and Conditions of the Legal Contract between UNOPS and the Service Provider.

- 3.4. The Contractor and Subcontractors shall ensure that all rules, instructions and signage pertaining to the work is communicated in a language(s) understood by the workforce.
- 3.5. The Contractor is responsible for making sure that all of its Subcontractors adhere to UNOPS requirements.

## 4. UNOPS GOLDEN RULES

- 4.1. UNOPS has identified 10 Golden Rules (to address critical risk and safeguard lives) for employees, contractors and visitors. The rules require attention by management over and above these HS Requirements. In the spirit of UNOPS Goal Zero commitment, these rules have to be strictly applied and monitored.

These rules are summarized below:

Rule	Description
1	<p><b>Competence</b></p> <p>No one should carry out any work unless they are competent (licensed, qualified, experienced and have had job-specific training to do so), have adequate resources for the job and they are authorized to do the job.</p> <p>Every individual at UNOPS workplaces should be alert to hazards and immediately address unsafe acts and conditions.</p> <p>Emergency plans, equipment and arrangements must be in place and every individual must know what to do in an emergency.</p>
2	<p><b>Working at heights</b></p> <p>Always have adequate fall protection (safe access, safe platform, protected edges, fall restraint and fall arrest) when working at heights.</p>
3	<p><b>Electricity</b></p> <p>No one should install, repair or tamper with electrical equipment unless they are competent (licensed, qualified, experienced and have had job-specific training to do so), have adequate resources for the job and they are authorized to do the job.</p>
4	<p><b>Energy sources</b></p> <p>Ensure that all energy sources have been isolated and locked off, and that stored energy has been released/secured before undertaking a task. For example, switching off and locking-out to prevent accidental start-ups and accidental exposure to energy sources such as uninsulated live electrical conductors.</p>
5	<p><b>Traffic rules</b></p> <p>All personnel should follow road and site traffic rules. Non-authorized employees, the general public and pedestrians should be separated by physical barriers from mobile plant equipment and vehicles.</p>
6	<p><b>Lifting operations</b></p> <p>Ensure that all lifting operations are planned, supervised and undertaken by competent personnel using certified equipment that has the capacity for the lifts being undertaken. Never allow anyone to be in the path or drop zone of a suspended load.</p>

7	<p><b>Excavations</b></p> <p>Excavations should be visibly identified and protected from collapse; they must have appropriate means of access and egress, and barricades to prevent falls into them.</p>
8	<p><b>Hazardous substances</b></p> <p>All personnel must know how to handle, store and dispose of any chemicals or hazardous substances they use in their work activities.</p>
9	<p><b>Confined spaces</b></p> <p>No one should be allowed to enter a confined space unless they are properly trained, have all of the required safety and rescue equipment and understand the safe system of work for the specific activity and confined space.</p>
10	<p><b>Liquid accumulations</b></p> <p>Any person working in or around water/liquid accumulations or storage facilities should wear a buoyancy vest and never work alone.</p>

Note that there may be a specific rule or set of instructions to address special hazard conditions such as the Coronavirus pandemic. When required, these rules or instructions shall be communicated in writing to the Contractor by the UNOPS Project Manager.

## 5. PROJECT-SPECIFIC REQUIREMENTS

- 5.1. UNOPS reserves the right to add or remove specific criteria outlined in this document in line with requirements from risk assessments, incident investigations and inspections conducted.
- 5.2. The Contractor shall be responsible for HS from the Commencement Date to the time the Taking Over Certificate is issued. In addition, the Contractor shall also be responsible for HS during the rectification of defects during the Defects Notification Period.
- 5.3. The UNOPS Representative reserves the right to stop the Works, or any parts thereof, due to any unsafe act and or condition until such time the identified non-compliances have been sufficiently addressed. Such stoppages are at the Contractor's expense.
- 5.4. The Contractor shall ensure that sufficient emergency response/first aid arrangements are available at the Site for the duration of the project.
- 5.5. The Contractor shall as far as reasonably possible put in place a Fire Prevention Plan to manage the risk of fires resulting from any activities under the control of the Contractor and/or his employees. The Fire Prevention Plan shall include storage and disposal of flammable and/or harmful/hazardous substances (fuel/paint/combustible waste material etc.).
- 5.6. Before commencing the work, the Contractor submits equipment maintenance records, including calibration and certification records where applicable, to the UNOPS Technical Coordinator for inspection and acceptance. The Contractor is also required to provide a maintenance plan for equipment. All of these records should be kept up-to-date for the duration of the Contract.
- 5.7. The Contractor shall ensure that their work activities comply with all relevant national legislation and codes.

## 6. ROLES AND RESPONSIBILITIES OF CONTRACTORS

### 6.1 Contractor's Representative/Contractor Managing Director (or equivalent)

6.1.1. The Contractor's Representative shall ensure that:

All Contractor and Subcontractor workers under his/her direct control comply fully with these HS requirements, all relevant HS legislation, and any specific HS requirements that apply to the service or work that the Contractor is carrying out on behalf of UNOPS.

### 6.2 Occupational Health and Safety Officer(s)

6.2.1. The Contractor shall appoint Occupational Health and Safety Officers (OHSO) in sufficient numbers to ensure the effective implementation of HS. As a minimum, the number shall not be less than the number indicated by the UNOPS project team in the procurement solicitation documents and the Contract.

6.2.2. The Contractor's OHSO shall (as a minimum):

- Conduct Site inductions for employees, temporary workers, Subcontractors and visitors
- Conduct training and awareness on procedures
- Facilitate risk assessments for routine/non-routine tasks
- Contribute to the preparation of method statements
- Facilitate incident investigation and reporting
- Plan and execute emergency drills and disseminate lessons learned
- Conduct inspections on Site using a format that is acceptable to the UNOPS Project Manager
- Ensure that all deviations found during inspections and corrective and preventative actions from incidents shall be documented and rectified on or before the due date set
- Maintain a sex-disaggregated register of employees, temporary workers and Subcontractors issued with PPE
- Verify the adequacy and safety of all work proposed, tools and equipment
- Contribute to the designing of Temporary Works
- Work closely with local health and safety authorities
- Comply with audit procedures and relevant legislation
- Organize and conduct periodic health and safety campaigns and HS champions recognition events
- Arrange regular HS meetings

It should be noted that these duties are not meant to be exclusively performed by the OHSO but may be shared by supervisors and others.

## 6.3 Supervisor(s)

The level of supervision affects HS performance therefore adequate, competent supervision should be provided at all workplaces with particular emphasis on safety-critical tasks.

- 6.3.1. In determining the number of appointed competent supervisors, the nature and scope of work being performed shall be taken into consideration. The number of supervisors has to be adequate to ensure that no worksites are left unsupervised. As a general guide, there should be at least one (1) supervisor for every worksite up to a maximum of 20 employees and one (1) supervisor for every 20 employees over this. More supervisors are required when there is increased risk, when workstations are far from each other and when national legislation stipulates a higher level of supervision.
- 6.3.2. Supervisors must ensure that adequate numbers of competent workers are assigned to each task.
- 6.3.3. Supervisors must ensure that tools and equipment are fit for purpose and safe to use.
- 6.3.4. Supervisors must ensure that the hazards in the workplace have been identified and effective controls are in place to address the hazards.
- 6.3.5. Supervisors must ensure that safety-critical tasks are directly supervised from the time they start until they are completed.

## 6.4 Management of Subcontractors

The Contractor must plan for and ensure that there are adequate resources and controls for adequately supervising the Subcontractors that they engage. This includes, but is not limited to assessing that:

- The Subcontractor's personnel have adequate HS competence
- The Subcontractor has tools and equipment that are safe to use
- The Subcontractor meets all legal requirements under national law
- The Subcontractor has received adequate training to ensure that the UNOPS HS requirements are met
- Arrangements are in place to adequately supervise the work of the Subcontractor to ensure that the Subcontractor works safely at all times

# 7. HEALTH AND SAFETY PLAN REQUIREMENTS

7.1. The following are minimum requirements for the compilation of the Contractor's HS Plan:

- 7.1.1. The Contractor shall prepare an HS Plan that addresses key risks in the work that the Contractor is contracted to do. The Plan shall be updated and aligned to the UNOPS Project HS Plan (or facilities plan if the work is for a facility) before the work starts. The Contractor HS Plan shall include the following:
  - A baseline risk assessment of key stages or key activities in the work assigned to the Contractor. The baseline risk assessment must address all HS risks including fatal risks covered by the UNOPS Golden Rules (see [Section 4](#)) and occupational health stressors such as the presence of disease-causing chemicals, microorganisms, and psychosocial

conditions such as stress that affect mental health (including addressing the higher risk to women in some situations)

- Safe work procedures or method statements for safety-critical/high-risk activities
- HS legal requirements that are relevant to the work
- Key objectives and targets to address risks (identified in the risk assessment) and meet UNOPS requirements described in these requirements
- Details of emergency arrangements that include details of the provision and maintenance of emergency access ways, firefighting equipment, first aid equipment, evacuation plans, rescue equipment, emergency drills, emergency contact details and signage
- The arrangements that shall be put in place to ensure that high-risk activities are directly supervised
- The programme that shall be followed for the inspection of all workplaces, machinery, tools and equipment, and observations of critical tasks are carried out
- Critical controls for applicable fatal risks. These controls may include, but are not limited to, permit to work systems (for confined spaces, excavations, hot works and working at heights), medical fitness checks for safety-critical roles, competence checks (licencing, relevant on-the-job training) for safety-critical roles, planned maintenance, calibration, certification and pre-use checks for safety-critical equipment
- Arrangements to ensure that all incidents are reported and investigated
- Arrangements to ensure that corrective and preventative actions for risks and issues that arise from inspections and incidents are carried out effectively within the time set
- A training and awareness programme that identifies the relevant personnel to be trained, the type of training that shall be provided, and other training and capacity development initiatives to address key HS risks identified and to instil a safe working culture

- 7.1.2. During the procurement for works process, bidders shall submit a proposed HS Plan that includes (but is not limited to) the aspects highlighted in Section 7.1.1. The plan shall be used to assess whether a bidder meets the UNOPS HS requirements.
- 7.1.3. Within 21 days of the Commencement Date, the Contractor should update the HS Plan and submit it for approval to UNOPS. The HS Plan shall include hazards from Site mobilization, Site establishment and the management of work packages. The updates should consider the specific Site conditions, equipment to be brought to Site, the capacity of the workforce available and other factors that have a bearing on hazards at the Site and the risk they pose.
- 7.1.4. The Contractor should also align its HS Plan with the overall UNOPS HS Plan for the project before seeking to get the plan approved.
- 7.1.5. The Contractor's HS Plan shall include all aspects covered by the Contractor's Subcontractors. It is the Contractor's responsibility to ensure that its Subcontractors are accounted for in HS planning, implementation, performance monitoring and reporting to UNOPS.
- 7.1.6. Where an HS Plan is required under the national legislation, Contractors must ensure that the Plan they develop covers both national and UNOPS requirements to avoid having to write a second plan.

## 8. CONSTRUCTION SITE ESTABLISHMENT

### 8.1 Site establishment

- 8.1.1. Before mobilizing to the construction Site, the Contractor shall provide a Site Establishment Plan to the UNOPS Project Manager for approval. The plan will, as a minimum, include the following:
- a. Office and Site layout (Site office, construction camp, the position of fixed equipment such as tower cranes, maintenance and testing facilities; walking, working, smoking and eating areas; and adequate ablution facilities for men and women)
  - b. Access control and traffic management (a detailed traffic management plan shall be required for construction that affects the normal movement of vehicles on public roads)
  - c. Drinking water points
  - d. Waste disposal points
  - e. Spill kit stations
  - f. Firefighting equipment
  - g. Emergency rescue equipment and response contact details
  - h. First aid facilities
  - i. Vehicle parking areas
  - j. Emergency assembly/gathering points
  - k. Storage facilities and workshops
  - l. Construction employee accommodation facilities (where applicable)
  - m. Protection of existing structures, materials and items
  - n. Lighting and main electrical distribution board (provision of artificial lighting where natural lighting is inadequate, and emergency lighting at escape routes)
  - o. Specific arrangements to address HS hazards that exist in the location where the work is carried out, e.g., arrangements to ensure that employees are not exposed to radioactive materials or infectious diseases such as Ebola or Coronavirus
- 8.1.2. All areas that the Contractor and its Subcontractors control and use for delivering a UNOPS project shall be securely fenced off and identified with the appropriate signage to prevent access by members of the public. This includes construction sites, construction camps and associated sites such as borrow pits, surface water catchment areas (hafirs) and materials storage areas. The Contractor shall be responsible for all security arrangements for these locations.
- 8.1.3. In planning the location of Site facilities such as offices, accommodation and welfare facilities, the Contractor shall ensure that their location will not lead to exposure to hazards from the surrounding area and/or create nuisance/inconvenience to the public. Where such exposure cannot be avoided, the Contractor shall take relevant steps to address them, e.g., installing soundproofing to address high levels of noise and air filters to address air contamination.
- 8.1.4. The Site offices, storage facilities, sheds and other facilities shall be constructed to the appropriate technical specification and workmanship approved by UNOPS and shall be maintained in a neat and tidy condition at all times. The construction Site shall conform to applicable legislation and shall be approved accordingly.

- 8.1.5. UNOPS Project Manager and Technical Coordinator shall conduct a formal joint Site establishment inspection with the Contractor. A report detailing the findings will be submitted to the Contractor who must ensure that deviations from these UNOPS HS requirements are corrected within an agreed time frame.

## 8.2 Signage

### 8.2.1. Signage at Site establishment and construction areas

- a. All signage descriptions shall be made in two (2) languages as appropriate: A national or international language that non-local visitors are likely to understand (e.g., English, French or Spanish) and a local language. Signs must contain as much visual as possible to make it easier for people with low literacy to understand the messages.
- b. All signage must be maintained and kept in a neat condition. Over-cluttering of signage is prohibited.
- c. The notice board(s) indicating the minimum PPE requirements shall be displayed at the places where PPE restrictions apply (e.g., entrances to workshops, construction areas etc.).
- d. Signs shall be in place to identify physical barricades. The signs should be visible from all sections or sides from which people may approach the barricades.

### 8.2.2. Signage for identifying the project Site including Contractor controlled areas

- a. A project site shall be identified with a signboard to identify the project Site. Contractor work areas, camps and any other locations that are being used to exclusively support the UNOPS project shall also be identified with a signboard.
- b. When deciding on type of boards to use, consider the following:
  - 1) Weatherproof material
  - 2) Strong, durable material (e.g., metal, hard plastic)
  - 3) Appropriate size (possible size of boards could be 1 metre high by 0.5 metre wide)

## 8.3 Site coordination

The Contractor shall put in place adequate arrangements for coordination between its workers and those of other contractors that are working in the same area to avoid interactions that may lead to injuries or illnesses. For example, Site communication and planning should ensure that one (1) contractor's workers are not working in the line of fire (e.g., under the load of a crane during the crane lifting operation of another contractor), or ensure that the way shared welfare facilities are used by the contractor workers do not expose the other contractor's workers to disease-causing biological agents.

## 9. PERMIT TO WORK

- 9.1. The Contractor (including Subcontractors) shall comply with the UNOPS Permit to Work (PTW) system addressing critical risk controls. As a minimum, work that requires a PTW shall include confined space work, hot work, excavation<sup>1</sup>, lifting and working at heights. Examples of UNOPS PTW forms and guidelines are listed below:
- Confined Space Permit (HS08)
  - Hot Works Permit (HS09)
  - Excavation Permit (HS10)
  - Lifting Permit (HS11)
  - Working at Heights Permit (HS12)
  - Energized Works Permit (HS17)
- 9.2. The Contractor shall ensure that all Contractor Personnel, including supervisors, who will be doing work that is covered by the PTW, have received awareness training on the hazards and key controls of the work. No one should start work that is regulated by a permit before receiving this training. The Contractor must retain training records signed by the personnel.
- 9.3. Additional activities that may require a PTW/issue-based risk assessment sign off by the UNOPS Project Technical Coordinator within a construction area include:
- Demolition work
  - Blasting
  - Working near water bodies
  - Work being done within close proximity of an overhead power line
  - Electrical switching or energizing work
  - Places with a high likelihood of coming into contact with Explosive Remnants of War (ERWs). Review the General Conditions of Contract in the Contract for Works to see the other requirements stipulated by UNOPS regarding ERWs

## 10. EQUIPMENT REQUIREMENTS (GENERAL)

### 10.1 General requirements

- 10.1.1. The Contractor shall ensure that tools and equipment are identified, registered, inspected and declared safe by a competent person. This applies to all tools and equipment including but not limited to hand tools, portable electrical equipment, pneumatic tools, fixed plant equipment and mobile plant equipment (such as front end loaders, trucks, graders, bulldozers and cranes).
- 10.1.2. The UNOPS Project Technical Coordinator shall not allow the Contractor to bring tools or equipment to the Site that are substandard or that pose a threat to the health and safety of persons. Tools and equipment include fixed machines, portable equipment and hand tools. Homemade tools and equipment (such as makeshift ladders and hammers and homemade

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<sup>1</sup> The permit to work for excavations should mitigate the possibility of collapse of the walls of the excavation and the possibility of interacting with underground lines carrying gas, fuel, water, sewage and electricity.

modifications to machines) are strictly not allowed. The Contractor is expected to include the cost for standard tools and equipment in their bid and to provide them throughout the duration of the Works.

- 10.1.3. The Contractor must ensure that all portable electrical equipment is subjected to portable appliance electrical safety testing by a competent electrician.
- 10.1.4. The Contractor shall immediately stop any activity being carried out using substandard tools and equipment and immediately advise the UNOPS Technical Coordinator.
- 10.1.5. The Contractor shall ensure that no modifications/bypassing of portable equipment safety devices is done, e.g., the "dead man switch" is not disabled to make a grinder run continuously. Supervisors shall check and verify that safety features/devices are in place and functioning properly.
- 10.1.6. When used, all generators must have an oil spill/drip tray. Disposal of oil-contaminated waste and oil residues must be done in an environmentally friendly manner whilst also reducing the fire risk.
- 10.1.7. The Contractor must also apply precautions to prevent fire risk and environmental contamination at the storage area for the generator fuel.
- 10.1.8. All generators to be maintained and operated in accordance with the manufacturer's instructions.
- 10.1.9. Generators must not be run in enclosed spaces where there is no provision for preventing the exposure of personnel to fumes.
- 10.1.10. Electrical work and inspection of electrical installations must be performed by a competent electrician. The electricians must ensure that electrical safety features such as earthing, fuses and residual-current circuit breakers are in place to limit the exposure of people to electricity.

## **11. EQUIPMENT REQUIREMENTS (MOBILE MACHINERY/EQUIPMENT)**

### **11.1 General requirements**

- 11.1.1. The Contractor shall carry out planned inspections and maintenance of mobile equipment to ensure that the equipment is safe for use in line with the manufacturer's specifications or instructions. The UNOPS Technical Coordinator shall sign off to accept the use of the mobile equipment for UNOPS work after checking to ensure that the equipment is safe for use.
- 11.1.2. The equipment shall be adjustable to fit the physical stature of the operator.
- 11.1.3. Only personnel who have training and licences for the specific item of mobile equipment required by national law shall be allowed to operate the equipment. The UNOPS Technical Coordinator may accept equivalent international licensing. The Contractor shall ensure that copies of the records of training and licensing are readily available for inspection by UNOPS.
- 11.1.4. The Contractor shall be responsible for planning and segregating vehicular traffic, machine operation and pedestrian areas. The planning should include controlling vehicle traffic through the use of one-way traffic routes, light signals, on-site trained flag-people wearing high-visibility

vests to direct traffic and/or other means of controlling movement at the Site. The Traffic Management Plan shall be approved by the UNOPS Project Manager.

- 11.1.5. The Contractor, in consultation with UNOPS, shall ensure that permission is granted by the local or national authority before any traffic management changes that affect the movement of traffic on public roads are implemented.
- 11.1.6. The Contractor shall ensure that the use of mobile equipment is risk assessed and the key hazards and their controls are communicated to employees affected.
- 11.1.7. The induction at the Site must include measures to prevent pedestrians from coming into contact with moving plant and vehicles, and detail how segregation is maintained.

## **11.2 Site requirements**

- 11.2.1. The Contractor shall ensure that only competent, licensed and authorized workers operate equipment at all times.
- 11.2.2. Seat belts shall be worn on forklifts, earthmoving machinery or any other construction machinery with permanent seating arrangements.
- 11.2.3. Drivers shall be responsible for the safe transportation of all loads. This includes the proper securing of all loads through the correct methods with the use of correct securing devices. Loads protruding from vehicles shall be made visible (e.g., by the use of red flags in the day and flashing lights at night). The specific method of making protruding loads visible should be aligned to the national law.
- 11.2.4. All Site mobile machinery shall be safe for use with functional brakes, lights, mirrors, gommeneod condition tyres/tracks, horn, safe access ladder (for raised operator cabins), fire extinguishers and any other additional aspects that may be determined by the UNOPS Technical Coordinator.
- 11.2.5. All construction vehicles shall be fitted with a working orange rotating or flashing beacon and shall have audible back-up/reverse alarms.
- 11.2.6. A buggy whip/flag pole (for light motor vehicles) may be requested on construction sites and will be prescribed by the UNOPS Technical Coordinator.
- 11.2.7. Unauthorized vehicles are not allowed at the location of any physical activities connected to the implementation of a UNOPS Contract.
- 11.2.8. All roadside construction sites shall be barricaded to create a 2 metre safe zone. Such barricading must be visible at night.
- 11.2.9. There shall be a strict separation between pedestrians and construction vehicles at construction sites. The pedestrian walkways and the routes to be taken by construction vehicles shall be indicated on the Site Map.
- 11.2.10. Speed limits should be managed in a way that is consistent with safe Site operations and traffic movements.
- 11.2.11. Access to active or inactive construction sites by Contractor's Personnel and visitors should be limited to people who are required for the work activities that have been approved by UNOPS.

- 11.2.12. The Contractor shall ensure that there are adequate provisions for the safety of the children if child care is offered to working parents. Children shall not be allowed on Site or in any location where they could be harmed by work at or near the Site.
- 11.2.13. Workers shall not be allowed to bring necklaces or loose-fitting clothes that may be caught in rotating machines.

### **11.3 Vehicle fuelling/refuelling**

- 11.3.1. All vehicle fuelling and servicing areas shall have ground spillage protection, i.e. concrete flooring/impermeable covering, drip trays and an oil interceptor. Where spills are likely, the Contractor must provide a spill kit, and personnel must be trained in its use.
- 11.3.2. There must be secondary containment (bund walls that can take at least 110 per cent of the total volume of stored liquids) in places where liquid hydrocarbons are stored (e.g., fuel, lubricants, used oil).
- 11.3.3. Flammable liquids must be stored in flame-proof storage containers away from buildings and combustible materials. Firefighting equipment must also be provided at locations that are readily accessible when trying to fight a fire in the flammable store.
- 11.3.4. When refuelling is done on Site from a portable container, proper refuelling procedures should be implemented to prevent spillages and fire risk. Hand pumps, proper funnels and standard proprietary fuel containers must be used. The use of ad hoc reused containers and makeshift funnels is prohibited.
- 11.3.5. Waste contaminated with hydrocarbons shall be disposed of properly to avoid fire risk and environmental contamination.

### **11.4 Cranes**

- 11.4.1. The Contractor shall make sure that certificates of inspection and testing which are carried out in line with the relevant legislation and standards for cranes (mobile, tower and truck-mounted) are readily available when requested by UNOPS. The UNOPS Technical Coordinator, upon inspecting the cranes, may require some aspects of the cranes to be improved before the Contractor is allowed to use the crane at the Site.
- 11.4.2. The Contractor must ensure that where tower cranes are used, they are designed, erected, supervised and operated by competent persons.
- 11.4.3. All mobile cranes shall make use of spreader plates under the outriggers to ensure the load distribution is within the ground bearing capacity of the underlying ground. A competent person must check the ground bearing capacity and crane outrigger loadings and specify the size of spreader plates required.
- 11.4.4. Where crane services are used on Site (mobile and/or tower), the Contractor shall ensure the following requirements are met: relevant operator competencies, valid load test certificates (cranes including rigging equipment) and daily crane inspections. All the slings in use shall be listed in a register and inspected at least once every six (6) months.
- 11.4.5. The Contractor shall submit a relevant risk assessment and method statement/lifting plan that mitigates the specific risk factors at the Site where the lift shall take place (e.g., the effects of

wind speed, possible interaction with overhead electricity lines and the presence of people in the travel zone of the load).

11.4.6. A lifting plan shall be prepared for all lifting activities on Site – refer to Form HS11. Special care shall be taken for critical lifts. Critical lifts are defined as:

- a. Any lift that utilizes more than one (1) crane or hoisting device
- b. Any lift that is over 20 tons
- c. Any lift involving a crane-suspended work platform/cage
- d. Any lift located over critical operating and/or process equipment
- e. Any lift that exceeds 70 per cent of the valid load test certification of the crane

11.4.7. All mobile cranes shall be equipped with a drip tray that has to be in place under the crane when the crane is in operation.

11.4.8. Loads shall not be left suspended from a crane.

11.4.9. Lifting and carrying can only be done provided it is within the capabilities of the crane specified by the manufacturer.

11.4.10. The Contractor shall, as far as reasonably possible, avoid any lifting or rigging activities within and/or close to any existing overhead power lines and/or any other structures. The Contractor shall obtain approval from both the UNOPS Technical Coordinator and relevant authorities before any lifting or rigging activities planned within or close to existing services and or overhead power lines.

## **11.5 Other mobile machinery – forklifts/excavators/front end loaders and skid steer loaders**

11.5.1. Where mobile machinery such as forklifts/excavators/front end loaders and skid steer loaders are used, these need to be fully checked by the Contractor to ensure that there are no defects before use. When they are propelled by liquid petroleum gas, the Contractor shall ensure that the regular inspections also review the controls that are in place to limit the possibility of a fire occurring.

11.5.2. Excavation machinery should be checked regularly by the Contractor before use.

## **12. SUPERVISION OF CRITICAL TASKS**

12.1. The Contractor shall ensure that the performance of all specified work is supervised throughout the duration of the Contract by a sufficient number of competent appointed representatives of the Contractor, who have experience in the type of work specified.

12.2. The Contractor shall not allow work to occur without supervision. The Contractor shall also not allow workers to create hazardous arrangements or to leave situations that could become hazardous unattended. For example, a mobile crane must not be left with its boom extended and an inspection hole must not be left uncovered.

12.3. UNOPS classifies the following tasks as critical (with a potential to cause fatal or serious harm to workers), and as such the Contractor shall ensure their strict supervision and full compliance with Permit To Work requirements:

- a. Working at heights (HS12)
- b. Electrical repair and installations (HS18)
- c. Hot work (HS09)
- d. Energized works (HS17)
- e. Lifting operations and including mechanical handling (HS11)
- f. Excavation work (HS10)
- g. Demolition works (HS19)
- h. Confined space work (HS08)
- i. Working near accumulations of water and liquids

## **13. WORKING AT HEIGHTS**

### **13.1 General requirements for working at heights**

- 13.1.1. The Contractor must consider reducing the exposure to work at heights by ensuring that work that can be done on the ground is done on the ground.
- 13.1.2. A risk assessment and method statement/procedure shall be compiled and approved by the UNOPS Technical Coordinator before work at heights is started.
- 13.1.3. The method statement shall include a description of how the following shall be addressed: worker training and awareness about the hazards and controls for working at heights; type of equipment to be used and precautions to ensure that the equipment is used safely, e.g., checks on barricades, scaffolding, full-body safety harnesses (hereafter referred to as safety harness), lifelines and signage.
- 13.1.4. All edges must be protected by a physical barrier which is robust enough to stop a person who accidentally leans on the barrier from falling over the edge. The barrier must be at least 950 mm higher than the platform area. If the barrier is a guardrail it must be fitted with a midrail or midrails to stop someone from falling under the guardrail. The maximum gap permitted between midrails should be 470 mm.
- 13.1.5. Working platforms must be complete so that people do not fall through the floor, and secured so that they do not fall over.

### **13.2 Fall protection equipment**

- 13.2.1. Safety harnesses shall have a “double lanyard” and be in good condition (showing no signs of physical damage). Each harness shall have a number or another means of identifying it. The Contractor shall ensure that harnesses and lanyards are listed in a register and inspected at least once every three (3) months.
- 13.2.2. The risk of falling whilst working must be prevented at any height but especially so when working above 1.8 metres. This includes situations where work activities may lead to a person falling over or under edge protection installed. In such situations, an appropriate fall restraint or safety harness system must be used.
- 13.2.3. The Contractor shall ensure that all relevant employees are trained in the usage of harnesses including how to tie off on anchor points.
- 13.2.4. The Contractor shall install a lifeline or another suitable and sufficient anchorage point approved by the UNOPS Technical Coordinator. The lifeline should not be linked to scaffolding.

Inspection and testing of lifelines shall be done on a daily basis by an appointed Supervisor (who is responsible for inspecting lifeline equipment, safety harnesses and scaffolding installations).

- 13.2.5. The Contractor shall make provision to prevent objects and/or material from falling from elevated areas to protect persons below. Working platforms must be fitted with toe boards to prevent objects from falling or being kicked off. The areas where falling equipment may cause hazard shall be barricaded properly and access to these areas controlled. Warning signs are to be erected to make people aware of the hazard.
- 13.2.6. All tools and equipment as well as associated items, including but not limited to nuts, bolts and grinding discs etc., shall be transported/carried to elevated working platforms in suitable and sufficient containers.
- 13.2.7. The Contractor shall ensure that all equipment and hand tools can be secured to either the person or the structure with lanyards, bearing in mind that heavy hand tools should never be tied to a person as they may cause fall incidents. Only small hand tools are to be tied to users. When hand tools are not being used, they must be tied down to the structure.

### **13.3 Openings into which people could fall**

- 13.3.1. The Contractor shall ensure that all openings are covered with a suitable guard which shall be highly visible, designed to withhold imposed loads, firmly affixed and not easily removable over the opening hazard.
- 13.3.2. The cover shall be identified with weatherproof signage to indicate the opening hazard which the barricading and cover is protecting. The signage may be A4 sized, be in universally recognized "Danger" symbols and colours, and in an understandable language of the workforce.
- 13.3.3. The openings shall also be guarded by a rigid, affixed barricade capable of withstanding the force of a person falling against it.

### **13.4 Prohibitions (working at heights)**

- 13.4.1. The Contractor shall ensure that work activities at heights in weather conditions which pose a safety risk are immediately stopped.
- 13.4.2. Workers shall use proper safety harnesses with double lanyards. Safety belts that cannot distribute the force of the fall across the body and hold the user upright are prohibited.
- 13.4.3. Beam crawling or walking on pipes is prohibited.

## **14. SCAFFOLDING**

### **14.1 General requirements**

- 14.1.1. Scaffolds shall be well designed and erected to ensure that they are safe for use. They must be complete with all platforms, baseplates, standards, ledgers, bracings, ties and couplings in place. They shall also have guardrails, midrails and toeboards.
- 14.1.2. The roles and responsibilities of scaffolding personnel (designers, erectors, inspectors and dismantlers) shall be adequately documented by the Contractor, and the Contractor shall

ensure that each person is aware of their roles and responsibilities. Only the people assigned the role of designing, erecting, inspecting or dismantling scaffolds shall be allowed to carry out these activities.

- 14.1.3. Scaffolding laydown areas requirements: scaffolding material may only be stacked/stored at the allocated laydown areas, scaffold material must not restrict the safe movement of people in the laydown area, and the area must be barricaded (e.g., scaffolding frame with orange safety netting).
- 14.1.4. All users of scaffolding must ensure that any trap doors are closed and secured when performing work on platforms.

## **14.2 Erection, alteration and dismantling**

- 14.2.1. The erection, alteration and dismantling methods shall be documented by the Contractor in a procedure, including the means of securing scaffold boards.
- 14.2.2. The Contractor must ensure that scaffold builders are trained and declared competent. Untrained personnel are not permitted to erect, alter, inspect or dismantle scaffolding.
- 14.2.3. The Contractor shall assign a person who is legally authorized and competent to ensure that a scaffold is fit for purpose and safe for use before handing over to the scaffold user. After checking the scaffold, the person must put a tag to indicate whether the scaffold is safe or unsafe to use.
- 14.2.4. Scaffolds must be inspected:
  - Before first use
  - After any alteration
  - After any event affecting its stability
  - After adverse weather
  - Within seven (7) days of the last inspection when the scaffold is in continuous use
- 14.2.5. Scaffold builders must ensure prevention of fall measures are in place and good communication during the erecting and dismantling phases. This shall be documented in the required procedure.
- 14.2.6. Scaffolding boards to be used for scaffold erection or from scaffold dismantling should always be properly secured to prevent displacement.
- 14.2.7. During dismantling, all loose objects must be removed from the scaffold before dismantling.

## **15. LADDERS (PORTABLE)**

### **15.1 General requirements**

- 15.1.1. All ladders shall have an identification number, logged in a ladder register, and be inspected by a competent person and by the user prior to use.

- 15.1.2. Damaged ladders shall be marked as "DAMAGED" and removed from the project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site) and replaced with ones in certified usable condition.
- 15.1.3. When ascending or descending ladders, Contractor's Personnel shall maintain three (3) points of contact at all times and shall face the ladder.
- 15.1.4. Step ladder legs shall be fully spread and the spreading bars locked in place.
- 15.1.5. Step ladders shall not be used as straight ladders.

## **15.2 Use of ladders**

- 15.2.1. All ladders used for access shall be secured by tying at the top or by being footed at the bottom for the entire duration of use.
- 15.2.2. Portable metal ladders shall not be used in the vicinity of energized electrical circuits.
- 15.2.3. The ladder shall be placed so that the distance between the bottom of the ladder and the supporting point is approximately 1/4 of the ladder length between supports.
- 15.2.4. When using a ladder as access to an elevated position such as a roof, the installer shall ensure that the ladder side rails extend at least 1 metre above the dismount position, or that grab bars are present.
- 15.2.5. The ladder should be placed on stable level ground.
- 15.2.6. Workers shall wear a safety harness and tie off lanyards to a secure anchor whenever both hands must be used for the job or whenever the workers are exposed to a fall in excess of 1.8 metres.
- 15.2.7. Ladders must not be used as working platforms. They should only be used for accessing the working level. An appropriate working platform such as a scaffold should be put in place.

## **16. EXCAVATIONS**

### **16.1 General requirements**

- 16.1.1. The Contractor shall, as far as reasonably possible, avoid any excavation activities within and/or close to existing services and/or any other structures. The Contractor shall also obtain approval from both the UNOPS Technical Coordinator and relevant authorities before any excavation activities planned close to existing services lines.
- 16.1.2. The Contractor shall obtain approval to start excavation work after presenting a method statement, risk assessment and excavation permit to the UNOPS Technical Coordinator.
- 16.1.3. The excavation risk assessment shall identify risks which include but are not limited to machine toppling, engulfment of personnel, drowning from water accumulation and damage to underground services resulting in electrocution or other incidents.
- 16.1.4. All excavations are to be inspected by the Contractor's appointed competent person at the start of each shift before work commences and after inclement weather. Work may only commence if

the excavation is declared safe. A barricade and signage must be put in place to indicate when the excavation is unsafe for workers to enter.

- 16.1.5. Safe means of access/egress shall be provided either by secure ladders or sloping. Stairway stepping may be used, however, the steps shall be maintained at an agreed frequency, and a written record that describes the maintenance work required and the frequency of maintenance activities shall be kept.
- 16.1.6. Excavations with a depth of more than 1 metre shall require suitable and sufficient edge protection to prevent people and vehicles from falling in.
- 16.1.7. Excavations in streets or other public places that have not been fenced off shall be covered to prevent people from falling into the excavation. Diversion signs for excavation areas on roads and streets shall be placed well ahead of the excavated so that people see them before they get to the excavations.
- 16.1.8. If works are suspended for any reason, the Contractor shall ensure that the Site will be left in a state that is safe for the public, including children from the surrounding communities. This includes mitigating hazards that may arise during the stoppage of works (e.g., ensuring that there is no risk that children will drown because of pools of water that result from excavations filling up with rainwater).

## **16.2 Shoring and bracing**

- 16.2.1. Shoring and bracing must be applied in excavations where a risk of collapse of unsupported ground exists. Such excavations are to be sloped or battered at the minimum angle of repose or supported using proprietary trench support systems or timbers and struts.
- 16.2.2. When deciding on the extent of shoring and bracing, consideration must be given to the increase in ground pressure introduced to excavations by the adjacent location of structures. Consideration must also be given to the increase in pressure that results from placing excavated materials too close to the edge of the excavation.
- 16.2.3. Where it is not possible to slope the sides, the risk assessment must identify methods to prevent excavation collapse.
- 16.2.4. After reviewing the risk assessment, method statement and the conditions, the UNOPS Technical Coordinator may ask the Contractor to increase or reduce the extent of shoring and bracing.

## **16.3 Underground service lines**

- 16.3.1. Where such drawings exist, the Contractor shall obtain detailed drawings from the local authority or service provider to identify the underground service lines that could be affected by the excavation work.
- 16.3.2. Where cables are exposed, they shall be covered by wooden boards or other means as soon as possible after exposure to prevent damage from people or animals walking over the cables or objects falling on the cables.
- 16.3.3. In the event of accidental damage to cables, pipes or underground services, the work shall be stopped and the damage reported to the UNOPS Technical Coordinator.

- 16.3.4. Electricity shall be disconnected before starting the excavation if the excavation shall interface with underground electrical cables. It is the Contractor's responsibility to give sufficient notice (as required by local legislation) to the Service Provider regarding the disconnection.

## **16.4 Excavated material**

- 16.4.1. Excavated material must as a general rule be placed a distance back from the edge of the excavation at least equal to the depth of the excavation. No materials are to be stored close to the edge of excavation to avoid putting an additional load on the walls of the excavation.
- 16.4.2. The Contractor is responsible for the management of excavations during and after work and shall make provision for appropriate barricading, illumination, signage, and management of interference to walkways, traffic, and rescue in water environments.
- 16.4.3. The Contractor shall take measures to prevent falling off or spilling of construction materials when transporting the excavation materials.

## **17. DEMOLITION WORK**

- 17.1. The Contractor must ensure that before any demolition work is carried out, a detailed structural engineering survey of the structure to be demolished is carried out by a competent person and that a risk assessment and method statement of the demolition work has been developed and submitted to the UNOPS Technical Coordinator. The possibility of an unplanned collapse shall be considered in the risk assessment and method statement.
- 17.2. Before starting the demolition the Contractor shall check to ensure that services such as electricity, water, sewer and gas are cut off.
- 17.3. The Contractor shall also check to ensure that there are no people or animals in the structure to be demolished.
- 17.4. Demolition work must only be undertaken and supervised by competent personnel.
- 17.5. During demolition, the Contractor shall check the integrity of the structure at intervals determined in the method statement, to avoid any premature collapses.
- 17.6. The demolition Site shall have access control to ensure that there will be no unauthorized entry.
- 17.7. Demolition works that involve hazardous materials such as asbestos shall be carefully planned and handled by relevant abatement experts.

## **18. OPERATION OF BATCH PLANTS, CRUSHER PLANTS AND BORROW PITS**

### **18.1 Batch plants and crusher plants**

- 18.1.1. The Contractor shall ensure that hazards in batch plants and crusher plants are identified and mitigated. The hazards include nip and pinch points, moving conveyor belts, crusher jaws and concrete mixer blades. Machine guarding or other physical barriers must be in place to stop people from coming in contact with these hazards.

- 18.1.2. Repair, maintenance or cleaning work in the crusher or batch plant shall only be performed after sources of energy have been isolated, and lockout and tagging has been performed. For example, this means that the plant must be switched off and a lock placed on the switch to prevent accidental startup before an artisan goes inside the crusher chamber to repair the crusher jaws of a crusher plant.
- 18.1.3. The Contractor must minimize the exposure of workers to dust and noise through having noise and dustproof workstations for operators and a rotation of workers to limit exposure, or other arrangements to minimize the impact of noise and dust.
- 18.1.4. All workers at batch plants and crusher plants shall be provided with respiratory protection and hearing protection PPE at a rate that will allow the PPE to be maintained in a clean and usable state.
- 18.1.5. Warning signs shall be displayed to alert people to the hazards of the batch plant or crusher plant.

## **18.2 Borrow pits**

- 18.2.1. The Contractor shall restrict access by the public to the borrow pits.
- 18.2.2. Designated parking for small vehicles shall be put in place. Signs shall indicate that all vehicles are to reverse park at the borrow pit parking area.
- 18.2.3. The Contractor shall ensure that the movement of trucks, front end loaders, excavators or other mobile equipment shall be planned to ensure that there are no collisions during loading operations in the pit. Radio communication shall be used for communication among operators of mobile equipment and also between operators and any spotters on the ground that will be supporting the loading operations.
- 18.2.4. Borrow pits that accumulate water pose a high risk of drowning to children and livestock from the local community. The Contractor shall make borrow pits safe by reprofiling the land to remove steep slopes and minimize the accumulation of water.
- 18.2.5. The local community may request to take over the borrow pit to use it as a source of water for their livestock, irrigating crops or other use. Such arrangements should be in the form of a formal agreement between UNOPS, the Contractor and the community leadership/local authority indicating the community has been made aware of the hazards that the borrow pit poses and that they take responsibility for safety measures for the borrow pit.

## **19. WORKING IN INCLEMENT WEATHER**

### **19.1 Construction work done during electrical storms**

- 19.1.1. The project shall use the information provided by the local authorities or media to plan for inclement weather conditions.
- 19.1.2. During electrical storms, the Contractor shall ensure that all employees are removed from heights, operating cranes and working on top of open structural steel even when earthed.

- 19.1.3. After the storm, on-site conditions must be risk assessed and the wet conditions accounted for before work continues.

## **19.2 Crane operations when there is rain or snow**

- 19.2.1. Lifting operations should stop when the amount of rain or snow falls affect visibility.
- 19.2.2. For electrical storms, crane operations must stop during lightning within a 10 km radius and wind above 32 km/h (20mph).

## **19.3 Construction work performed during rain/snow**

- 19.3.1. During rain/snow conditions, all work on steel structures must stop. Workers must be protected from the adverse impacts of the weather conditions on their health, e.g., by providing shelter for the workers.
- 19.3.2. No electrical tools may be used during rain/snow fall weather in open areas.
- 19.3.3. Electrical work can be done in weatherproof areas where there is no risk of electrocution. The areas cleared for work during rain and snow are workshop(s), office(s) and work at ground level where conditions can be maintained in a dry and safe condition.
- 19.3.4. All employees that are required to continue working during rain/snow shall be provided with approved waterproof protective clothing and footwear. The UNOPS Technical Coordinator shall review and approve the clothing and footwear.

## **19.4 Scaffolding activities during inclement weather conditions**

- 19.4.1. During inclement weather, scaffolding work will be restricted to minimal safety-critical work.

## **19.5 All scaffold users must:**

- 19.5.1. Ensure that they only use scaffolding that has been inspected. Scaffolding shall be inspected before use and after inclement weather conditions (rain, wind, snow).
- 19.5.2. Ensure that the risks associated with working at heights during inclement weather are identified and reasonably mitigated.
- 19.5.3. Be cautious of slip/trip hazards when performing activities during inclement weather.

## **19.6 Driving in inclement weather**

- 19.6.1. The Contractor shall ensure that the danger of driving in wet/snow/heavy wind conditions is adequately covered in their risk assessment.
- 19.6.2. The risk assessment may include (but is not limited to) route planning, speed reduction, planning for emergencies, driving precautions for slippery surfaces and visibility hazards.

# **20. RAISING/LOWERING LOADS BY HAND (ROPE RIGGING)**

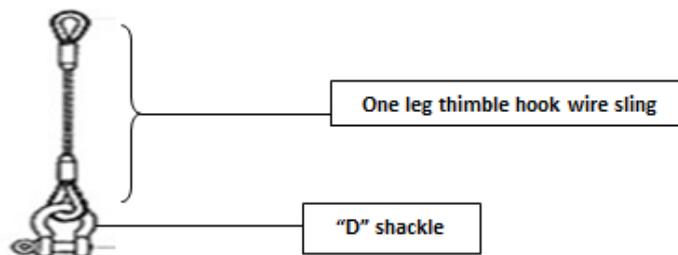
## 20.1 General requirements

- 20.1.1. The raising or lowering of equipment by hand using a rope has a high risk and often results in loads being dropped and persons injured.
- 20.1.2. The safest option is therefore not to allow this activity but rather use other means to lift/lower loads. Should it however not be practical and a load needs to be raised/lowered by hand, the following guidelines in Section 20.2 shall apply.

## 20.2 Load requirements

- 20.2.1. Only loads of 20 kg in mass or less may be raised or lowered by hand using a rope.
- 20.2.2. Ensure that all equipment, tools and materials to be lifted/lowered are placed in a bag or container and secured to the rope in such a manner that the load cannot become detached from the rope or fall out of the bag or container. The bag or container must be of sufficient strength that it will not break while the load is being raised or lowered.
- 20.2.3. Loads should not be connected to the rope using a knot. Instead, a mechanical connection (D shackle) to a thimble (see figure below) that is spliced into the rope (sling) should be used as a means of connection.

**Example: Thimble and shackle on wire sling**



## 20.3 Rope requirements

- 20.3.1. Before the initial use of ropes, ropes are to be inspected by the Rigger. The Contractor must ensure that there is a plan in place for periodic inspections of ropes by a Rigger. Users shall perform a visual inspection to identify defects before every use of the rope and record the results.
- 20.3.2. The dead-end (the other end of the rope) where the load is not attached shall be firmly fixed to a solid anchor point during lift/lowering operations.
- 20.3.3. The Contractor shall keep records of non-destructive tests that are carried out on ropes if such tests are required by national law.

## 20.4 Personnel requirements

- 20.4.1. The area beneath the lifting or lowering Site shall be barricaded to ensure that no persons enter under any suspended load.

- 20.4.2. A person must be present whilst lifting operations are ongoing to enforce access control at the barricaded area.
- 20.4.3. All personnel undertaking lifting or lowering by hand must be competent and briefed in the safe system of work.
- 20.4.4. Personnel undertaking lifting or lowering by hand must be aware of potential places where the load can get stuck or hooked whilst lifting/lowering takes place and take action to avoid these. The personnel must be provided with hand protection PPE.

## **21. TEMPORARY STORAGE AND USE OF FLAMMABLE LIQUIDS**

### **21.1 General requirements**

- 21.1.1. The Contractor shall ensure that all flammable liquid stores are adequately identified by the required signage, and capacities clearly marked. Material Safety Data Sheets shall be available at the location where the chemicals and flammable liquids are stored.
- 21.1.2. Flammable liquid storage areas must be provided with bunded spill containment that is 110 percent of the largest container or 25 per cent of the total volume stored, whichever is the greater.
- 21.1.3. The Contractor must ensure that where flammable liquids are being used, applied or stored at the workplace concerned, it is done in a manner that does not cause a fire or explosion hazard and that the area is effectively ventilated.
- 21.1.4. Smoking is strictly prohibited in any place in which flammable liquid is used or stored, and a suitable and conspicuous notice shall be placed at all entrances to any such areas prohibiting such smoking. Firefighting equipment shall be installed in suitable locations around the flammable liquids store.
- 21.1.5. The Contractor shall ensure that all containers holding flammable liquids are kept tightly closed and in locked storage when not in use and, after their contents have been used up, are removed from the construction site and safely disposed of.

## **22. FIRE PRECAUTIONS**

### **22.1 General requirements**

- 22.1.1. All appropriate measures are to be taken to avoid the risk of fire. The measures include the provision of sufficient and suitable storage for flammable liquids, solids and gases; the prohibition of smoking near flammable substances; posting of appropriate signage; and the provision of firefighting equipment.
- 22.1.2. All fire equipment is to be marked on the Site Establishment Plan.
- 22.1.3. No open fires are allowed on any UNOPS Site. The burning of waste is prohibited and all residual waste must be relocated to the waste area/landfill identified for disposal after waste segregation, recycling and reuse have been carried out.

## 22.2 Designated smoking areas

- 22.2.1. Contractors shall make provision for designated smoking areas in the areas that they control so that smoking only happens in the approved location as far away as possible from the storage of flammable substances and liquids. The location shall be chosen such that there is minimal exposure of other people to tobacco smoke.
- 22.2.2. The Contractor shall ensure that the smoking areas are equipped with sufficient waste bins (e.g., one (1) for cigarette stubs and one (1) for general waste), firefighting equipment and the necessary signage as required by legislation.
- 22.2.3. The Contractor shall ensure that the smoking area is kept clean and tidy at all times.

## 23. WORKING NEAR WATER ENVIRONMENTS

### 23.1 General requirements

- 23.1.1. The Contractor shall ensure that where construction work is done over or close to a water body, provision is made for preventing persons from falling into the water, and the rescuing of persons in danger of drowning will form part of the Emergency Management Plan.
- 23.1.2. A risk assessment and work procedure shall include (but is not limited to) the following as a minimum: identify the potential hazards such as drowning, overturning of plant/equipment into the water, rescue requirements, mandatory signage requirements (e.g., for life vests), rescue equipment requirements (e.g., life buoys/rings, rescue hooks, safety boat), trained rescue teams and access control.
- 23.1.3. The Contractor shall submit the risk assessment, work procedure and Emergency Management Plan to the UNOPS Technical Coordinator before the work commences.
- 23.1.4. Edge protection and fall restraint systems shall be used to stop people from falling into water or liquid bodies. All personnel exposed to the risk of drowning by falling into the water must be provided with and wear a lifejacket while working.
- 23.1.5. Precautions must also be taken to prevent equipment from falling into the water or liquid bodies.
- 23.1.6. No person shall be permitted to work alone next to any water or liquid body or containment facility.

## 24. STACKING AND STORAGE

### 24.1 General requirements

- 24.1.1. Contractors shall ensure that their Site Plans include stacking and storage considerations so that all stacking areas are identified and managed safely. Site planning shall include (but is not limited to) the following as a minimum:
  - a. Manual handling requirements

- b. Stacking/storage at heights
  - c. Stacking/storage methods to be used
  - d. Load bearing platforms and racking for stacked/stored materials
  - e. Barricading requirements (i.e. walkways)
  - f. Access control requirements
  - g. Quarantined and/or redundant material management
  - h. Emergency response
  - i. Fire precautions
- 24.1.2. The Contractor must ensure that a supervisor is responsible for supervising stacking and storage on Site. The supervisor will ensure that adequate storage areas are provided, that there are demarcated storage areas and that all areas will be kept neat and under control.
- 24.1.3. Flammable materials and substances must be stored in storage areas that are designed to minimize fire risk.

## **25. HOUSEKEEPING**

### **25.1 General requirements**

- 25.1.1. The Contractor shall ensure that waste is managed effectively so that it does not become a hazard, e.g., by increasing the possibility of fire, creating tripping hazards or providing a home for disease-causing organisms.
- 25.1.2. Contractors shall conduct Site inspections that include housekeeping checks as part of their daily supervisory activities. Loose materials including PPE must not be left unattended on Site during lunch or knock-off times. All surplus materials, tools and equipment should be stored safely and securely at appropriate storage areas until they are removed from the Site.
- 25.1.3. Contractors shall address protruding materials that could cause harm (e.g., by ensuring that nails protruding through timber are bent over or removed, and by removing reinforcement bars protruding from concrete).
- 25.1.4. On completion, the Contractor is responsible for the clearing of the Site and safe disposal of all materials, waste, temporary buildings and temporary building bases/foundations to the satisfaction of the UNOPS Technical Coordinator.

## **26. CONSTRUCTION EMPLOYEE FACILITIES**

### **26.1 General requirements**

- 26.1.1. The Contractor shall provide its employees with adequate facilities that meet UNOPS requirements. The design of the facilities including building materials, size and locations shall be approved by the UNOPS Technical Coordinator before the facilities are established.

- 26.1.2. The Contractor must provide, at or within reasonable access of every construction Site, the following clean, hygienic and maintained facilities in addition to the project-specific health requirements:
- a. At least one (1) sanitary facility for each gender and every 30 workers. Each sanitary facility must have a washbasin with soap, paper towels and a sanitary product disposal bin. It must also be culturally acceptable, lockable from inside, safe, have well-lit access and be gender-sensitive
  - b. At least one (1) shower facility per gender that is separate and lockable for every 15 persons (this requirement might not apply in restricted built-up areas in some city locations or for very small projects)
  - c. Changing facilities for each gender
  - d. Sheltered eating areas with hand washing water and soap available
  - e. Stable tables and chairs in the eating areas and ensure that all facilities are kept clean and dry
  - f. Adequate lighting and security arrangements to make these facilities safe at all times that workers may use them
- 26.1.3. Where applicable, the Contractor must provide reasonable and suitable living accommodation for the employees at construction Sites that are far removed from their homes and where adequate transportation between the Site and the employees' homes, or other suitable living accommodation, is not available. When living accommodation and/or transportation are provided, due consideration should be given to the safety of all, and especially of female personnel and other underrepresented or vulnerable groups.
- 26.1.4. First aid clinic facilities with a health officer in remote Sites where such facilities are not available in the nearby towns and villages, must be provided.
- 26.1.5. The Contractor shall make provision for the positioning, access, cleaning and maintenance of temporary mobile construction welfare facilities on road construction or similar type of construction projects.
- 26.1.6. The mixed storage of food, tools and/or PPE in the same compartment/space is strictly prohibited.
- 26.1.7. The Contractor shall provide adequate first aid and firefighting equipment at the workstations and the accommodation provided by the Contractor. The Contractor shall provide training in first aid and firefighting, so that first aiders and firefighters will be readily available at the Site and the construction camp/accommodation.

## **27. DRINKING WATER**

### **27.1 General requirements**

- 27.1.1. The Contractor shall ensure adequate provision is made for clean drinking water on Site near work areas taking into consideration that no eating or drinking in operational areas is permitted.
- 27.1.2. Should any contamination of the drinking water occur, the Contractor must prevent access to it, immediately provide an alternative supply of drinking water and report the matter immediately to the UNOPS Technical Coordinator.

## 28. GENERAL HYGIENE

### 28.1 General requirements

- 28.1.1. The Contractor shall ensure general hygiene practices such as the washing of hands, appropriate coughing etiquette, no spitting on Site, using clean PPE/apparel and equipment, and ensuring that water dispensers and food utensils are kept clean. These practices shall be included in the Safety Management System and shall be implemented and monitored on Site.
- 28.1.2. Liquor, drugs (narcotic/recreational) and weapons (guns, personal knives, etc.) are not permitted on the construction Site.
- 28.1.3. No person having consumed alcohol or drugs within the preceding 24-hour period is permitted on Site.
- 28.1.4. Personnel under medication that may affect their performance shall report to the supervisor and shall not be allowed to carry out safety-critical activities as per these requirements.
- 28.1.5. The usage of cell phones is not permitted while operating machinery, equipment or vehicles.

## 29. RISK ASSESSMENTS

### 29.1 General requirements

- 29.1.1. A baseline risk assessment before commencement of work and a risk assessment at each key stage of the work shall be submitted by the Contractor to the UNOPS Technical Coordinator, who shall approve the risk assessment after ensuring that:
  - The Contractor has identified all foreseeable hazards within the assessed activity including hazards that affect some groups of workers more than others, e.g., impacts of vibration or chemical exposure may be higher risk to pregnant women
  - Hazards have been prioritized by their rating (the combination of severity and probability)
  - Adequate control/mitigation measures have been documented for each hazard
  - Both routine and non-routine conditions and special conditions have been taken into account
- 29.1.2. The Contractor must ensure that the workforce is briefed on the contents of the risk assessments before the work starts. The workers must sign the briefing register to acknowledge that they have been briefed.
- 29.1.3. The risk assessment(s) will be reviewed and amended as necessary to ensure that the Works progress safely. Triggers for change include:
  - Change in Site conditions (project stage, weather, ground conditions, etc.)
  - Change in work methods
  - Change in equipment

- Change in personnel
- Lessons learned from incidents

29.1.4. UNOPS may agree to the use of Contractor's forms for risk assessments and other aspects of health and safety management if these are deemed to be of acceptable quality and have been approved by the UNOPS Project Manager.

## **29.2 Examples of typical project risk**

29.2.1. Potential hazards are listed in these HS requirements to make the Contractor aware of the potential hazards that may be encountered on Site. See the list below.

*Note: The list is not comprehensive and the onus lies with the Contractor to ensure that all the hazards in their scope of work are identified, before and during the project, and the necessary risk assessments are carried out.*

Some of the identified potential hazards on a typical project include (but are not limited to):

<p><b>Hazardous environments:</b></p> <ul style="list-style-type: none"> <li>● Confined spaces</li> <li>● Dust</li> <li>● Fumes</li> <li>● Fog</li> <li>● Extreme environmental conditions (distances, temperature extremes, medical service)</li> <li>● Extreme situational conditions (e.g., hours of work)</li> <li>● Insufficient lighting</li> <li>● Noise (above 85 dBA in certain areas)</li> <li>● Vibration</li> <li>● Rain/wet conditions</li> <li>● Snow</li> <li>● Water</li> <li>● Work that may have an impact on the public</li> <li>● Working at heights and on elevated structures above other persons (fall protection plans required)</li> <li>● Working in and around excavations or floor openings</li> <li>● Working next to moving mobile equipment</li> <li>● Working next to or in existing structures</li> <li>● Working next to public roads/railway lines/bodies of water</li> <li>● Working with chemical products</li> <li>● Working within or near electrical installations such as power lines</li> </ul> <p><b>Hazardous substances:</b></p> <ul style="list-style-type: none"> <li>● Asbestos Containing Materials (ACM)</li> <li>● Biological hazards</li> <li>● Chemicals</li> <li>● Diesel</li> <li>● Liquid petroleum</li> <li>● Solvents</li> </ul>	<p><b>Hazardous operations:</b></p> <ul style="list-style-type: none"> <li>● Concrete pouring</li> <li>● Concreting</li> <li>● Crane lifts (sometimes in windy conditions)</li> <li>● Electrical distribution boxes installations</li> <li>● Erecting and demolishing structures</li> <li>● Erecting and dismantling scaffolding</li> <li>● Erecting and dismantling support-work</li> <li>● Excavations</li> <li>● Welding/grinding/cutting</li> <li>● Tunnel blasting</li> <li>● Use of explosives for stone quarrying</li> <li>● Piling and drilling</li> </ul> <p><b>Hazardous equipment:</b></p> <ul style="list-style-type: none"> <li>● Air compressors</li> <li>● Concrete batch plants</li> <li>● Chains and slings</li> <li>● Conveyor belts</li> <li>● Cranes</li> <li>● Earth moving equipment</li> <li>● Excavators</li> <li>● Ladders</li> <li>● Lifting equipment</li> <li>● Pressure vessels</li> <li>● Scaffolding</li> <li>● Trucks</li> </ul> <p><b>Hazardous tools:</b></p> <ul style="list-style-type: none"> <li>● Angle grinders</li> <li>● Circular saws</li> <li>● Electric hand tools</li> <li>● Welding units – arc and gas</li> <li>● Nuclear density gauge (Troxler)</li> </ul> <p><b>Psychosocial hazards:</b></p> <ul style="list-style-type: none"> <li>● Stress</li> </ul>
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## 30. INSPECTIONS FOR HEALTH AND SAFETY

### 30.1 General requirements

- 30.1.1. The Contractor shall carry out inspections daily at all active workplaces as part of the daily supervision routine. The inspection shall be carried out by the Contractor's Supervisors and Managers and also by the Health and Safety Officers.
- 30.1.2. Findings from the inspection shall be recorded in the Contractor's Site diary or similar observation log. At least one (1) formal inspection (recorded on the UNOPS inspection form, HSE05, or similar) shall be recorded per week by the Contractor for each active Site that the Contractor will be working on.
- 30.1.3. Any work activity where hazards, unsafe acts or conditions are observed that pose a risk of death, serious ill health or serious injury to workers or other people, shall be stopped as soon as such risk is identified. Work shall only resume after the issue has been effectively addressed to the satisfaction of the UNOPS Technical Coordinator.
- 30.1.4. The Contractor shall ensure that all other issues raised in the inspection are corrected by the target date indicated in the inspection report. The date of completion of the actions shall be indicated in the inspection report and the inspection report shall be made available for verification by the UNOPS Technical Coordinator or Project Manager.
- 30.1.5. Inspections of the project Site should minimally cover and not be limited to the following:
- Equipment
  - Small equipment (form HS15)
  - Scaffolds (form HS14)
  - Lifting devices (form HS16)
  - Electrical cables
  - Fire extinguishers and first aid boxes
  - Housekeeping
  - Welfare facilities (toilets and eating areas)
  - Access control, barricading and signage
- 30.1.6. Repeated breaches of the requirements indicated in this document shall be addressed with strict corrective actions from UNOPS in line with the contract clauses that deal with breaches of health and safety requirements.

## 31. INCIDENT REPORTING

### 31.1 General requirements

- 31.1.1. Delayed reporting of incidents shall not be tolerated. The Contractor shall establish an incident reporting process that ensures that incidents are reported to UNOPS as soon as they happen and no later than six (6) hours after the incident has occurred.

- 31.1.2. The following are incidents that should be immediately reported to the UNOPS Technical Coordinator:
- Any occupational injuries and diseases/illnesses on Site (fatal cases, lost time injury or illness cases, minor injuries or illnesses)
  - All reportable incidents as required by national legislation (flying or falling objects, machinery out of control, failure of safety, dangerous substance spilt or uncontrolled release of the substance under pressure, failure to comply with medical fitness requirements)
  - Any damage caused to the property or environment
  - High potential near misses (near misses that are assessed as having the potential to result in fatal or serious incidents)
- 31.1.3. The Contractor shall collaborate with the UNOPS Technical Coordinator to ensure that all Class 2 (minor) incidents are investigated to determine the root causes. The Contractor shall also ensure that corrective and preventative actions from the incidents are effectively completed.
- 31.1.4. Class 1 incidents (fatal, lost time more than seven (7) days, and property damage above US\$20,000) shall be investigated by an investigation team convened by UNOPS. The Contractor shall fully cooperate with the investigation.
- 31.1.5. The Contractor shall not share information about incidents with the media, UNOPS partner organizations, members of the public or third parties without permission from the UNOPS Project Manager.
- 31.1.6. The Contractor shall ensure that corrective and preventative actions from incident investigations shall be carried out effectively and within the agreed timelines.
- 31.1.7. The Contractor shall also ensure that key lessons learned from other sites shared with the Contractor by the UNOPS Technical Coordinator shall be implemented within the timeline agreed with the UNOPS Technical Representative.

## **31.2 Immediate actions following an incident**

- 31.2.1. Immediately after an incident has occurred, priority shall be given to ensuring that no further injuries occur and that the injured are given first aid followed by adequate medical attention at an appropriate medical facility. Efforts should be made to ensure that other workers and members of the public are kept away from harm.
- 31.2.2. First aid, firefighting equipment, spill kits and other initial response mechanisms shall be used to limit the impact of the incident before emergency services, such as ambulance and fire brigade services, or other help arrives.
- 31.2.3. After the initial response is complete, the location of any serious incident and any equipment involved must be secured to aid with the investigation by preventing potential evidence being disturbed.

## 32. EMERGENCY PREPAREDNESS

### 32.1 General requirements

- 32.1.1. The Contractor shall develop emergency procedures (including Site Emergency and Evacuation/Rescue Plan) based on possible emergency scenarios in the project context that could affect the Contractor's work. The emergency procedures should be part of the Contractor's Health and Safety Plan approved by the UNOPS Project Manager. Requirements for first aid, medical evacuation and fire rescue shall be addressed in the emergency procedure.
- 32.1.2. The Contractor shall ensure that the necessary firefighting equipment and PPE are in place in the respective areas, subject to approval by the UNOPS Technical Coordinator and Project Manager.
- 32.1.3. Such emergency procedures shall include (but are not limited to):
- The name and contact details of a person designated and appointed as an emergency coordinator and Site emergency evacuation marshals that are trained in the emergency procedure
  - The means of communications between evacuation marshals and the emergency coordinator (e.g., mobile phone or radio)
  - Arrangements to be followed during overtime/night time or weekend work (if applicable)
  - The communication methods to notify employees of an emergency (sirens, public announcement systems)
  - A schedule for carrying out emergency drills based on credible scenarios. The drills shall be formally recorded
  - The provision for clear walking routes and access control and assembly points during an emergency
  - Emergency telephone and ambulance numbers must be available and displayed on Site

## 33. WASTE MANAGEMENT

### 33.1 General requirements

- 33.1.1. The Contractor shall have a Waste Management Plan (WMP) for the Site under its control. The WMP is part of the Social and Environmental Plan of the project.
- 33.1.2. The WMP shall identify practical measures to minimize waste or to re-use or recycle materials and products to reduce material intensity and generation of waste. Other strategies that can be practised include:
- a. Substituting raw materials or inputs with less hazardous or toxic materials, or with those where processing generates lower waste volumes
  - b. Re-using potential waste materials in their current state
  - c. Applying processes that convert materials efficiently, providing higher product output yields, including modification of the design of the process, operating conditions and process controls

- d. Instituting good housekeeping and operating practices including inventory control to reduce the amount of waste resulting from out-of-date materials, off-specification, contaminated, damaged, or excess to needs
  - e. Waste segregation to prevent the mixing of non-hazardous and hazardous waste, thus minimizing the volume of hazardous waste
- 33.1.3. Employees must be trained in the application of the WMP. This training may be included in the project-specific induction training and/or toolbox talks. Proof should be made available on request (HSE07 Site induction register).
- 33.1.4. All construction waste must be disposed of in accordance with national environmental legislation. Such waste should be placed in appropriate waste receptacles. The Contractor shall develop a waste register detailing the waste stream, quantity, disposal date and disposal location for each waste disposal.
- 33.1.5. Domestic waste emanating from eating areas and ablution facilities shall be marked and placed in appropriate waste receptacles. Food waste shall only be discarded in domestic waste bins. Employees shall be clearly instructed on these requirements.
- 33.1.6. Spills of diesel, oil and other hazardous chemicals and construction materials such as bitumen should be prevented at all times. All equipment that has the potential for spillages or leakages shall be equipped with drip trays. In the event of a spill, the source of the spill must be identified and addressed. The spill must be cleaned immediately and any contaminated soil must be removed and disposed of through a recognized waste disposal method with the approval of the UNOPS Technical Coordinator.

## **34. PERSONAL PROTECTIVE EQUIPMENT**

### **34.1 General requirements**

- 34.1.1. The Contractor shall ensure that all employees and visitors are using approved risk-based PPE at all times. No person is allowed to enter the Site without required PPE (UNOPS approved).
- 34.1.2. A Contractor shall ensure action is taken against any employee who continuously fails to use the required PPE. Action in accordance with the Legal Contract Terms and Conditions shall be taken against the Contractor should a Contractor fail to implement appropriate actions to control his/her employees.

### **34.2 PPE selection**

- 34.2.1. Selection of PPE by the Contractor should be based on the hazard identification and risk assessment process, and selected according to criteria on performance and testing established by recognized national standards organizations or international organizations.
- 34.2.2. The Contractor shall ensure that the PPE issued is of the correct size and personnel know how to use the PPE appropriately. Women must be given PPE designed for women.
- 34.2.3. As a minimum, all personnel at a UNOPS construction Site must have safety boots, a hard hat, safety goggles and a reflective vest (or work suit with reflectors).

- 34.2.4. The Contractor shall ensure that for welding PPE, welders' and bracers' welding helmets are fitted to hardhats and that they wear respirators where applicable. Welders, bracers and cutters shall wear suitable double eye protection (face shield and safety glasses), gloves, apron and spats. Suitable spark containment screening shall be provided to protect onlookers and passers-by.
- 34.2.5. Additional PPE shall be identified from risk assessments for specific areas and tasks. This may include long sleeves, arc flash resistant clothing for any type of live electrical work, life jackets for near water construction, earmuffs for noisy construction Sites such as crusher Sites, jackhammering, etc.
- 34.2.6. When working with hazardous chemical substances, all of the PPE required in the Material Safety Data Sheet must be worn.
- 34.2.7. The Contractor must implement the specific PPE requirements for the project area to address outbreaks of diseases such as Coronavirus or Ebola. These requirements may be obtained from UNOPS before bidding for UNOPS work.
- 34.2.8. The Contractor must ensure that Contractor employees sign for PPE issued to them and that the records are maintained and made available to UNOPS upon request.

## **35. SAFETY ORIENTATION, INDUCTION AND TRAINING**

### **35.1 General requirements**

- 35.1.1. The Contractor shall ensure that all its employees are given adequate orientation, induction and training to perform their specific roles.
- 35.1.2. The Contractor shall identify all training needs for workers. A training matrix (HSE18) shall form part of the HS Plan and be adhered to. Proof of attendance (training registers) shall be available on Site.

### **35.2 Training**

- 35.2.1. Training and Site induction of workers should address language barriers.
- 35.2.2. All workers performing tasks that form part of the critical risks identified at the Site shall receive training covering project high-risk exposures including but not limited to work at heights, confined space work, electrical safety, excavation work, lifting and mechanical handling of material, working near mobile and earth moving equipment, and working near water/liquid accumulations.

### **35.3 Safety induction**

- 35.3.1. All employees and visitors are required to undergo a site induction about the general hazards prevalent on the construction Site, construction risk assessment, rules and regulations, and other related aspects. Job-specific induction will be carried out by a competent Contractor's Supervisor or trainer on the Site.

- 35.3.2. The Contractor shall maintain comprehensive records of personnel under his control attending induction training. Acknowledgement of receiving and understanding the induction must be signed by all persons receiving the induction accordingly.

## **36. TOOLBOX TALKS AND DAILY TASK INSTRUCTIONS**

### **36.1 General requirements**

- 36.1.1. The Contractor shall conduct safety “toolbox” talks at least twice a week with the Contractor’s Site Personnel to raise health and safety awareness among the personnel. The topic of these talks shall be based on identified risks and trends associated with the project.
- 36.1.2. A spokesperson who is proficient in a language that is commonly understood by all personnel should facilitate the toolbox talk so that seeking clarifications or discussions may be done in a familiar language for the personnel.
- 36.1.3. The Contractor shall ensure that toolbox talks are held in groups of less than 20 people to allow for effective participation and the area where the toolbox talks are held are conducive to an effective communication session (i.e. noise levels, size of the workforce, visibility, etc. to be considered).
- 36.1.4. Proof of toolbox talks shall be kept on Site (HSE07 Site induction register).

### **36.2 Task instructions**

- 36.2.1. The Contractor shall ensure that workers are given adequate work instructions before they start work so that they have adequate information for performing their duties safely. The instructions shall include specific precautions to address the risks identified in the risk assessment of the work and any other risks that could arise as a result of the nature of the work and the specific conditions at the time of doing the tasks.
- 36.2.2. The Contractor shall keep records that show the instructions given and the signatures of the workers that received the instructions for safety-critical tasks such as working at heights, performing excavation work or working in confined spaces.

## **37. CONSTRUCTION HS MEETING**

### **37.1 General requirements**

- 37.1.1. The Contractor shall establish a weekly construction meeting which may be dedicated to HS or HS may be a standing agenda. The required attendance (as a minimum) shall comprise of the Contractor Construction Manager, HSSE Officer, Construction Supervisors, UNOPS Technical Coordinator(s).
- 37.1.2. The purpose of the construction HS meeting/agenda item is as follows:
- a. To coordinate the HS effort of Contractor employees (including Subcontractors) on the Site

- b. To function as a forum where the individual Contractors may provide input towards the improvement of the HS standards set for the Site
- c. To coordinate HS training needs on the Site and to further develop the project induction-training programme to suit changing needs
- d. To review the incidents on the Site and act as an overall steering committee for HS performance

37.1.3. HS matters for discussion at the weekly construction HS meeting (as a minimum) include:

- a. Work plan for the week ahead
- b. UNOPS learning from incidents insights
- c. Incident investigations and non-conformances
- d. Hazardous materials/substances
- e. Work procedures
- f. Protective clothing/equipment
- g. Housekeeping and waste management
- h. Work permits
- i. Emergency preparedness
- j. Traffic control
- k. Training
- l. Forthcoming high hazard activities
- m. General health and safety issues

37.1.4. The Contractor shall record meeting minutes and distribute them to UNOPS, the Contractor's team and Subcontractors within a week of the date when the meeting was held.

## **38. END-OF-JOB HS DOCUMENTATION**

### **38.1 General requirements**

38.1.1. During and after completion of the construction work, the Contractor will provide a copy of the following documents to the UNOPS Project Manager for review and approval:

- a. All construction risk assessments
- b. Approved HS Plan updated
- c. List of all Subcontractors involved, their details and work scope
- d. A register of all incidents
- e. Investigation reports of all incidents (with all corrective actions completed)
- f. Records of all incidents reported to the National Regulatory Authority. i.e. Department of Labour
- g. UNOPS/Contractor/Contractor Management HS audits (site establishment, legal compliance, in-house, external and site audits)
- h. Copies of all HS non-conformance reports received/issued (including corrective and preventive action plans)

- i. A comprehensive HSSE report (statistics, recognitions, achievements, lessons learnt)
- j. Guidelines for safe operation and maintenance of the completed asset (as a standalone document or as part of the Operations and Maintenance (O&M) Manual)

## **39. PERFORMANCE MEASUREMENTS**

### **39.1 General requirements**

39.1.1. Performance measurement shall cover and is not limited to the following:

- a. Status of HS Plan implementation
- b. Rate of carrying out inspections
- c. Completion of training and awareness activities
- d. Number of outstanding HS action items compared to the total number of actions identified
- e. Reporting of incidents and performing incident investigations
- f. The decrease in the incident frequency ratio

## **40. OCCUPATIONAL HYGIENE**

### **40.1 Lighting**

40.1.1. In the absence of natural lighting, the Contractor shall ensure that workplaces are supplemented with sufficient artificial illumination to promote worker health and safety. All light sources should be energy efficient with minimum heat emission.

### **40.2 Ventilation and temperature**

40.2.1. The Contractor shall ensure that fresh air must be supplied for work in confined spaces. Mechanical ventilation systems shall be maintained in good working order. The practice of re-circulating contaminated air is prohibited.

40.2.2. For confined spaces, the Contractor shall ensure that the measurement of oxygen, carbon dioxide or other relevant gas levels before and during the performance of work tasks are performed. A person shall be stationed outside the confined space to supervise the activity.

40.2.3. Construction/renovation activities in active healthcare facilities and hospitals require special consideration to mitigate the risk of health and safety issues both to the occupants of the facilities and construction workers. The Contractor should do a risk assessment to determine the controls required. These controls may include the provision of adequate and appropriate ventilation systems, use of appropriate PPE, etc.

40.2.4. The Contractor shall ensure that hazards associated with thermal stress are considered in site risk assessments and appropriate mitigation measures put in place to address the specific hazards identified. The measures may include PPE for protection against cold/hot weather, work planning schedule and fatigue management (e.g., by reducing working hours and increasing breaks), provision of shaded rest areas, and drinking water for rehydration.

- 40.2.5. The wet bulb globe temperature (WBGT) or a nationally recognized method of equal standing should be used for screening environmental contribution to heat stress.

### **40.3 Hazardous materials**

- 40.3.1. The Contractor shall where possible avoid the use of any hazardous substance by replacing it with a substance that under its normal conditions of use is not dangerous or less dangerous to the workers, following the observance of the change control process to include any impacts on design liability. Precautions must be taken to keep the risk of exposure as low as possible.
- 40.3.2. In some locations, hazardous materials may include explosive remnants of war. The Contractor may only proceed with work after the ERWs are removed. Removal of ERW will be organized by the UNOPS Project Manager who will ask specialized units such as UNMAS to safely remove, handle and dispose of the ERWs.
- 40.3.3. The Contractor shall exercise proper disposal of used hazardous materials (such as used oil and lubricants) and chemicals from demolitions.
- 40.3.4. The number of employees exposed to or likely to become exposed to hazardous materials must be kept at a minimum and the level of exposure (concentration of materials and length of time of exposure) maintained below internationally established or recognized exposure limits.
- 40.3.5. The Contractor must ensure that all chemicals and hazardous materials containers are labelled and marked to identify the contents. Material Safety Data Sheets or equivalent data/information in an easily understood language must be readily available to exposed workers and first aid personnel at the place of storage or any other place where exposure is likely.
- 40.3.6. The Contractor must ensure adequate and competent supervision of the work, work practices and the appropriate use of PPE.

### **40.4 Buildings and facilities**

- 40.4.1. All permanent/temporary buildings and facilities shall conform to national regulations.
- 40.4.2. In absence of permanent structures, the Contractor shall erect temporary structures to provide sanitary facilities and other facilities to his/her employees performing duties on Site in line with the national regulations.
- 40.4.3. The Contractor shall ensure that all persons within the construction Site have ready access to amenities and sanitary facilities. All amenities and facilities must, at all times, be kept in a clean and hygienic condition.

### **40.5 Asbestos**

- 40.5.1. The Contractor shall ensure that no asbestos-containing material will be allowed on Site. This refers, in particular, but not exclusively, to packing, insulation and building materials.
- 40.5.2. The Contractor shall ensure that where construction involves removal of existing structures containing asbestos, removal and disposal of such material will be done by specially trained personnel that are certified in line with national legislation where such legislation exists.

- 40.5.3. The Contractor must present a plan describing how to perform the activities to remove asbestos material, including the use of PPE and how the final disposal of the removed material shall be done without harming people or the environment.

## **40.6 Workshops**

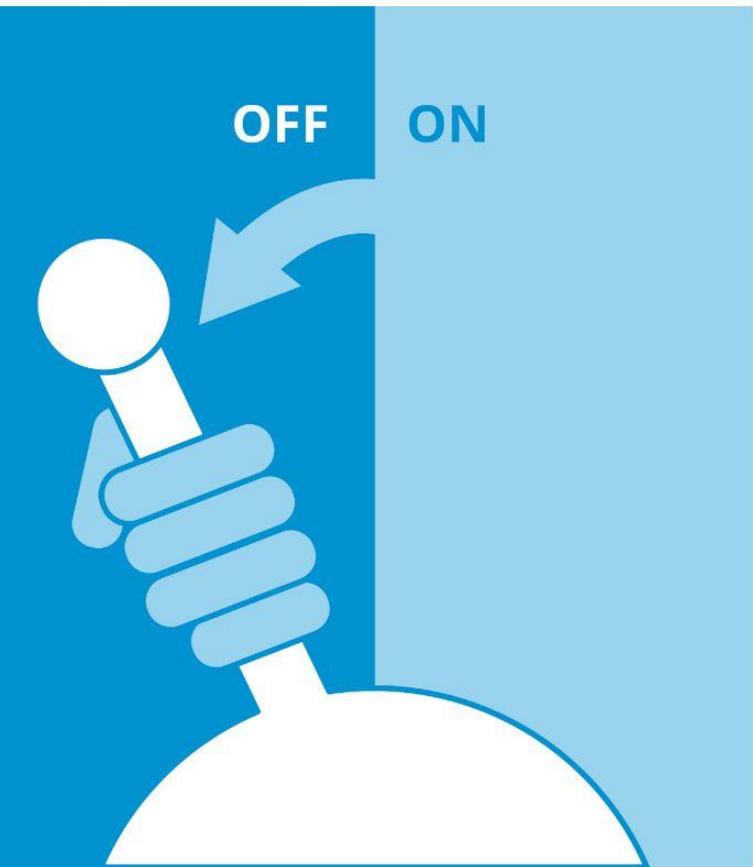
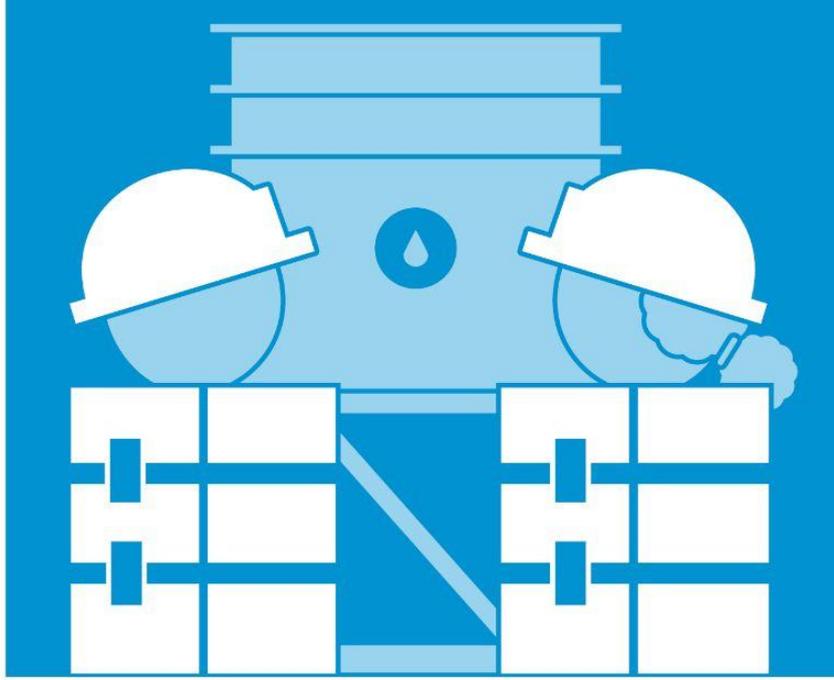
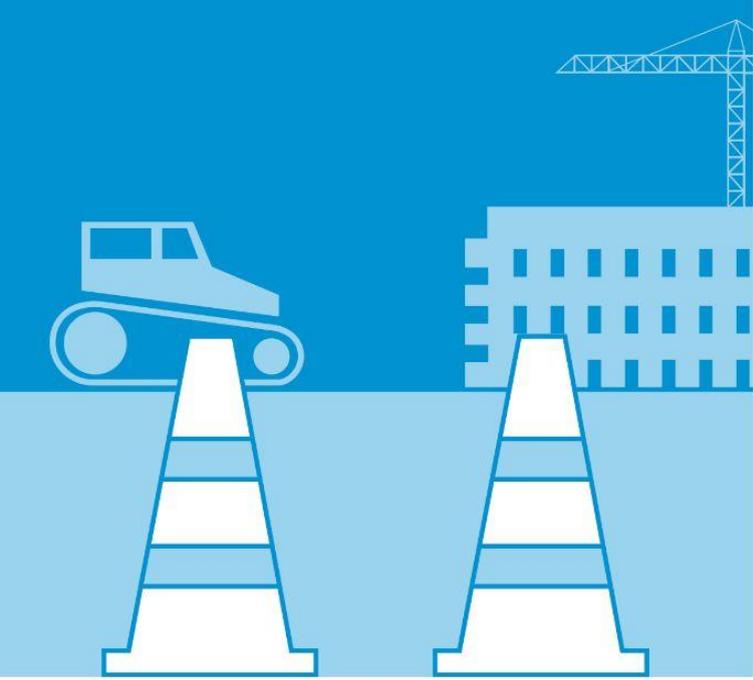
- 40.6.1. Offices should not be directly connected to workshops (with doors opening into the workshops).
- 40.6.2. The exhaust ventilation from air extraction systems in workshops must vent to the open air such that contaminated air cannot be recirculated into the workshop or any other nearby building or enclosed space.

## **40.7 Construction material testing site laboratories**

- 40.7.1. Chemicals intended for construction materials testing should be clearly and visibly marked as dangerous/hazardous and should be handled only by competent and certified technicians.
- 40.7.2. The Contractor should avoid the use of hazardous testing equipment such as a nuclear density gauge (commonly referred to as a Troxler). Permission to use such equipment for exceptional cases should be sought from the UNOPS Technical Coordinator. In such cases, stringent controls should be put in place to ensure that the hazard, such as the radiative source in the case of the nuclear density gauge, is effectively mitigated when using and handling such equipment.

## 41. REFERENCES

- IFC, 2007. Environmental, Health, and Safety (EHS) Guidelines.
- ILO, 2003. Standards-related activities in the area of occupational health and safety: An in-depth study for discussion with a view to the elaboration of a plan of action for such activities, Report VI.
- UNOPS documentation
  - Amended list - UNOPS fatal and significant risks
  - EOI.CSG.2017.02, Reporting and Management of Health & Safety and Social & Environmental incidents, UNOPS
  - EOD.ED.2017.03, Occupational Health & Safety and Social & Environmental management, UNOPS
  - General Site Rules GHS01
  - Golden Rules
  - Project Health and Safety Management Plan HS01
  - Site Establishment GHS12
  - Confined spaces GHS1
  - Electrics GHS03 EN
  - Excavation GHS04
  - Lifting GHS02
  - Working at heights GHS09



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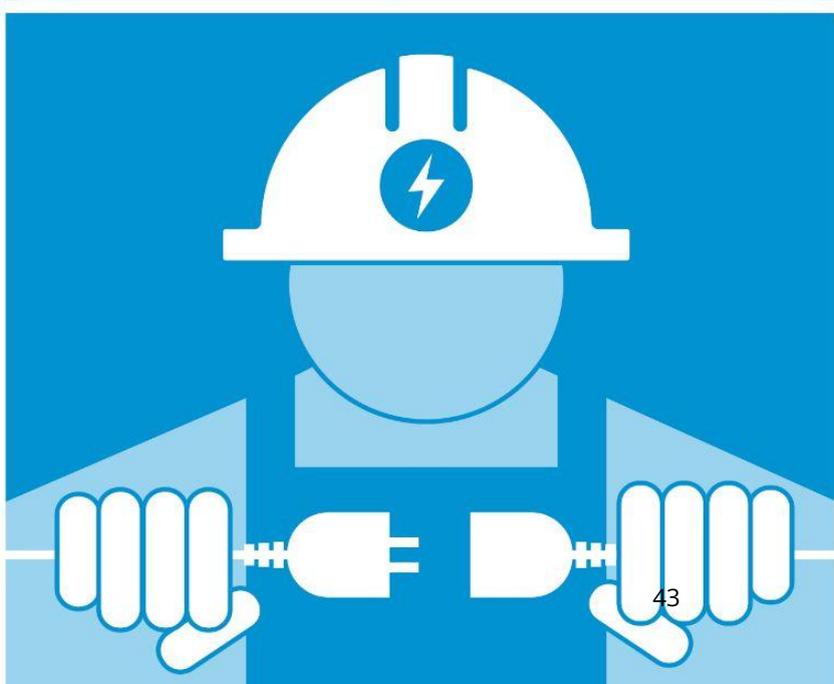
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# Register of Interested Parties

<b>Office/Project</b>	<b>UNOPS Ukraine. School Repairs in Ukraine.</b>
<b>Location</b>	Ukraine
<b>Revision and date</b>	First Issue. 13 Feb 2023

“Any persons or organisations that can affect, be affected by or perceive itself to be affected by UNOPS decisions and/or activities”

**Step 1:** List interested parties (e.g. beneficiaries, communities, suppliers, NGOs, donors, regulators, our personnel, partners, etc.)

**Step 2:** Describe how you will determine their requirements (i.e. their needs and expectations)

**Step 3:** List the requirements you have identified, and highlight those that will become compliance obligations (NOTE: make sure you include compliance obligations in the Legal Register, HSE03)

1. List of interested parties and methodology for determining requirements

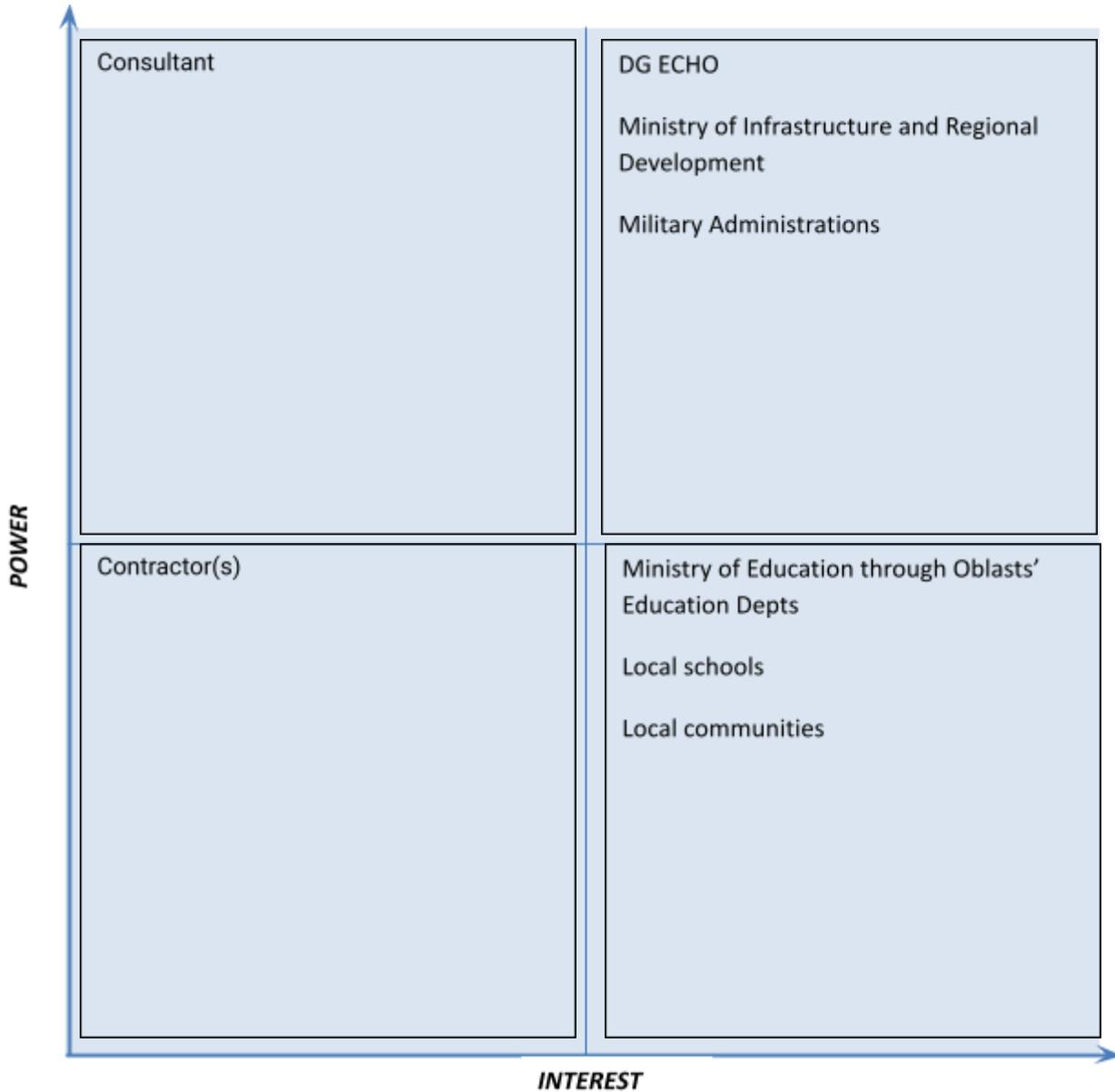
<b>Interested party</b>	<b>Requirement</b>	<b>Requirement identified by way of</b>
<b>1. DG ECHO</b>	Project delivery Reporting	DG ECHO Legal Agreement
<b>2. Ministry of Infrastructure and Regional Development</b>	Main beneficiary of the project - To be informed about the project progress and outputs during working group meetings, - Approval of all newly identified/proposed sites (educational establishments) must be obtained in writing before starting any procurement of works and/or services	Join Action Plan and Procurement Plan <i>(as required by the state registration of international technical assistance project in Ukraine)</i>
<b>3. Oblasts Military Administrations</b>	Recipients of the project outputs; Provide coordination on oblast- and regional levels; - To be consulted for the project products description and outcomes during working group meetings,	Join Action Plan and Procurement Plan <i>(as required by the state registration of international technical assistance project in Ukraine)</i>



Interested party	Requirement	Requirement identified by way of
	- Facilitate communication with and access to the project sites	
<b>4. Ministry of Education though Oblasts' Education Departments</b>	- To be informed about the project progress and outputs during working group meetings	Recommendations of DG ECHO
<b>5. Local schools</b>	To be involved in the implementation of activities at the local level, under the supervision of assigned focal point(s) from the Oblast Administrations	Join Action Plan and Procurement Plan <i>(as required by the state registration of international technical assistance project in Ukraine)</i>
<b>6. Local communities</b>	To be informed about implementation of activities at local level, for confidence building and partnership with local education authorities	<i>Memorandum of Understanding</i>
<b>7. Consultant</b>	Provide engineering-, cost management- and construction management services to UNOPS	LTA No. UNOPS/AR/2021/002 and COOs under this agreement
<b>8. Contractor(s)</b>	Deliver the Works	Contractor's Agreement(s)



- 2. Determination of compliance obligations for UNOPS Office in Ukraine based on a power/interest grid analysis



- 3. Identified compliance obligations must be reported in the Legal Register (form HSE03)

## Hazard and Risk Assessment

<b>Location/Project/Office</b>	UNOPS Ukraine. School Repairs in Ukraine Project		
<b>Details of what is being assessed</b> <small>(activity, functional area)</small>	Repair Works to the schools damaged as a result of hostilities		
<b>Document prepared by</b> <small>(name &amp; signature)</small>	Sergey IZDEBSKY , Viktoriya SEKRETNA	<b>Reviewed and approved by</b> <small>(name &amp; signature)</small>	Viktoriya SEKRETNA
<b>Date</b>	13 Feb 2023	<b>Date</b>	13 Feb 2023

Revision	Date	Author	Description of main changes

Item	Task/Activity	Potential Hazards/Risks for each task	Risk Rating (1-16)	Hazard Control Method	Control Risk Rating (1-16)	Person to implement and monitor implementation
1	Moving on a site	slippery or uneven ground; slips/trips or falls: - access routes obstructed by materials - leads and hoses across access routes - safety wear not appropriate - poor visibility - slippery floor	6	- Clean up area before start of work - Ensure proper housekeeping & storage - All access routes kept clear of materials and debris - All leads kept clear of ground or covered - All surfaces for access kept dry and in good condition - Provide appropriate PPE - Provide adequate lighting - Signage situated appropriately - Provide temporary flooring cover in places with slippery or uneven ground - Provide temporary light fencing	2	Contactor
2	Work in a confined space	inadequate space of work	4	-Do not, under any circumstances enter a confined space unless you have been trained, you have all of the necessary equipment, and you have been directly instructed by qualified supervision; -All preparatory work should be make out of confined space; - For labor safety all works should be done with minimum two workers	1	Contactor
3	Working at heights	- no handrails on platforms or levels - working outside handrails - falls from ladders/scaffolds - ladders not secured - unsafe areas – brittle roof area, scaffolding	6	- All work platforms to have secure handrails - Persons to wear fall arrest type harness - All floor penetration covered or barricaded - Ladders to extend at least 1 m above landings be at correct angles/choose right ladder for the job - Maintain three points of contact - Secure the ladder - Always face the ladder - Use fully planked scaffolds - Ensure proper access to scaffolds - Plumb and level scaffolds	2	Contractor

Item	Task/Activity	Potential Hazards/Risks for each task	Risk Rating (1-16)	Hazard Control Method	Control Risk Rating (1-16)	Person to implement and monitor implementation
				<ul style="list-style-type: none"> <li>- Ensure stable footing</li> <li>- Inspection and tagging before use by a competent person</li> </ul>		
4	Working at heights	Falling objects: <ul style="list-style-type: none"> <li>- protruding objects</li> <li>- not wearing PPE</li> <li>- objects falling from work platforms, scaffolds or ladders</li> <li>- debris from grinding operations</li> <li>- wind blown particles</li> </ul>	6	<ul style="list-style-type: none"> <li>- Remove, mark or protect protruding objects</li> <li>- Provide appropriate PPE</li> <li>- Site rules, awareness/enforcement</li> <li>- All work platforms, scaffolds fitted with toe-boards</li> <li>- Barricade all areas below to prevent access including foot paths if necessary</li> <li>- Secure construction fencing Signage situated appropriately</li> <li>- Materials stacked securely</li> <li>- Use appropriate PPE - harness, hard hats</li> <li>- Shield grinding operations</li> </ul>	2	Contractor
5	Works with equipment	trappings, entanglement, burns and other hazards arising from equipment	6	<ul style="list-style-type: none"> <li>-Safety helmets and safety footwear (incorporating steel toe-caps and mid-sole) must be worn at all times;</li> <li>-Provide weekly checking of all equipment</li> <li>- Safety goggles for protection during all cutting, grinding and drilling operations or where there is risk from impact, dust, chemicals or hot metal.</li> </ul>	2	Contactor
6	Moving between sites	transport hazards, either on the road or on premises/sites, while traveling or as a pedestrian (linked to the speed and external features of vehicles and the road environment)	6	<ul style="list-style-type: none"> <li>-Provide safety vehicles for transportation of labourers.</li> <li>-Make risk Assessment Briefing about safety on a road.</li> <li>-All site personnel are requested to follow designated pedestrian routes. Do not walk in the vicinity of mobile plant unless this is directly relevant to the task you have been instructed to carry out, e.g. banksman</li> </ul>	2	Contactor
7	Works with electrical equipment	harmful energy sources such as electricity, radiation, noise or vibration	6	<ul style="list-style-type: none"> <li>-All electrical equipment to be used on site should be presented to UNOPS site staff for inspection prior to use. All guards should be fitted and be in</li> </ul>	2	Contactor, UNOPS staff

Item	Task/Activity	Potential Hazards/Risks for each task	Risk Rating (1-16)	Hazard Control Method	Control Risk Rating (1-16)	Person to implement and monitor implementation
		(linked to the amount of energy involved)		good working order. All cables should be correctly housed with all cores protected by insulation. - Ear protection during all operations which produce noise above the level at which you need to raise your voice to be heard.		
8	Work in a space with bad ventilation	inhalation of vapours, gases, or particles	4	-Provide good aeration on work places -Dust masks for protection from dust - Lock chemicals, petrol, hazardous materials and substances storage	1	Contactor
9	Extra work	excessive workload	4	Control amount of the work hours, it shouldn't be more than 10.	1	Contactor, UNOPS staff
10	Work with flammable materials	fire and explosion (linked to the amount and nature of flammable material)	8	- Provide emergency drill; - Organized evacuation plans on sites; - Perform labour safety briefings prior to the start of works; - Fire can result from the overloading, arcing or faulty conditions of electrical plant, equipment and material. Non conducting carbon dioxide or dry powder fire extinguishers should be provided at suitable locations	4	Contactor
11	Waste water from site cleaning activities - painting, plastering	Contamination. Waste water/washed toxic solvents, heavy metals entering natural and storm water system causing pollution and potential harm to aquatic life and H&S hazard for human and livestock	4	-Waste water from site facilities will be connected to local authority sewer system; -Waste water from site facilities removed from site to approved sewerage/waste water collector -Establish regular checking regime of the condition of the sewer connection -Implement regular monitoring of the watercourse -Perform labour safety briefings prior to the start of works; envision the use of appropriate personal protection equipment (PPE) by workers, including safety shoes and dust respirators, for demolition and clean-up activities, accordingly to the building and work safety regulations. A PPE's should protect workers from a lead consist dust.	2	Contactor

Item	Task/Activity	Potential Hazards/Risks for each task	Risk Rating (1-16)	Hazard Control Method	Control Risk Rating (1-16)	Person to implement and monitor implementation
12	Dust created by demolition, general construction activities, cutting, blasting, drilling of concrete	Creation of construction dust. -Nuisance to workers, neighbors and general public - Health risk to operatives - Potential damage to adjacent properties	4	-Perform labour safety briefings prior to the start of works; -Moistening objects to prevent spreading of dust. -Deliver pre-cut material where possible - Protect existing finished works - Use wet cutting/blasting/drilling where possible - Workers/operatives to use appropriate PPE -Consider enclosing the working area - Consider extraction for the enclosed working area	2	Contactor
13	Noise created from breaking out, grinding, coring of concrete work, general site plant, tools and equipment use	Hearing damage to workers on site -Disturbance to adjacent neighbors and general public -Potential disturbance to the wild life and livestock	4	-Appropriate selection of plant and equipment (consider plants with the acoustic enclosures) - Maintenance and regular checking of the equipment condition - Liaison with neighbors if required to confirm appropriate time for noisy activity - Limit work within the night/sensitive hours - Operatives to use appropriate PPE -If possible, locate the areas of noisy activities away from the sensitive receiver i.e. houses/livestock -Turn off plant when not in use - Regular monitoring of the 'noisy' activities	2	Contactor
14	Waste creation during demolition and construction processes	-Creation of waste on site, - Contamination of soil and water, - Hazard of burring materials on site -Hazard for workers -The storage, incompatibility, or degradation of materials	4	Segregation of materials to be done, materials should be recycled when it is possible and materials with negative contamination impact should be demolished accordingly to the standards. Construction debris to be transported to the solid waste landfill.	2	Contactor

Item	Task/Activity	Potential Hazards/Risks for each task	Risk Rating (1-16)	Hazard Control Method	Control Risk Rating (1-16)	Person to implement and monitor implementation
15	Works with oil paint	-oil contamination of waste water, - hazard for workers	4	-Establish regular checking regime of the condition of the sewer connection -Implement regular monitoring of the watercourse - Provide good ventilation in work places - Use respirators	1	Contractor
16	Works with solvents	- Hazard for workers - Incorrect handling or disposal of chemicals on site - Lack of information - Not wearing PPE when handling chemicals - Incorrect storage - Excessive generation or exposure to airborne substances – dusts, fumes, mists,	9	- Keep solvents away from the skin - Wash thoroughly after working with them - Work in spaces with fresh air and not in confined indoor spaces. - Provide good ventilation in work places - Use respirators and appropriate PPE - Provide training in hazardous substances - Safe work methods for use, storage and disposal followed - Hazardous substances and dangerous goods stored and labelled correctly - Provide spill kits and training in containing accidental spill	3	Contractor
17	Contractor mobilization to site	Transportation to and from site – including moving plant & general moving traffic - traffic hazards: -Trucks entering, exiting or reversing from work site -Working in close proximity to roads -Delivery of materials blocking exits or footpaths -Falls from heights (high plant) – potential	6	-Safe work procedures -Exclusion work zones -Use of safety signs -Speed restriction signs displayed and enforced -Use temporary barriers -Planning space and location requirements in advance -Deliver materials as close as feasible to work areas -Put in place appropriate signage including physical barriers -Provide appropriate PPE including high visibility vest	2	Contractor UNOPS Monitoring

Item	Task/Activity	Potential Hazards/Risks for each task	Risk Rating (1-16)	Hazard Control Method	Control Risk Rating (1-16)	Person to implement and monitor implementation
		for fatality or serious injury -Being struck by vehicles -Mobile plant				
18	Contractor mobilization to site	Manual handling (offloading/stacking materials, tools, equipment, components & shoveling) -Bending -Reaching -Stretching -Pulling -Lifting -Repetitive motions -Awkward posture	6	-Ensure workers know their limits -Encourage trying preliminary lifts first -Walk & never run with load -Prohibit unauthorized riding of equipment -Document safe work procedures -Provide mechanical aids -Provide training in manual handling techniques -Encourage team lifts where appropriate -Encourage exercising (warm up/stretch) before starting work	2	Contractor UNOPS Monitoring
19	Contractor mobilization to site	Unevelled terrain -Falls -Cuts	6	-Place appropriate safety signs -Require appropriate PPE including footwear -Discourage running across the terrain	2	Contractor UNOPS Monitoring
20	Contractor mobilization to site	Inadequate amenities (drinking water, toilets & washing facilities) Poor hygiene could result in illness, spread of infections	6	-Provide and maintain appropriate amenities -Encourage good hygiene	2	Contractor UNOPS Monitoring
21	Setting out, earth works and excavations	Excavations collapse of trenches can result in crushing, asphyxiation: -Collapse of trenches -Trench cave-ins	12	-Establish locations of underground and overhead utilities & services before excavation works -Make inspections after every rain or other hazard producing occurrences -Do not allow water accumulation in excavations -Use appropriate PPE	3	Contractor UNOPS Monitoring

Item	Task/Activity	Potential Hazards/Risks for each task	Risk Rating (1-16)	Hazard Control Method	Control Risk Rating (1-16)	Person to implement and monitor implementation
		-Collapse of trenches on removing trench shoring -Caught-in/between		-Train worker to use PPE -Provide safe access into & exit from excavations -Avoid jumping into or across trenches -Competent person to inspect trenches daily -Support sides of excavation or place a shield between the side of excavation and the work area -Remove trench side support in short sections -Never enter unprotected trench or excavation deeper than 1.5 m without adequate protection system in place -Make sure the trench or excavation is protect by sloping, shoring, benching or trench shield system -No work within 2m of an open deep trench unless barricades are in place to prevent falls		
22	Setting out, earth works and excavations	Dust from excavation	6	-Watering at least once a day -Provide appropriate PPE (masks) -Rotate workers to minimise exposure	2	Contractor UNOPS Monitoring
23	Setting out, earth works and excavations	Cuts and bruises	6	-Safe work procedures -Provide appropriate PPE including gloves and safety boots -Keep safe distances between workers excavating manually	1	Contractor UNOPS Monitoring
24	Work outdoors	Heat or Wet weather conditions -Heat - Heat rashes, cramps, heat stress, dehydration, sunburn -Fatigue – long term exposure to UV radiation	6	-Provide regular rest breaks -Provide shade where practicable -Re-schedule work if extreme weather conditions present risk -Provide water in hot weather -Provide appropriate PPE	2	Contractor UNOPS Monitoring
25	Works outdoors	Cold and Windy weather conditions - hazard for workers	4	- Follow local rules and regulations while working in cold and windy conditions - Wear appropriate closing	2	Contractor UNOPS Monitoring

Item	Task/Activity	Potential Hazards/Risks for each task	Risk Rating (1-16)	Hazard Control Method	Control Risk Rating (1-16)	Person to implement and monitor implementation
		<ul style="list-style-type: none"> <li>- cold-related injuries and burns</li> <li>- shivering</li> <li>- fatigue</li> <li>- loss of coordination</li> <li>- confusion and disorientation</li> </ul>		<ul style="list-style-type: none"> <li>- Workers in extreme conditions should take frequent, short breaks in warm, dry shelters to allow their bodies to warm up</li> <li>- Avoid exhaustion and fatigue</li> <li>- Work in pairs</li> <li>- Learn the signs and symptoms of cold-induced illnesses and injuries and what to do to help workers</li> </ul>		
26	Concrete works	Cement products and hazardous substances -Cement Dermatitis -Burns including abrasive effects of sand -Dust -Incorrect handling or disposal of chemicals on site -Lack of information -Not wearing PPE when handling chemicals -Incorrect storage -Excessive generation or exposure to airborne substances – dusts, fumes, mists, vapours etc. -Cutting or grinding masonry	6	<ul style="list-style-type: none"> <li>-Assess work area before commencing work</li> <li>-Provide Materials Safety Data Sheet (MSDS) &amp; risk assessment for hazardous substances</li> <li>-Provide appropriate PPE</li> <li>-Provide emergency eye wash facility</li> <li>-Provide training in hazardous substances</li> <li>-MSDS reviewed as part of risk assessment</li> <li>-Provide appropriate PPE (masks, goggles, long sleeve gloves, etc.)</li> <li>-Safe work methods for use, storage and disposal followed</li> <li>-Hazardous substances and dangerous goods stored and labelled correctly</li> <li>-Provide spill kits and training in containing accidental spill</li> <li>-Apply barrier cream to hands before commencing work</li> <li>-Remove dirt, cement and work dust with hand cleaner and apply barrier cream</li> <li>-Wear goggles</li> <li>-Wear respirators or dust masks when cutting or grinding</li> </ul>	2	Contractor UNOPS Monitoring
27	Painting works	Painting - hazardous substances	9	<ul style="list-style-type: none"> <li>-Provide training in hazardous substances</li> <li>-MSDS reviewed as part of risk assessment</li> <li>-Provide appropriate PPE</li> </ul>	3	Contractor UNOPS monitoring

Item	Task/Activity	Potential Hazards/Risks for each task	Risk Rating (1-16)	Hazard Control Method	Control Risk Rating (1-16)	Person to implement and monitor implementation
		<ul style="list-style-type: none"> <li>-Incorrect handling or disposal of chemicals on site</li> <li>-Lack of information</li> <li>-Not wearing PPE when handling chemicals</li> <li>-Incorrect storage</li> <li>-Excessive generation or exposure to airborne substances – dusts, fumes, mists,</li> </ul>		<ul style="list-style-type: none"> <li>-Safe work methods for use, storage and disposal followed</li> <li>-Hazardous substances and dangerous goods stored and labelled correctly</li> <li>-Provide spill kits and training in containing accidental spill</li> </ul>		
28	Mechanical and Electrical works	<ul style="list-style-type: none"> <li>Manual handling (Use of heavy hand-held tools, handling heavy objects, assembling/stacking materials, components &amp; shovelling)</li> <li>-Bending</li> <li>-Reaching</li> <li>-Stretching</li> <li>-Pulling</li> <li>-Lifting</li> <li>-Repetitive motions</li> <li>-Awkward posture</li> <li>-Use of excessive force</li> </ul>	9	<ul style="list-style-type: none"> <li>-All access routes kept clear of materials and debris</li> <li>-All leads kept clear of ground or covered</li> <li>-All surfaces for access kept dry and in good condition</li> <li>-Provide appropriate PPE</li> <li>-Provide adequate lighting</li> <li>-Work environments conform with ergonomic standards</li> <li>-Train employees in manual handling techniques</li> <li>-Provide adequate lighting</li> <li>-Provide mechanical aids</li> <li>-Modify work requirements</li> <li>-Imposed restriction on certain activities</li> <li>-Requirements for two person lifts</li> <li>-Training of employees</li> </ul>	3	Contractor UNOPS Monitoring
29	Electrical works	<ul style="list-style-type: none"> <li>Electric shock - low voltage electricity</li> <li>-Electric leads and power tools</li> <li>-Electric leads on the ground</li> </ul>	16	<ul style="list-style-type: none"> <li>-Tools and leads inspected and tagged</li> <li>-Use of portable RCD</li> <li>-Residual current devices tested as per regulation</li> <li>-Electric leads kept elevated and clear of work areas</li> <li>-All electric leads kept dry</li> </ul>	4	Contractor UNOPS Monitoring

Item	Task/Activity	Potential Hazards/Risks for each task	Risk Rating (1-16)	Hazard Control Method	Control Risk Rating (1-16)	Person to implement and monitor implementation
		<ul style="list-style-type: none"> <li>-Electric leads in damp areas or wet environments</li> <li>-Electric leads tied to metal rails (high or low voltage)</li> <li>-Contact with underground or overhead cables</li> </ul>		<ul style="list-style-type: none"> <li>-All electric leads kept insulated</li> <li>-Avoid live work situations</li> <li>-Lock-out and equipment tag procedures</li> <li>-Ensure permit to work is obtained</li> <li>-Overhead cables to be protected</li> <li>-Services to be isolated when working in proximity</li> <li>-Establish safe clearance distances</li> <li>-Provide appropriate PPE</li> <li>-Install current breakers</li> <li>-Inspection of tools and cables before use</li> </ul>		
30	Mechanical and Electrical works	<ul style="list-style-type: none"> <li>Power tools and non-power tools including jack bolt cutters, hand-held cutting saw</li> <li>-Exhaust fumes</li> <li>-Contact with electric conductors</li> <li>-Contact with cutting blades could result in laceration or amputation</li> <li>-Part of equipment breaking up or ejecting materials</li> </ul>	9	<ul style="list-style-type: none"> <li>-Provide instruction in safe use of hand tools</li> <li>-Use hand tools carefully according to instructions</li> <li>-Use skilled labors</li> <li>-Service and tag tools</li> </ul>	4	Contractor UNOPS Monitoring
31	Mechanical and Electrical works	<ul style="list-style-type: none"> <li>Hot materials/work</li> <li>-Welding spatter</li> <li>-Grinding sparks in inflammable environment</li> <li>-Fire in work place</li> <li>-Exposure to sun</li> </ul>	9	<ul style="list-style-type: none"> <li>-Provide appropriate PPE and training</li> <li>-Keep work place clear of waste or flammable materials</li> <li>-Use of fire proof blankets</li> <li>-Remove flammable materials or store correctly</li> <li>-Provide adequate fire fighting equipment</li> <li>-Eliminate ignition sources from flammable atmosphere</li> <li>-Worker fire fighting training and awareness</li> </ul>	4	Contractor UNOPS Monitoring

<b>Item</b>	<b>Task/Activity</b>	<b>Potential Hazards/Risks for each task</b>	<b>Risk Rating (1-16)</b>	<b>Hazard Control Method</b>	<b>Control Risk Rating (1-16)</b>	<b>Person to implement and monitor implementation</b>
32	Work process	Sexual harassment and exploitation work place bullying -Emotional stress, fear and anxiety, physical illness	6	-Establish work place policy -Provide staff briefings or training	2	Contractor UNOPS Monitoring

# Project Emergency Contact Numbers

<b>Project Title</b>	School Repairs in Ukraine.		
<b>Project Location</b>			
<b>Contractor</b>			
<b>Date of issue</b>		<b>Revision</b>	

Service	Telephone Number	Name/Details/Address
UNOPS representative		
Contractor Contact		
Site First Aid givers		
Nearest Doctor		
Nearest Medical Clinic /Hospital		
Ambulance Service		
Nearest Fire Service		
Nearest Police Service		
Services Providers Electricity Water Service Gas Service		

Other		
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# Emergency Drill Record

<b>Project Title</b>	School Repairs in Ukraine
<b>Location of the drill (address)</b>	
<b>Date of Emergency drill</b>	
<b>Time warning system was initiated</b>	
<b>Warning system initiated by</b>	
<b>Weather condition</b>	
<b>Emergency coordinators present</b>	
<b>Approximate number of people evacuated</b>	
<b>Time taken to fully evacuate</b>	

<b>Overall Standard of Emergency Drill</b>	<b>Unsatisfactory</b>	<b>Satisfactory</b>
(tick the correct)		
<b>Comments/findings</b>	<b>Action required/ Responsibility</b>	<b>Date completed</b>

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<b>Name of Person in charge of the drill</b>		<b>Date</b>	
<b>Signature</b>			

## UNOPS Work Permit: Confined Space Entry

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<b>Project Title</b>	School Repairs in Ukraine.	<b>Permit Number</b>	
<b>Location of Confined Space</b>		<b>Date Submitted</b>	
<b>Details of Work</b>		<b>Date Approved</b>	
<b>Name of Contractor/Workers</b>		<b>Validity Period</b>	

Atmospheric (gas) Testing	Results (Tests to be carried out prior to any entry by lowering detection equipment into the confined space.)
Oxygen	
Carbon Monoxide	
Hydrogen Sulphide	
Other?	
<b>EXPLOSIVENESS</b>	

**Ensure that the Confined Space is free from**

	Check performed
Noxious Sludge and Material Matter	
Gas and Fumes	
Isolated from all sources of Gas and Fumes	

**The following precautions must be taken as a condition of this permit approval**

	Yes	No
Gas monitoring throughout operation		

Is forced ventilation system required for operation?		
Breathing apparatus required to be worn?		
Specific protective clothing to be used (list)		
Support person in attendance		
Lifeline system (harness, winch and tripod) to be used		
Non spark tools and flameproof electronics and equipment to be used		
Emergency rescue equipment/facilities required		
Specific workers training to be undertaken		
Other precautions? (detail)		

**Approval:** (Before the works are undertaken the recipient understands and is competent with the safe systems of work in confined spaces.)

<b>Signature of Approving Authority</b>	<b>Date</b>
<b>Signature of Recipient</b>	<b>Date</b>

**Completion:** (Confirmation that all persons and equipment has been withdrawn from the space and the area has been left safe.)

<b>Signature of Recipient handing back</b>	<b>Date</b>
<b>Signature of Approving Authority</b>	<b>Date</b>

## UNOPS Work Permit: Hot Works

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<b>Project Title</b>	School Repairs in Ukraine	<b>Permit Number</b>	
<b>Location of Proposed Works</b>		<b>Date submitted</b>	
<b>Details of Work</b>			
<b>Name of Contractor/Workers</b>			
<b>Hot Work Fuel Source</b>			

**The following precautions are to be undertaken by the Contractor:**

<p><b>Within a 10 metre radius of the work</b></p> <p> <input type="checkbox"/> Removal of combustible Material and Liquids                   <input type="checkbox"/> Covering/protection of fixed combustibles                   <input type="checkbox"/> Clean floor areas of combustibles                   <input type="checkbox"/> Wetting down of combustibles                   <input type="checkbox"/> Covers to collect sparks                   <input type="checkbox"/> Cover all floor and wall openings             </p>
<p><b>General</b></p> <p> <input type="checkbox"/> All cutting and welding equipment is in good repair                   <input type="checkbox"/> All equipment operated by competent people                   <input type="checkbox"/> Does the area require additional ventilation                   <input type="checkbox"/> Ensure suitable PPE is in use                   <input type="checkbox"/> If smoke alarms are required to be disconnected to perfume the hot work then continuous fire watch must take place.             </p>
<p><b>Extinguishers</b></p> <p> <input type="checkbox"/> Hose Reel                   <input type="checkbox"/> CO2                   <input type="checkbox"/> Dry Powder                   <input type="checkbox"/> Water             </p>

**Authorisation**

<b>Signature of Approving Authority</b>	<b>Time/Date of permit validity</b>
<b>Signature of Receiver:</b>	<b>Date:</b>

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**Completion**

<b>The work areas have been inspected one hour after the completion of the works and is all clear.</b>	
<b>Permit Receiver</b>	<b>Date/Time</b>
<b>Approving Authority (Permit returned and expired)</b>	<b>Date/Time</b>

## UNOPS Work Permit: Excavation

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<b>Project Title</b>	School Repairs in Ukraine	<b>Estimated Time Required</b>	
<b>Location of Proposed Works</b>		<b>Proposed commencement of excavation</b>	
<b>Details of Excavation (including max depth)</b>		<b>Permit Number</b>	
<b>Person in charge of Excavation (name and title)</b>		<b>Date submitted</b>	

### Underground and Overhead Services Checklist

	‘As built’ existing services drawings	Services locations confirmed on site and marked	Control zone confirmed, excavation within?	Services require isolation?	Area to be scanned?	Specific method, controls, techniques and protection required?
Electrical (in ground)						
Electrical (overhead)						
Water main						
Gas main						
Sewer system						
Storm water system						
Data and telecoms						

Other?						
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**General Considerations**

	Yes	No
Is area required for stockpiling sufficient and secure?		
Are temporary barriers available to protect excavation?		
Has risk assessment been carried out for the works?		

**Note:** All archaeological items uncovered during excavation shall be immediately reported to the UNOPS site representative. Work shall be stopped and waiting for further instruction from UNOPS site representative.

**Authorisation**

<b>Signature of Approving Authority</b>	<b>Time/Date of permit validity</b>
<b>Signature of Receiver</b>	<b>Date</b>

**Completion**

<b>The work area is complete and has been left in a safe condition.</b> <b>The work has not been completed and the following remains outstanding:</b>	<b>Date/Time</b>
<b>Permit Receiver:</b>	
<b>Approving Authority: (permit returned and expired)</b>	<b>Date/Time</b>

## UNOPS Work Permit: Lifting (Crane)

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<b>Project Title</b>	School Repairs in Ukraine	<b>Banksman/Slingers</b>	
<b>Location of Proposed Lift</b>		<b>Permit Number</b>	
<b>Proposed Date of Lift</b>		<b>Date submitted</b>	
<b>Appointed person to control lift</b>			

Details and Description of Lift	
Type of Crane	
Safe Working Load of the Crane	
Details of the item to be lifted	
Weight to be lifted	
Maximum radius of the lift	
Confirmation of lift and radius suitability	
Lifting Gear minimum capacity	
Crane operator licensed/Experienced	
Banksman/Slinger licence/Experienced	
Crane and equipment weekly/monthly/yearly inspections detailed?	

Pre Lift Checklist		
<input type="checkbox"/> Ground conditions suitable for access and lifting?	<input type="checkbox"/> Visual inspection of lifting gear	<input type="checkbox"/> Crane level and wheels clear of ground?
<input type="checkbox"/> Outrigger spreaders	<input type="checkbox"/> Health and Safety Hazard	<input type="checkbox"/> Risk controls in place relating to

required and in place?	and Risk assessment undertaken?	access, vehicles, workers, lifting area etc
<input type="checkbox"/> Crane operator has all round vision?	<input type="checkbox"/> Any workers under suspended loads?	<input type="checkbox"/> Have all workers involved been thoroughly briefed on proceedings?
<input type="checkbox"/> Any additional requirements?		

**Approval**

<b>Signature of Approving Authority</b>	<b>Time/Date of permit validity</b>
<b>Signature of Receiver</b>	<b>Date</b>

**Review and Completion**

<b>Lift undertaken as planned?</b>	
<b>Improvements for next lift?</b>	
<b>The lift has/has now been completed</b>	<b>Date/Time</b>
<b>Permit Receiver:</b>	
<b>Approving Authority:</b> <b>(permit returned and expired)</b>	<b>Date/Time</b>

## Weekly inspection of ladders/trestles

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<b>Project Title</b>	School Repairs in Ukraine	<b>Site</b>		<b>Date</b>	
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Ladder ID Number	Description – ladder: length or number of rungs, scaffold - location

**Guidance**

- Weekly inspections shall be carried out and report completed.

- The report should be kept on site until the project is complete.
- All ladders/trestles should be individually tagged.
- Ladders/Trestle's must be in good condition and correctly stored - check for splits or cracks in the stiles and rungs. Ensure that none of the rungs are missing or loose.
- Ladders shall not be painted - paint can hide damaged parts.
- Any defected ladders / trestles should be removed from site immediately.



## Scaffold inspection checklist

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<b>Project Title</b>	School Repairs in Ukraine.	<b>Site</b>	
<b>Scaffold ID number and location</b>			
<b>Inspection date</b>			

FOOTINGS		BRACING		PLATFORMS	
Soft and uneven		Façade and ledger		Bad boards	
No base plates		Some missing		Trap boards	
No sole boards		Loose		Incomplete boarding	
Undermined		Wrong fittings		Insufficient supports	
SATISFACTORY		SATISFACTORY		SATISFACTORY	
STANDARDS		COUPLINGS		GUARD RAIL & TOE BOARDS	
Not plumb		Wrong fittings		Wrong height	
Joined at same height		Loose		Some missing	
Wrong spacing		Damaged		Loose	
Damaged		No check couplers		Damaged	
SATISFACTORY		SATISFACTORY		SATISFACTORY	
LEDGERS		TIES		LADDERS	
Not level		Some missing		Insufficient length	
Joined in same bays		Loose		Not tied	
Loose		Damaged		Damaged	
Damaged		Other		Other	
SATISFACTORY		SATISFACTORY		SATISFACTORY	

Other comments	Action required/Responsible	Action Completed

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<b>Name of Person carrying inspection</b>		<b>Signature</b>	
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## Weekly inspection of small tools

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<b>Project Title</b>		<b>Site</b>	
	School Repairs in Ukraine		

Tool ID Number	Description

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#### Guidance

- Weekly inspections shall be carried out and report completed.
- The report should be kept on site until the project is complete.
- Any tool that is found to be defective shall not be used, then fixed or removed from site.



## Weekly inspection of lifting devices

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<b>Project Title</b>	School Repairs in Ukraine	<b>Site</b>	
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ID Number	Description

Guidance

- Weekly inspections shall be carried out and report completed.
- The report should be kept on site until the project is complete.
- Any tool that is found to be defective shall not be used, then fixed or removed from site.



# Legal Register for Health, Safety and Environment

<b>Office/Project</b>	School Repairs in Ukraine
<b>Location</b>	Multiple locations
<b>Revision and date</b>	V.1.0.

## I. Introduction

UNOPS premises are protected by the Immunities and Privileges of the United Nations. These immunities also apply to UNOPS staff. It is the intention of UNOPS to ensure that operations do not operate below the standard of local legislation (see the UNOPS Health and Safety policy and the UNOPS Environmental Policy). Contractors and construction sites have an even higher obligation to meet legal and other obligations as they are incorporated under local laws. The contractors are assumed to have control over their ability to meet local legislation at UNOPS construction sites. UNOPS has the role of enforcing legal and other requirements in line with the UNOPS policy commitment.

When researching for applicable national legal HSE requirements, it is recommended that existing legislation in the following areas is explored:

Access/ Egress	Small tools
Fire/Emergency Prevention and Response	Work over water
Ergonomics	Work interactions (e.g. stress, psychosocial)
Occupational Health Stressors	Use of Lifting Machinery
Pressurised equipment	PPE
Electrical equipment	Other general H&S requirements
Hazardous substances	Water quality and management
Preparation of food	Air quality
Structures	Waste
Transportation	Resources conservation
Working at heights	Pollution control
Excavation	Other general environmental requirements

## II. Legal Register

No	Legislation/Requirement	Source	Requirements
1	UN Occupational Safety and Health (OSH) Framework	CEB/2015/HLCM/7 of 31 March 2015	The framework was implemented through six phases by December 2018
2	A system-wide road map for United Nations climate neutrality by 2020 and of the related goals towards enhancing the environmental sustainability of United Nations operations	CEB/2015/HLCM/7 of 31 March 2015	United Nations climate neutrality by 2020 and enhancement of environmental sustainability
3	Environmental Sustainability Management in the UN System	CEB/2013/HLCM/5 of 7-8 March 2013	Development and implementation of environmental sustainability management systems in each UN organization
4	A framework for advancing environmental and social sustainability in the United Nations system	UN Environmental Management Group, 2012	Moving UN organizations towards strengthening environmental and social sustainability in our activities
5	EOD 03 "Occupational Health & Safety and Social & Environmental Management"	UNOPS	Establish UNOPS Social, Environmental and H&S policies
6	OD 28 "Policy on work-life harmonisation" and AI/OEC/2009/02 on flexible working	UNOPS	Support personnel in balancing the demands of work and personal life.
7	Road and driving safety AI/EO/2010/04	UNOPS	Provide instructions governing road and driving safety
8	OD 08 Policy on prohibition of Discrimination, Harassment, including Sexual Harassment, and Abuse of Authority	UNOPS	Ensuring the workplace is free of any form of discrimination and harassment
9	The Law of Ukraine "About Labour Protection"	The Information of Verhovna Rada of Ukraine, 1992, № 49, 668 p.	This Law determines basic provisions by realization of constitutional right of workers to protection of their life and health in the course of labor activity.
10	DBN (State Construction Norms) A.2.2-1:2021 Composition and content of materials on the evaluation of environmental impact (EEI) when designing and constructing enterprises, buildings and facilities.	The Ministry of Communities and Territories Development of Ukraine from 30.12.2021 № 366	Outline the necessary procedures and minimum requirements for environmental impact assesment
11	DBN (State Construction Norms) A.3.2-2-2009 (SSBT 45.2-7.02-12 ) The system of standarts of labour protection. Labour protection and industrial safety in construction.	The Ministry of Communities and Territories Development of Ukraine from 27.01.2009 № 45	Determines the requirements for labour protection and industrial safety during construction and installation work.
12	DBN (State Construction Norms) A.3.1-5-2016 Organization of building production	The Ministry of Communities and Territories Development of Ukraine from 05.05.2016 №115	General requirements for the organization of construction during the new construction, reconstruction, overhaul, technical re-equipment of buildings, buildings of any purpose, their complexes or parts, linear objects of engineering and transport infrastructure
13	DBN (State Construction Norms) V.1.2-12-2008. Building in the compacted area. Safety requirements.	The Ministry of Communities and Territories Development of Ukraine	These norms establish safety requirements during the new construction, reconstruction and technical re-equipment of objects in

		from 27.08.2008 №385	the conditions of compacted development and cover the safety of adjacent buildings and territories, the safety of the object under construction, the safety of the production process for the execution of construction and installation work
14	DSTU (State Standard of Ukraine) 4050-2001 Signal special clothing. Jackets. Specifications.	State Standards of Ukraine from 14.09.2001 № 454	This standard applies to men's and women's vests with tufts of retro-reflective materials intended to enhance the safety of work in conditions of insufficient visibility.
15	DBN (State Construction Norms) V.2.5-56:2014 Fire protection systems	UUFTS: Ukrainian Union Fire and Technological Safety from 13.11.2014 № 312	Systems of fire protection of buildings, or their parts, structures, equipment of different purposes, during the new construction, reconstruction, technical re-equipment, overhaul of these objects.
16	NPAOP (Regulatory Legal Acts on Labour Protection) 0.00-1.80-18 Rules of labor protection during operation of lifting cranes, lifting devices and related equipment	Ministry of Social Policy of Ukraine from 19.01.2018 № 62	Rules of construction and safe operation of lifting cranes
17	DNAOP (The State Regulatory Legal Acts on Labour Protection) 0.00-1.21-98. Consumers' electric installations safety code	State Committee of Ukraine on Supervision of Labor Protection from 09.01.1998 № 4	Rules for safe operation of electrical installations
18	NAPB (Regulatory Legal Act on Fire Safety) A.01.001-2014 Fire safety regulations.	Ministry of Internal Affairs of Ukraine from 30.12.2014 № 1417	The rules establish common requirements for fire safety for buildings, structures of different purposes and adjoining territories, other real estate, equipment, which are being exploited, construction sites, as well as during construction, reconstruction, restoration, overhaul, technical re-equipment of buildings and structures.
19	NPAOP (Regulatory Legal Acts on Labour Protection) 45.2-1.11-97 State Committee of Ukraine for Industrial Safety, Labor Protection and Mining Supervision. Occupational safety regulations for erections of monolithic concrete and reinforced concrete objects.	State Committee of Ukraine on Supervision of Labor Protection from 14.03.1997 decree № 58	Rules of occupational safety at erections of monolithic concrete and reinforced concrete objects
20	NPAOP (Regulatory Legal Acts on Labour Protection) 0.00-1.15-07 On Approval of the Occupational Safety Regulation for working at height.	State Committee of Ukraine of Industrial Safety, Labor Protection and Mining Supervision 27.03.2007 p № 62	Rules of occupational safety for working at height.

### III. References

1. Convention Immunities and Privileges of the United Nations. <http://www.un.org/en/ethics/pdf/convention.pdf> (Dec. 2014)
2. <http://www.un.org/en/ecosoc/docs/2010/res%202010-23.pdf>

3. ILO: Safety and Health in Construction Convention no. 167 (Dec. 2014)  
[http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100\\_INSTRUMENT\\_ID:312312](http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312312)
4. ECOLEX, the gateway to environmental law, operated jointly by FAO, IUCN and UNEP  
<http://www.ecolex.org/start.php>
5. NATLEX, the ILO database of national labour, social security and related human rights legislation  
[http://www.ilo.org/dyn/natlex/natlex4.home?p\\_lang=en](http://www.ilo.org/dyn/natlex/natlex4.home?p_lang=en)
6. LEGOSH, the ILO global database on occupational safety and health legislation  
<http://www.ilo.org/dyn/legosh/en/f?p=LEGPOL:1000>

# Check for Compliance Requirements for Health, Safety and Environment

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<b>Office/Project</b>	School Repairs in Ukraine
<b>Location</b>	Multiple locations
<b>Revision and date</b>	

## I. Immunities and Privileges of the United Nations

The founding Charter of the United Nations provides for the privileges and immunities “necessary for the fulfilment of its purposes.” (Article 105, UN Charter). The Convention on Immunities and Privileges adopted by the General Assembly of the UN on 13 February 1946 details the specifics of these legal exemptions.

This means that while UNOPS as a separate entity of the United Nations is exempt from compliance with local laws, it does interact with local governmental agencies for the provision of services and should meet the minimum standards for the operation of these services if not exceed them according to international standards.

## II. UN requirements and UNOPS HSE minimum standards

The regulations and requirements put forth in the UN system should be applied to UN facilities. Therefore, UNOPS shall meet the requirements of the UN Occupational Safety and Health (OSH) Framework (CEB/2015/HLCM/7 of 31 March 2015); of the UN Climate Neutrality Strategy and the Strategic Plan for Environmental Sustainability Management (CEB/2013/HLCM/2); and the UN Roadmap towards Climate Neutrality by 2020 (CEB/2015/HLCM/7 of 31 March 2015); and of other relevant UN initiatives and frameworks.

UNOPS minimum standards for Health, Safety and Environment apply in all its projects and operations, also in cases where they go beyond and above local legislative requirements.

### III. Check for Compliance Requirements

Item <sup>1</sup>	Legislative instrument (law, regulation, decree, etc.)	Area of concern/hazard regulated	Year	Regulatory Body	Requirements	Compliance (Y/N)	Evidence of Compliance/ Corrective Actions
1	<i><b>The Law of Ukraine "About Labour Protection"</b></i>	Offices and building sites	1992 , № 49, 668 p	Verhovna Rada of Ukraine	This Law determines basic provisions by realization of constitutional right of workers to protection of their life and health in the course of labor activity, on proper, safe and healthy working conditions, governs with the assistance of relevant organs of the government the relations between the employer and the worker on safety issues, occupational health and the production circle and establishes single procedure for the organization of labor protection in Ukraine.		<ol style="list-style-type: none"> <li>1. Permission or declaration for performance of work of high danger and for operation (application) of machines, mechanisms, equipment of high danger.</li> <li>2. Decree on the appointment of the responsible for the protection of labor and fire safety</li> <li>3. Decree on the approval and putting into effect of the instructions on labor protection by type of work to be performed.</li> </ol>

<sup>1</sup> Ensure numbering of legislative instruments is aligned and can be cross-referenced with those included in the Legal register.

2	<b><i>DBN (State Construction Norms) A.2.2-1:2021 Composition and content of materials on the evaluation of environmental impact (EEI) when designing and constructing enterprises, buildings and facilities.</i></b>	Building site	from 30.12.2021 № 366	The Ministry of Communities and Territories Development of Ukraine	These construction norms outline the necessary procedures and minimum requirements for environmental impact assessment in the design documentation for new construction, expansion, reconstruction and technical re-equipment of industrial and civilian objects, the main requirements for the composition and content of these materials.		1. Contractor's performance according to the project's documentation.
3	<b><i>DBN A.3.2-2-2009 (HPAOP 45.2-7.02-12 ) The system of standards of labour protection. Labour protection and industrial safety in construction.</i></b>	Building site	27.01.2009 № 45	The Ministry of Communities and Territories Development of Ukraine	These norms and rules should be observed in the course of the construction and installation work in the construction of new, reconstruction, expansion and technical re-equipment of the existing enterprises, buildings and structures, and also taken into account in the development of projects for the work production.		<ol style="list-style-type: none"> <li>1. Documents of workers confirming the right to perform work with high danger.</li> <li>2. The log of the site safety inductions.</li> <li>3. The log of work-permits for high risk construction activities.</li> <li>4. The organization and execution of construction and installation work must meet the requirements of hygienic standards, sanitary rules and norms approved by the Ministry of Health of Ukraine</li> </ol>
4	<b><i>DBN (State Construction Norms) A.3.1-5-2016 Organization of building production</i></b>	Building site	Decree from 05.0	The Ministry of Communities and	General requirements for the organization of construction during the new construction,		<ol style="list-style-type: none"> <li>1. General work log.</li> <li>2. Internal Regulations which include measures for</li> </ol>

			5.20 16 № 115	Territories Development of Ukraine	reconstruction, overhaul, technical re- equipment of buildings, buildings of any purpose, their complexes or parts, linear objects of engineering and transport infrastructure		occupational safety and environmental protection.
5	<b><i>DBN (State Construction Norms) V.1.2-12-2008. Building in the compacted area. Safety requirements.</i></b>	Building site	from 27.0 8.20 08 № 385	The Ministry of Communities and Territories Development of Ukraine	These norms establish safety requirements during the new construction, reconstruction and technical re-equipment of objects in the conditions of compacted development and cover the safety of adjacent buildings and territories, the safety of the object under construction, the safety of the production process for the execution of construction and installation work		1. Internal Regulations which include measures for occupational safety and environmental protection.
6	<b><i>DSTU (State Standard of Ukraine) 4050-2001 Signal special clothing. Jackets. Specifications.</i></b>	Building site	14.0 9.20 01№ 454	State Standards of Ukraine	This standard applies to men's and women's vests with tufts of retro- reflective materials intended to enhance the safety of work in conditions of insufficient visibility.		1.The availability and use of overalls on site.

7	<b>DBN (State Construction Norms) V.2.5-56:2014</b> <b>Fire protection systems</b>	In relation to owners of offices	13.1 1.20 14 № 312	UUFTS: Ukrainian Union Fire and Technologic al Safety	<p>The requirements of these building codes apply to the design, mounting, checking of conformity and maintenance of operational suitability of fire protection systems, namely:</p> <ul style="list-style-type: none"> <li>- automatic fire suppression system;</li> <li>-autonomous local-application fire-extinguish system ;</li> <li>- fire alarms system;</li> <li>- fire alarm systems and evacuation management of people;</li> <li>- anti-smoke protection systems;</li> <li>- centralized fire detection systems;</li> <li>- dispatching of the fire protection system.</li> </ul> <p>The above-mentioned fire protection systems are intended for fire protection of houses, buildings or their parts, structures, equipment of different purposes, during the new construction, reconstruction, technical re-equipment, overhaul of these objects.</p>		<ol style="list-style-type: none"> <li>1.Certificate of verification of information of fire protection systems</li> <li>2.Certificate of technical examination of fire protection systems.</li> <li>3.Maintenance plan of fire protection system.</li> </ol>
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8	<b><i>NPAOP (Regulatory Legal Acts on Labour Protection) 0.00-1.80-18 Rules of labor protection during operation of lifting cranes, lifting devices and related equipment</i></b>	Building site	from 19.01.2018 № 62	Ministry of Social Policy of Ukraine	Establish the minimum safety requirements for the equipment that the employer must maintain at the level specified in these Rules and other regulations on occupational safety and health during its use.		1.Logs of supervision of constructions and technical condition of lifting cranes
9	<b><i>NAPB (Regulatory Legal Act on Fire Safety) A.01.001-2014 Consumers' electric installations safety code</i></b>	Offices and building sites	09.01.1998 № 4	State Committee of Ukraine on Supervision of Labor Protection	The requirements of these Rules apply to those who work with electrical installations up to 220 kV inclusively and are mandatory for all, both consumers and producers of electricity, all forms of ownership of the means of production		1. Log of accounting and testing of power tools, transformers, frequency converters and portable lamps. 2. Certificate confirming the safety of electrical equipment for transformer stations.
10	<b><i>NAPB (Regulatory Legal Act on Fire Safety) A.01.001-2014 Fire safety regulations.</i></b>	Building site	from 30.12.2014 № 1417	Ministry of Internal Affairs of Ukraine	The rules establish common requirements for fire safety for buildings, structures of different purposes and adjoining territories, other real estate, equipment, which are being exploited, construction sites, as well as during construction, reconstruction, restoration, overhaul, technical re-equipment		1.Order of persons responsible for fire safety from the customer and general contractor (contractor) organization on the object as a whole and on separate sites

					of buildings and structures.		
11	<b><i>NPAOP (Regulatory Legal Acts on Labour Protection) 45.2-1.11-97 State Committee of Ukraine for Industrial Safety, Labor Protection and Mining Supervision. Occupational safety regulations for erections of monolithic concrete and reinforced concrete objects.</i></b>	Building site	14.0 3.19 97 decree № 58	State Committee of Ukraine on Supervision of Labor Protection	Rules of safe performance of work during the construction of objects from monolithic concrete and reinforced concrete.		1.Safety instruction log.
12	<b><i>NPAOP (Regulatory Legal Acts on Labour Protection) 0.00-1.15-07 On Approval of the Occupational Safety Regulationd for working at height.</i></b>	Building site	27.0 3.20 07 № 62	State Committee of Ukraine of Industrial Safety, Labor Protection and Mining Supervision	The rules of occupational safety at the time of work at the altitude apply to business entities that organize or perform work at high altitude, including vertical works, and establish safety and labor protection requirements during the construction, installation (dismantling) of structures and equipment, repair, reconstruction, operation of objects.		1.The log of admissions for works at height. 2.Safety instruction log.

#### IV. References

1. Convention Immunities and Privileges of the United Nations.  
<http://www.un.org/en/ethics/pdf/convention.pdf> (Dec. 2014)
2. <http://www.un.org/en/ecosoc/docs/2010/res%202010-23.pdf>





# Incident Report Form

<b>Project/Office</b>	School Repairs in Ukraine		
<b>Report date</b>			
<b>Reported by</b>		<b>Title/role</b>	

## I. DETAILS OF THE INCIDENT

<b>Incident date</b>	
<b>Incident time</b>	
<b>Incident place</b>	

Incidents are classified into two classes, as below. You can select either Class 1 or Class 2, not both. Select the Class that better describes the type of incident. You can select multiple sub-categories under each class.

Incident class	Category 1	Category 2	Category 3	Category 4	Category 5
Class 1					
Class 2					

## II. IDENTIFICATION OF TYPE OF INCIDENT AND IMMEDIATE CAUSES

1) Select the type of the incident from the list below. An incident can be classified at the same time as H&S/environmental/social.

Type of Incident - H&S		Type of Incident - Social
Moving Machinery/vehicles at project site	Dust, Fumes, Vapours	Misuse of UNOPS property
Fall from height	Noise	Damage to Cultural Heritage
Powered Hand tools	Temperature or heat	Occurrence of infringement of labour rights
Hand Tools	Overexertion	Occurrence of infringement of human rights
Animals or insects	Structural Failure	Stakeholder/community complaint
Fire or Explosion at project sites	Chemical/biological	Strike, demonstration
Trips & smaller falls	Stress	Other (please specify)
Drowning	Other (please specify)	
Borrow-pit Management		

Type of Incident - Environmental	
Chemical/Oil Spill	Damage to ecosystems (e.g. damage to flora/fauna)
Improper Disposal Waste	Odour air Emissions
Disasters (Earthquake, Flood)	Dust, Fumes, Vapours, Air pollution
Water Pollution/ Sedimentation	Other (please specify)

\* note that incidents related to terrorism, civil unrest, armed conflict and crime; as well as fire, aviation safety and road transport, are under the responsibility of the UN Security Management System, and should be reported to UN Security using the security incident form. Incidents at contractor operated project sites should be reported through this incident report form.

2) For each type of incident, select the relevant descriptor(s) from the list. You can select up to 5 descriptors for each type of incident. If a descriptor is not listed below, please type in short descriptor in "Other". Add more rows as necessary.

Incident type	Descriptor 1	Descriptor 2	Descriptor 3	Descriptor 4	Descriptor 5	Other
H&S						<i>Please type in short descriptor here</i>
						<i>Please type in short descriptor here</i>

Provide description of the immediate causes of the incident:

**III. DESCRIPTION OF THE INCIDENT**

Record all facts prior to and including the incident, if it was a planned activity, describe/list material, ecosystem and property damaged, etc:

**IV. ROOT CAUSE ANALYSIS**

Select the root cause(s) of the incident from the list below. If "Other" please specify.

Root causes	Yes	No
Improper Planning		
Poor Maintenance		
Poor Supervision		
Poor Quality of Equipment		
No rules, standards, or procedures		
Lack of knowledge or skills		
Improper motivation or attitude		
Failure to comply with rules		
Other		

## Incident Review Report

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<b>Project/Office</b>	UNOPS Ukraine. School Repairs in Ukraine		
<b>Review completed on</b>		<b>Reference to incident report</b>	
<b>Incident reviewer/ review team members</b>	<span style="color: red;">[For Class 1 incidents, include names of members of the review team and indicate the lead reviewer.]</span>		

### I. DETAILS OF THE INCIDENT

<b>Incident classification</b>	Class 1	<input type="checkbox"/> Fatal <input type="checkbox"/> Lost time <input type="checkbox"/> Major Environmental <input type="checkbox"/> Major Property Damage <input type="checkbox"/> Reportable Social	
	Class 2	<input type="checkbox"/> Minor Environmental <input type="checkbox"/> Minor Injury/Illness <input type="checkbox"/> Minor Property Damage <input type="checkbox"/> Near miss	
<b>Incident Date</b>		<b>Incident Time (Approx.)</b>	
<b>Incident Place</b>			
<b>Description/What Happened</b>  <small>(Record all facts prior to and including the incident that can help clarifying its dynamics and its causes)</small>			
<b>Photos attached</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>Witness (if any), name and contact details</b>			
<b>Witness Statement attached</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No		

**II. DETAILS OF HARMED PERSON(S) (Only for Health & Safety Incidents. For other type of incident, proceed to Step III.)**

Name		Age	
Address/Contact details			
Occupation		Employer	
Status	<input type="checkbox"/> Contractor Employee <input type="checkbox"/> Subcontractor employee <input type="checkbox"/> Visitor <input type="checkbox"/> UNOPS Employee <input type="checkbox"/> Public <input type="checkbox"/> Other		
Date injury reported		To Whom Reported	
Did person return to work the same day?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Treatment of injury	<input type="checkbox"/> None <input type="checkbox"/> On Site First Aid only <input type="checkbox"/> Doctor <input type="checkbox"/> Hospitalised		
Details of treatment			
Were any emergency services in attendance?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Details of emergency services if in attendance			
<b>Injury Details</b>  <b>Injury type:</b> (e.g. cuts/abrasions, bruising, sprain/strain, fracture, dislocation, unconsciousness, other)  <b>Body part:</b>			
Date of return to work			

**III. OUTCOME OF INVESTIGATION**

<b>Immediate cause</b>  What unsafe/inappropriate acts or conditions caused the event? Note contributing factors that have made the incident worse (e.g. incorrect use of ladder, lack of PPE, absence of drip trays/containment)	
<b>Secondary cause</b>  What human, organisational or job factors contributed/caused the event (e.g. poor housekeeping, poor planning, incorrect work method, lack of supervision/training, improper attitude, lack of hazard control etc.)? Also review the adequacy of risk assessments.	
Lessons learned	
Recommended preventative action(s)	<input type="checkbox"/> Training of personnel <input type="checkbox"/> Improve hazard/impact Identification <input type="checkbox"/> Improve hazard/impact control <input type="checkbox"/> Increase supervision <input type="checkbox"/> Improve risk/impact assessment <input type="checkbox"/> Discuss during HSSE meeting <input type="checkbox"/> Other (please specify below)

Preventative action(s) to be carried out by (Name of responsible person and target completion date)			
Close out (Agreed actions have been completed and situation now is satisfactory)	<i>[Before closing out, ensure that the preventative action has been implemented for a reasonable period of time and it is showing to be effective.]</i>		
Signature of lead reviewer	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;"></td> <td style="width: 40%; text-align: center;">Date</td> </tr> </table>		Date
	Date		

## Incident Highlight Report

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<b>Incident Classification</b>	Class 1	<input type="checkbox"/> Fatal <input type="checkbox"/> Lost time <input type="checkbox"/> Major Environmental <input type="checkbox"/> Major Property Damage <input type="checkbox"/> Reportable Social	
	Class 2	<input type="checkbox"/> Minor Environmental <input type="checkbox"/> Minor Injury/Illness <input type="checkbox"/> Minor Property Damage <input type="checkbox"/> Near miss	
<b>Incident Date</b>		<b>Incident Place</b>	
<b>Lessons learned</b>			

## GENERAL SITE RULES

### Introduction

- No-one is permitted to carry out work on this site, or enter the site before being inducted and briefed on the H&S Site Rules by the appointed UNOPS site representative.
- The H&S Site Rules apply to all personnel employed on site to carry out work; this will include but not be exclusive to: UNOPS' Staff, Contractor's Personnel, Subcontractors, Suppliers and Visitors.
- In addition to the H&S Site Rules, Contractor and Sub-contractor Managers are responsible for briefing their own workforce in their own Risk Assessments and Method Statements regarding Health and Safety for their works. Records of these briefings must be kept and made available on site at all times for inspection by the UNOPS representative.
- The UNOPS H&S Sites Rules are there to reinforce good practice in Construction Safety, they do not substitute nor dissolve any individual or Employer of their obligation or responsibility under the relevant laws of governance in the place of the work. Neither do they replace any obligations Contractors are subject to in the relevant Conditions of Contract for the project.

### Project Description

- For project description including Donor, Beneficiary and project team details, refer to the Project Implementation Plan.
- For the project emergency arrangements – refer to the project establishment/emergency plan, project emergency/evacuation procedures (**Form HS02**) and site emergency contact (**Form HS03**).

### Health and Safety

#### 1. Purpose

- 1.1. The purpose of this briefing and the issuing of H&S Site Rules is to help prevent accidents, improve health and safety in the work place through standard procedures, awareness and education, and actively seek reporting of accidents and near misses to improve future practice and behavior to improve health and safety.

#### 2. Employees Responsibilities

- 2.1. Under general Health and Safety at Work practices, your responsibilities are to:

- Take reasonable care for the health and safety of yourself and others who may be affected by your acts or omissions at work.
- Co-operate with your employer and UNOPS Site Management, as far as may be necessary, to enable them to carry out their duties in regard to health and safety matters relating to these rules.

**GUIDELINE GHS01**

- Not intentionally or recklessly interfere with anything provided for the health, safety and welfare of yourself and others.

**3. General**

- 3.1. Private vehicles may only be parked on the site by agreement with the UNOPS Site Representative. It is preferable that all vehicles entering site have a flashing amber beacon for increased visibility.
- 3.2. The site speed limit has been set at 10 Kph. Appropriate signage shall be erected on site for information.
- 3.3. The following articles are prohibited and must not be brought to site:
  - Alcohol
  - Non-prescribed drugs
  - Animal/Pets
  - Children
  - Radios/I-Pods and the alike
- 3.4. Anyone who has a medical condition that may give rise to difficulties for themselves or others on site should report the matter in confidence to UNOPS staff. Examples would be: heart condition, vertigo, asthma, epilepsy etc.
- 3.5. All visitors must be directed to the UNOPS site office prior to entry to site.
- 3.6. Anyone who acts in an aggressive or offensive manner towards a member of the public or anyone else will be excluded from the site.
- 3.7. Alcohol and Drugs – UNOPS has a policy of zero tolerance in respect of any person carrying out duties or work on this site having consumed drugs or alcohol.

Random screening for alcohol and drugs may be carried out and specific testing may be undertaken on reasonable suspicion or following a work related accident or incident.
- 3.8. Mobile phones must not be used whilst driving or operating plant, personnel on foot must ensure that they are in a safe area before taking or making calls, any calls made or received on a mobile phone should be essential calls only, social calls should be made outside the working site and out with working hours.

**4. Personal Protective Equipment**

- 4.1. High visibility jacket/vests, safety helmets and safety footwear (incorporating steel toe-caps and mid-sole) must be worn at all times.
- 4.2. Other P.P.E. must be worn during operations with specific health and safety risks, e.g.
  - Safety goggles for protection during all cutting, grinding and drilling operations or where there is risk from impact, dust, chemicals or hot metal.
  - Dust masks for protection from dust.

**GUIDELINE GHS01**

- Ear protection during all operations which produce noise above the level at which you need to raise your voice to be heard.
  - Gloves during concreting work.
- 4.3. Stocks of all necessary PPE should be held on site and be made available by your Employer. It is your Employer's responsibility to provide you with the relevant PPE for your task.
- 5. Reporting Of Accidents, Incidents And Near Misses**
- 5.1. All accidents must be recorded in the Accident Book, which is held by the UNOPS staff.
- 5.2. UNOPS staff must immediately be informed of "near misses" or any unsafe conditions, including tools, plant and equipment.
- 5.3. Hazard/Near Miss Reports should be completed on site to record any concerns you may have with any aspect of site operations. UNOPS staff will assist with this task. Serious or imminent risks should be brought to the attention of a supervisor immediately.
- 6. Plant**
- 6.1. Vehicles with restricted rear view vision must have a trained and authorized plant and vehicle banksman in attendance when reversing.
- 6.2. Items of plant such as dumpers, rollers, aerial platforms etc, must only be operated by persons who are trained and competent.
- 6.3. Under health and safety at work practices, there is a general requirement to be trained to use or carry out adjustments to most power tools e.g. wood working machinery, cartridge tools, cut off saws etc, such operations are required to be authorized by the appropriate site management.
- 6.4. Plant and vehicle operators must not carry passengers unless the vehicle is specifically designed for that purpose with fixed seating and seatbelts. Other personnel must not request a lift, nor travel as a passenger on a site vehicle unless it is designed for that purpose. Failure to comply with these instructions will render all individuals involved liable to disciplinary action and removal from site.
- 6.5. All site personnel are requested to follow designated pedestrian routes. Do not walk in the vicinity of mobile plant unless this is directly relevant to the task you have been instructed to carry out, e.g. banksman.
- 6.6. Plant and vehicle operators must produce a copy of their Driving License (including the endorsements page) prior to driving a vehicle on site.
- 6.7. Towing of plant and equipment on site must not take place unless the plant or vehicle has been fitted for this purpose. Towing arrangements must be assessed; manufacturers towing information must have been briefed to personnel and site management have approved it.

## **7. Confined Space Work**

7.1. Do not, under any circumstances enter a confined space unless you have been trained, you have all of the necessary equipment, and you have been directly instructed by qualified supervision.

***“A Confined Space is an area of work where there is an access/ egress problem or a lack of natural atmosphere, typically includes: manholes, chambers, tanks and pump wells.”***

## **8. Scaffold/ False work**

8.1. Do not take access to newly erected or altered scaffolding unless instructed to do so after inspection and approval by the UNOPS Site Representative.

8.2. All scaffolding and ladders on site shall be clearly marked using scaff tags to indicate whether scaffolding can be accessed or not.

8.3. All scaffolds and ladders must be in good condition and be regularly checked.

8.4. All access scaffolds for placing concrete or other works at height require a suitable edge protection to prevent personnel, materials, plant and equipment from falling.

8.5. Climbing on the scaffolding is strictly forbidden.

8.6. All ladders must be placed at the correct angle of 1:4, fixed at the top and secured at the bottom.

8.7. Do not alter, or interfere with scaffold in any way unless you are trained to do so and are authorized to do so from your Supervisor.

## **9. Excavation Work**

9.1. Do not carry out any excavation work, by hand or machine, until you have been instructed to do so.

9.2. Do not carry out any excavation work until you have been told by UNOPS staff that all underground services in the area have been located, exposed and protected.

If you encounter any unmarked services stop work and contact UNOPS site staff immediately.

9.3. All underground services exposed in an excavation, including in trial pits, must immediately be protected as instructed by UNOPS staff.

## **10. Hazardous Substances (COSHH- Control of Substances Hazardous to Health)**

10.1. A site file is maintained in the UNOPS Site Offices of Contractors COSHH Assessments, it is essential that proper procedures, as laid down by the manufacturers, are used when handling their materials.

10.2. You must be briefed by your Supervisor on the risks from the material and be issued with all necessary PPE required.

10.3. If you are in any doubt seek the advice of your Supervisor.

## **11. Electrical Equipment**

11.1. All electrical equipment to be used on this site should be presented to UNOPS site staff for inspection prior to use. All guards should be fitted and be in good working order. All cables should be correctly housed with all cores protected by insulation.

## **12. Material Handling**

12.1. Do not sling loads unless you are having received proper training as a Slinger/Signaller and are authorized by the UNOPS Site Staff.

12.2. Do not manually handle loads in excess of what you can safely and comfortably handle.

12.3. If there is a requirement to lift a load greater than what you can safely and comfortably handle then consult with your Supervisor to ensure that the necessary assistance is available.

12.4. Do not use any item of lifting equipment unless UNOPS Site Staff has confirmed that it is properly certified and satisfactory for the task in hand. The use of “unauthorized” slings, chains, shackles etc., is strictly forbidden.

## **13. Setting Out**

13.1. If kerb pins or setting out pins are to be driven into the ground ensure that the area has first been checked to ensure there is no risk of striking any underground services, most especially electrical cables.

13.2. Steel pins driven into the ground for any purpose must be protected to remove the hazard of personnel falling onto them and being spiked, this practice of driving steel pins into the ground must be approved by UNOPS Site Staff prior to action.

## **14. Welfare Facilities**

14.1. Canteens, toilets and drying rooms are provided by your Employer for your welfare and comfort. Anyone found defacing or abusing these facilities will be liable to be removed from site.

14.2. Care should be taken to ensure that heating appliances are used safely. Items of clothing must not be hung directly above heaters.

14.3. Smoking is not permitted within any construction buildings on site, in the working vehicles and nearby material (particularly flammable) storage.

14.4. Eating and drinking is expressly forbidden in all areas, other than those designated welfare facilities.

## **15. Housekeeping**

15.1. Your workplace must be kept tidy during and after work. Rubbish must be placed in the bins or skips provided and not discarded on the site.

**GUIDELINE GHS01**

- 15.2. Site fencing and pedestrian fencing must remain in place. If there is a requirement to open it for access purposes then ensure it is immediately reinstated.
- 15.3. Ensure that openings such as manholes and gully pots are securely covered at all times. If the cover must be removed temporarily, then physical barriers must be provided around the opening.

**16. Further Briefings And Instructions**

- 16.1. There are detailed Risk Assessments, Works Procedures and/or Method Statements for all of the operations involved in this project. Your Employer and Supervisor must give you any necessary briefings and instructions for the operations you take part in prior to a work activity commencing.

**17. Access to Site**

- 17.1. No contractor, subcontractor, visitor or any other individual must commence works without notifying the UNOPS site staff that they are on site and ready to start work. All personnel must be inducted, signed in and receive this briefing, failure to follow this procedure will render the individual to be removed from site.

**18. Emergency Arrangements**

- 18.1. The Site Emergency and Evacuation Information (**Form HS02 and HS03**) gives details of the locations of key equipment and telephone numbers for the organizations to be contacted in the event of an emergency. **Form HS02** also gives clear instruction regarding required response during an emergency and evacuation; please make yourself familiar with its contents. Copies are posted on the site notice board.

**19. First Aid**

- 19.1. The First Aiders on this site are identified in the **Form HS03**.

**20. Permits**

- 20.1. On this site, formal permits must be in place before any of the following operations may be carried out: Permit to Excavate, Hot Work Permit & Confined Spaces Permit. Permits will be issued by UNOPS staff.

**21. Workforce Consultation**

- 21.1. This site operates an "Open door" policy which actively encourages employees to raise concerns they may have regarding health, safety or welfare with the site management. Anyone raising such a concern shall receive a fair hearing and be spoken to in a civilized and reasonable manner. Safety issues can be raised with the site team verbally and in writing.

**Environmental**

- I. Prevent oil/petrol leaks into the ground - Drip trays to be placed under static plants.

**GUIDELINE GHS01**

- II. All barrels to be stored in areas provided - No barrels or containers containing oil, fuel or chemicals to be left on site unattended.
- III. Only nominated and trained personnel shall carry out fuelling operations.
- IV. Minimise emissions - switch off all plant when not in use.
- V. Segregate waste; ensure that they are stored in designated place.
- VI. Disposal of waste material by burning on site is **not** permitted, unless permit is obtained from HSE Manager.
- VII. Discharge of untreated sewage (including silted water) to the water bodies is not permitted.
- VIII. In the event of a spill or other environmental incident or complaint, report it to site supervisor and UNOPS representative.
- IX. Do not carry out any work outside the site boundaries.

**Quality**

It is essential that work is carried out in line with the contract requirements and the UNOPS systems. Therefore please follow instructions and if work appears to be carried out incorrectly, please inform your supervisor before you go too far and it is covered up. ***If in doubt please ask!***

**FINALLY**

If, at any time, you are unsure of the way in which a task should be carried out, or of the safety precautions to be taken, then you should IMMEDIATELY stop work and seek guidance from UNOPS staff.

## LIFTING

### 1. General

Lifting shall be undertaken by trained and competent personnel only.

Specific site induction and safety rules (**Form HS04**) should include instruction regarding safe site working operations associated with the tower crane if applicable to site.

A specific Hazard and Risk Assessment review (**Form HS09**) should be carried out with identified hazards relating to an operational tower crane identified and control measures in place.

Lifting Plan shall be prepared for all lifting activities on site – refer to **Form HS15**.

### 2. Tower Crane

All tower crane erection, commissioning and maintenance should be carried out by a registered/licence (in accordance with any local authorities and laws) and experienced professional industry practitioners. Documented evidence should be obtained confirming the suitability, experience and expertise of the proposed company.

All erection, commissioning and dismantle operations should be thoroughly pre-planned with written submissions made detailing all personnel involved with relevant experience and role descriptions, design and loading calculations regarding crane base and fixing supports, erection/dismantle process including lifting methods, transport, unloading etc. The plan should also outline all testing and certification processes for the crane commissioning including a comprehensive list of operating tolerances and items/equipment and operations for testing. This is a complex and thorough process which may require additional professional review, certification and support based on the available skills and expertise within the local context and the assessed risk.

Key personnel including crane supervisor, driver, banksmen and slingers (dogmen) must be nominated and be trained, competent, experienced and where required certified to carry out the required tasks.

An operational and equipment testing program should be established and executed as part of the tower crane maintenance program. Daily, weekly and six monthly inspection schedules are typical and records of such inspections and checklists should be kept.

A suitable radio communication system must be provided to allow for safe communication between the crane driver and banksman (dogman).

An evacuation/rescue plan and procedure should be developed to access personnel working in the crane cab or on the crane jib in the case of an emergency.

### 3. Mobile Cranes

In addition to the points noted above for the Tower Crane, the following items are for consideration when operating a mobile crane.

- Only trained and or certified operators can operate the mobile crane
- Ensure the planned regular inspections have been carried out.

**GUIDELINE GHS02**

- Ensure outriggers are used and are on suitable load bearing ground.
- Confirm signals between driver and slinger/dogman.
- Check minimum of 600mm slewing clearance.
- Check for overhead cables, services and structures.
- Ensure load is correctly fixed, balanced and secure.
- Never exceed the SWL
- Slew the load gently to minimise load swing.
- Ensure the vehicle driver is out of the cab before lifting.
- All proposed tandem lifting must be fully planned with a full briefing prior to any operation.
- Never leave a load suspended
- Very few cranes can lift and travel with loads, confirm operation design and ability of machine prior to any operation to carry.

**4. Excavator, forklifts and Hiabs**

In some instances excavators, forklifts and Hiabs can be used on site for lifting. Following rules shall apply for such lifts:

- A machine operator is responsible for controlling each lift. If something cannot be lifted safely, then shall not be lifted at all.
- Only machines that are designed for lifting and has the proper lifting attachment fitted for securing and lifting the load shall be used.
- Safe Working Load (SWL) capacity of the equipment shall be never exceeded.
- The SWL should be marked in the cab or on the boom. It should also be found in the instruction handbook that is supplied with the machine in the form of lifting or load charts or tables.
- The lifting chart gives information about the lifting capacity of the machine at different distances from the cab (the lifting radius), different height or depths and whether the lift is parallel to the tracks or across the tracks.
- Machines that are permitted to lift shall be clearly marked.
- Ensure load is correctly fixed, balanced and secure.
- Lifts can be only undertaken following communication with the slinger/signaller and on his signal.
- Weight of the load must be established/estimated prior to lifting.
- Lifting shall be only carried out in area clear of people.

**GUIDELINE GHS02**

- Only properly checked lifting equipment (such as chains, strops and shackles) may be used for lifting.
- Good lifting practice is to position the machine to carry out the lift most effectively. Where possible, keep the load:
  - between the tracks;
  - reasonably close to the machine (not at full stretch);
  - low to the ground.
- Keep to level ground and avoid side slopes. If lifting takes place on a slope, position the tracks should be up (or down) the slope (and not sideways).
- If lifting includes travel with a load, the load shall be positioned between the tracks, reasonably close to the cab and not too high off the ground. Travel should be slowly and carefully, ensuring the route is clear of obstructions and personnel at all times.
- The lifting operation shall be stopped at any time if events dictate (such as if someone is walking towards or into the lifting area).

## **ELECTRICS**

The main dangers to be prevented from electrical work are the risk of electric shock, fire, burns and explosions. Risk of shock can come from voltages in excess of 50V ac and 120V dc. The electrical current is dangerous, not the applied voltage and even a small shock can prove dangerous if received by a person working at height or operating plant and equipment as any loss of control in these situations could lead to more significant accidents.

Procedures and basic operating principles for safely working with electricity are listed below for consideration when identifying and controlling project specific electrical risk.

- Whenever possible work carried out on electrical equipment, plant and wiring systems should be done with power shut off. Where work has to be carried out on live electrical systems with high voltages then only trained, experienced, competent personal with specific task safety procedures in place should execute the works.
- Local, Government, State or Supply Company electrical supply boards, lines, plant and equipment should not be tampered with. Only the relevant authorised electrical supply authority employees should carry out work in this area.
- To assist in preventing danger, carefully planning the electrical works before it starts is essential. This can be done using a task analysis or method statement and is particularly important when carry out infrequently performed tasks.
- All electrical isolation work should be carried out by an authorised person. This can be complex depending on the specific electrical system and may require numerous isolation actions. Confirmatory voltage detection tests should be carried out on the system to ensure that the system is safe to work on. A “Warning” notice system should be used to ensure the electrical system is not reactivated by other parties while being worked on.
- Voltage detection testing needs to be performed in a safe manner. Make sure there is adequate space, sufficient lighting, secure footing for the worker, the space is clear of explosive gases or vapours, no signs of overheating or fault of the lines and equipment. The use of “homemade” testing equipment (i.e. lamps and neon testers) is forbidden. Testing equipment should be regularly checked.
- All electrical equipment, tools, appliances, boards and leads require regular testing and inspection. An inspection and testing schedule should be compiled for the specific project, recording inspection dates and findings.

As a guide generally portable hand held tools, extension leads, lighting and RCD’s should be checked by the user daily and formally inspected and tested every 1 to 3 months. Electrical distribution systems, installed plant and equipment, fixed lighting, lifts, hoists and the alike should be checked before first use, then by the user weekly and formally inspected and tested every 3 months.

- Working with Overhead Electrical Services
  - Prior to any site occupation, all overhead electrical services should be identified in conjunction with the Services Authority and an assessment made regarding interface/impact of the services on the proposed project works.

**GUIDELINE GHS 03**

- Treat all overhead cables as live.
  - Consider diverting or isolating overhead services adjacent to the work area (work to be carried out by the Services Authority). No work, office, storage or fabrication areas should be located beneath or adjacent to overhead electrical services or within the vicinity of temporary works like scaffold and carnage.
  - Existing overhead lines may require protection and regular inspection throughout the duration of the works on site. Electrical poles may have an earth mat below which may carry current. Never disturb or damage the earth mats.
- Underground Electrical Services
    - Prior to any site occupation, all underground electrical services should be identified and marked in conjunction with the Services Authority.
    - Permit system must be in place for excavation and digging works to ensure all precautions are taken to ensure safe works.
    - When digging assume all cables are live and if available use cable locators.
    - Make sure exposed cables are protected and supported to protect from damage.
    - When backfilling, ensure that marker tape or tiles are used to identify the cable location
  - Temporary electrical installations should be designed, installed, commissioned, tested, maintained and decommissioned by competent persons. All systems will include appropriate earthing and protection.
  - Fire can result from the overloading, arcing or faulty conditions of electrical plant, equipment and material. Non conducting carbon dioxide or dry powder fire extinguishers should be provided at suitable locations.

## EXCAVATION

Excavation presents significant safety issues with excavation collapse, striking of underground services and machinery accidents potentially causing serious injury.

Procedures and basic operating principles for safely carrying out excavation works are listed below for consideration when identifying and controlling project specific excavation risk.

- All excavation activities on site should be controlled by the UNOPS Work Permit system – refer to **Form HS14**. Key safety issues relating to the inherent risk involved in excavation are identified in the Permit system and appropriate controls and protection measures will be required to be put in place before works are carried out.
- Excavations are required to be supported or battered back where necessary to prevent collapse. Ongoing review and inspection of supports is required to ensure unauthorised removal and alterations of supports and braces are identified and rectified. Careful excavator operation is required in and around supports to prevent striking damage.
- Locate excavated spoil/stockpile heaps well back from the edge of the excavation works. A general rule is to keep the spoil as back from the edge of the excavation at least the distance that the excavation is deep. Don't store materials close to the edge of excavated areas.
- Excavated areas require edge protection to prevent falls. Secured ladders should be used for excavation access, do not climb on excavation supports.
- When vehicles are operating in the vicinity of the excavation, i.e. trucks tipping for backfilling, use stop blocks or create berms/kerbing to prevent vehicles driving into excavations.
- Excavations should be checked daily before entering for any change in condition which may make the excavation unsafe, i.e. after heavy rainfall, changes in support and shoring etc.
- Working in and around excavations workers should always wear the correct PPE, never jump across excavations, and never throw tools or materials down to someone into an excavated area.
- Excavation machinery should be checked regularly before use. Items to be considered include
  - Coupler assembly, free of debris and material, check for any damaged or cracked components
  - Generally check for any missing parts or components, oil leaks, distressed welds etc
  - Check safety, lynch and mounting pins, locks and nuts. Are they in good condition, not bent, or worn and functioning correctly
  - Check blocking arm and bar components and operation
  - Check all the hydraulic hoses, couplings, fittings

**GUIDELINE GHS 04**

- Check all grease points; ensure maintenance scheduling is carried out
- Check lights, flasher beacons, mirrors etc
- In operating excavation machinery the following should be considered
  - Never carry passengers
  - Keep watch for potential hazards, overhead cables, people and machines
  - If outriggers and supports are available they are to be used
  - Ensure safety pins are always fitted with quick hitch buckets
  - Always ground bucket before leaving the machine
  - Do not leave the machine unattended unless switched off, parked and fully locked

## **FIRE SAFETY**

The risk of fire is a significant issue on construction sites, with fire potentially causing damage to materials and property as well as serious injury and even death to workers.

It is important that all practicable steps are taken to prevent fire on site and that adequate detection and prevention measures are devised, communicated and implemented on the project.

Procedures and basic operating principles for fire safety on site are listed below for consideration when identifying and controlling project specific fire risk.

- The UNOPS Hot Work permit should be in place for high fire risk activities – refer to **Form HS13**. The system allows the inherent fire risk of the proposed activity to be specifically identified and appropriate controls and checks put in place.
- Where possible consideration should be given to planning and executing the construction works in a sequence that facilitates as early as possible the installation and operation of the permanent fire protection elements of the project. Examples include installation of fire escape stairs, fire doors, protective material to steel elements, lightning conductors, fire detection systems, water supply and feed for hydrants, sprinklers, hose reels etc.
- Fire safety considerations relating to the projects temporary buildings include
  - Where possible, temporary buildings and accommodation should be located away from the main building works to provide a fire break
  - Where temporary buildings have been constructed raised above the ground, the space beneath should be enclosed to prevent the accumulation of rubbish and combustible material
  - Internal heating to temporary buildings must be installed properly and maintained. Gas heating must be supported by adequate ventilation. Heaters should not be used for drying clothes
  - Fire detection and alarm systems should be installed in temporary accommodation, especially in buildings used for cooking and drying
  - Consider a no smoking policy
  - Establish fire escape routes for temporary accommodation, include within the project wide emergency/evacuation plan
  - Provide adequate and suitable types of fire extinguishers
  - Consideration should be given to the material composition of the temporary accommodation in relation to fire resistance materials
  - Consider security measures and requirements to minimise the risk of arson. Measures could include hoarding and fencing off of the site, security guards, illumination of the site after hours, security cameras etc

**GUIDELINE GHS 05**

- On very large projects with high fire risk elements, it may be appropriate to appoint a fire safety coordinator (part/full time) to assist in fire prevention duties
- Contact and liaison with the local emergency fire services (where they exist) at the start of the project is important, discussing fire services access, emergency escape routes, positions of dry and wet risers, location of temporary buildings, storage of hazardous items etc
- An appropriate means of alarm/warning of fire must be established on the project. Clear access and egress to and from the site and buildings must be maintained at all times
- Fire extinguishers, hose reels, hydrants and other fire protection equipment should be located in conspicuous locations, well labelled and regularly inspected and maintained
- Mechanical plant and vehicles on site should be equipped with suitable fire extinguishers. Vehicles should be refuelled in the designated areas with engines switched off. Exhaust pipes and gases must be kept clear of combustible materials
- Remove waste and rubbish from site regularly. Prohibit fires on site
- All electrical supply installations, both permanent and temporary must be installed by competent and qualified electricians. Do not overload electrical sockets
- All gas, LPG and flammable liquids must be stored in secured areas/compounds, well ventilated, shaded and secure. The area should be well signed and “no smoking” signage very important. Storage of highly flammable liquids should be kept to a minimum

## NOISE

Noise induced hearing loss is a common health hazard on construction sites.

It is important that all practicable steps are taken to prevent excessive noise on site and that adequate prevention measures are devised, communicated and implemented on the project.

- Hearing protection must be worn when working in and around excessive noise. If you have to raise your voice to be heard at 1 metre distance, then the noise level is excessive (80 decibels and above)
- Wherever possible review loud noise activities and adopt less noisy processes or introduce plant/equipment that are a quieter option.
- Keep all equipment, plant and machinery covers, casings and housing fixed and closed when in operation.
- Where possible baffles, covers and noise suppressants should be used on noisy equipment.
- Do not keep noisy machinery, plant or equipment running unnecessarily.
- Where possible locate noisy plant, equipment and machinery away from general working areas to reduce the number of people exposed to the excessive noise generated.
- Consideration should be given to shielding noisy work activities and equipment in and behind sound absorbing structures and materials.

## **SCAFFOLD**

Falls from height account of over 50% of the deaths associated with the construction industry. The correct design, installation and use of scaffold are extremely important to ensure people working at height are as safe as possible.

The people involved in the design, installation and inspection of the scaffolding system for the project must be competent in the type and complexity of the scaffold system to be used.

Any scaffold system should be officially inspected at least once a week to ensure it remains in safe condition. Each scaffolding and ladder shall be marked with the appropriate scaff tag, indicating inspection dates and whether scaffolding/ladder is safe for use. It is suggested that scaffolds that are not completed or not safe to be used shall have a red tag with clear 'No Entry' sign.

Key issues for consideration at design, installation and ongoing use stages are outlined on the below:

### **Foundations/Base**

- Scaffolding must be on suitable foundations and stable against subsidence (level, compacted, capable of all loads)
- Each supporting standard should be supported by a base plate and then a sole board (guide on sizing, base plate 15 x 15 x 0.6 cm, sole boards 50 x 200 x 3.8 cm)
- Ensure each supporting standard is centred on the base plate and sole board.

### **Geometry**

- All standards shall be vertical
- All ledgers and guardrails shall be horizontal
- All transoms shall be horizontal
- All standards, ledgers and guardrails shall be staggered

### **Bracing**

- Braces start from ground and extend to top platform at 45 degrees

### **Platforms/decking**

- All platforms shall have an appropriate width (70 cm minimal)
- All platforms shall be secured against uplift or horizontal movement
- Platforms shall have toe/kick boards, at a minimum height of 15 cm, fixed to the scaffold
- All lap planks shall be tied/cleated
- Gaps in the platforms shall not be more than 5 cm

**GUIDELINE GHS 07**

- The platforms should be no more than 30cm away from the work face. If so an internal guardrail is required

**Access to Platforms**

- Appropriate access shall be provided to every working platform
- Ladders shall be secured top and bottom
- Ladders shall be positioned at a 4 to 1 ratio
- Ladders above the second lift shall be located within the scaffold frame

**Ties**

- Ties shall be placed every 4 to 5 m horizontal and vertically
- Ties shall be staggered every second floor lift

**Guardrails**

- Guardrails are required on all platforms
- Height of guard rails shall be between 90 – 110 cm
- Platforms shall have a mid-rail
- Internal guard rail required if platform is further than 30 cm away from work face

**Raking Members**

- Raking members shall be connected to the standards
- Raking members shall have a horizontal tube connected back to the scaffolding

**Erection and Dismantling**

- Working procedure for scaffolders working at height shall be prepared, Risk Assessment shall be completed
- Scaffolders shall install guard rails, decking and ties as soon as possible when erecting
- PPE must be worn by scaffolders

**General**

- Screening may be required to protect the surrounding areas
- Screening material shall be suitable for the conditions and fixed correctly (will not become a “sail” in windy conditions)
- Scaffold shall be adequately protected against vehicle collision

**GUIDELINE GHS 07**

- Scaffolding shall not be overloaded - material loads shall be distributed around the support standard bearing members
- Walking space shall be allowed on platform where materials are also stacked

## UNDERGROUND SERVICES

Underground Services present significant safety issues. Damage to electrical cables can cause explosive effects of arcing current and flashes leading to severe burns or even death. Gas leaks can cause fire or explosions. Damage to water/sewerage pipe work and cabling can cause significant material and consequential loss.

Damage can be caused by excavation or tasks which penetrate the ground such as jack hammering, driving in poles, stakes and pins, piling and the alike.

Procedures and basic principles for safely working with underground services are listed below for consideration when identifying and controlling project specific risk.

- All interface activities on site with underground services should be controlled by the UNOPS Work Permit system – refer to **Form HS14**. Key safety issues relating to the inherent risk involved in excavation (underground services) are identified in the Permit system and appropriate controls and protection measures will be required to be put in place before works are carried out.
- Treat all services as live, despite location, appearance and physical condition. Always check and reconfirm the actual service you are dealing with, people do mistake one service for another.
- Make sure there are plans of the underground services, seen and studied before any work carried out. Mark all positions of the cables and pipes using paint or other waterproof markings on the ground. Use cable and pipe locator to trace electricity cables and metal types.
- Service Provider should be contacted for information on location of all underground services.
- Look for surface signs of services present, example gas meters, service connections into property/building locations or public services.
- Hand dig trial holes as required to confirm location of services in the work area (spades and shovels are safer than picks or forks)
- Watch out for signs of services while work continues, carry out repeated locator checks.
- Backfill around services with fine material and lay warning tiles/tape as required, backfill method should be agreed by Services provider where applicable.
- Do not attempt repairs on damaged services, seek trade specific professional assistance.
- Do not use hand-held power tools directly over or alongside main electrical cables.
- Do not use exposed services as a convenient step, handhold or shelf within the excavation.
- Do not handle or attempt to alter the position of an exposed service.
- Do not install plant close to an existing service, or build them into a manhole or other structure.

**GUIDELINES GHS 08**

- Protect an existing service that will remain open for some time, with ether timber, sandbags etc.
- Services spanning across and excavation should be well supported.
- Note and record on as-built drawings any additional or out of location services discovered.

## WORKING AT HEIGHTS

Falls from height are the largest single cause of serious injuries and deaths in infrastructure/construction. Working at height must be treated as a high risk activity for those at height and those working below

Planning is vital before you begin working at height. Anywhere you are at risk from a fall then a hazard and risk identification should be carried out

General issues for consideration when working at heights:

- Ensure safe access and egress to work face
- Installation of guardrails to perimeters and penetrations
- Use of setting up fall protection barriers (safety mesh and edge protection)
- Consider the risks involved from objects falling from above
- Review and implement suitable means to prevent fall
- Walking and working surfaces are strong enough to support workers
- Do some areas require isolation and barricading

Safe Ladder Use:

- Extended use of ladders in lieu of working platforms is prohibited.
- Check equipment before use, no splits or cracks in stiles and rungs, none missing or loose
- Remove defective ladders from site
- Do not position ladder in the place where it can be struck by passing vehicle or where it can be knocked by a door or window,
- Ladders should only be used when other platforms have been explored but not able to be used. Work on ladders should only be used in short durations
- Ladders need to be set on a firm base and leaning at the correct angle. One (out) to Four (up) ratio acceptable
- Ladders should be tied at the top and extend a safe distance (1 m or 3 rungs) above the landing height
- The base of the ladder should be staked to prevent slipping
- Clean footwear from excessive mud/soil before climbing the ladder
- Always face the ladder when climbing; always have three points of contact on the ladder at all times
- Do not over reach from the ladder; always move the ladder to the new work face

**GUIDELINE GHS 09**

- As much as possible avoid carrying out loads up ladders – hoist it up.
- For step ladders: all four feet must be in contact with the ground, rungs shall be facing the work activity, never work higher than three steps down from the top of the ladder

**Use of Harnesses Safely:**

- Harnesses should only be considered as a last option after platforms, mobile towers, scaffolding, and where no other fall restraint is available
- Harness equipment must be fully inspected before use. Include wedding, leather, checking for cuts, cracks, tears, abrasions and damage. Check hooks and karabiners and all stitching
- Wet equipment and harnesses should be hung to dry naturally
- Confirm a firm and secure anchorage points and lines (best above head height). All anchorages should be installed by a competent person, design by an Engineer and checked
- Do not tie, loop or place the harness lanyard near small or sharp items during use, this could mean the lanyard fails in the event of a fall situation
- Users should be trained in harness use by a competent person
- Never work alone while using a harness, if you fall you may need assistance to be rescued
- Have established rescue/emergency procedures in place

**Mechanical Elevated Work Platforms (scissor hoists, cherry pickers, crane baskets):**

- Checked the machine is the correct type for the task intended
- Trained operators are required for the machinery in use
- Do not use the machine as a crane or have it overloaded
- The machine requires regular inspection and testing, check before use
- Ensure the machine is set up on firm ground with all support legs fully extended where applicable
- Operate well away from overhead services
- Workers on platforms are to wear harnesses
- Ensure the lanyard is just long enough to provide free movement within the confines of the platform
- Do not allow material waste and rubbish to build up on platform
- Ensure tools are secured to the working platform

### General

- All ladders/trestle's should be individually tagged.
- Ladders/Trestle's must be stored correctly.
- Ladders must not be painted - paint can hide damaged parts.
- Any defected Ladders / Trestle's should be removed from site immediately.
- Ladders/trestles shall be weekly inspected and record of the inspections shall be kept on site.

## **SIGNIFICANT ACCIDENT OR INCIDENT RESPONSE**

A Significant Accident or Incident is an event with serious or extreme consequences. Such events would include multiple major injuries, a fatality, a major environmental incident or an extreme failure of a product, structure, element or service.

This guide does not replace relevant UNOPS Organizational Directives (OD's) and Administration Instructions (AI's) relating to communications, reporting lines and responsibility with regard to safety, security, risk and continuity planning. The aim of this document is to assist in the site team's immediate response to a significant event on a construction project with the aim to attend to immediate physical needs of any injured parties and contain and control the overall situation to minimise further loss, injury or damage.

### **Immediate Action**

UNOPS most senior member of the site team at the scene of the Accident/Incident should seek to respond in the following way.

- Immediately take control of the situation and implement the relevant steps outlined below.
- Contact relevant emergency services (local, government, UN, if available)
- Ensure that injured persons are attended to by first aiders and secondly that appropriate steps are taken to facilitate further critical medical treatment (i.e. stabilise and wait for ambulance/emergency services, or facilitate emergency transport of injured to nearest clinic/doctor/hospital facility)
- Make the site and surrounding area safe, this may require emergency barriers and cordons depending on the nature of the incident. The evacuation of the site and neighbouring properties may also be necessary.
- Notify your UNOPS line manager of the situation
- Leave to accident location as undisturbed as possible. However it may be required to disturb the location to affect a rescue or stabilise an area to make it safer where a dangerous situation still exists.
- Endeavour to ensure that injured workers or employee's next of kin receive the earliest notification of the accident (this may be in association with the local police and UNOPS senior management where appropriate).

### **Secondary Actions**

Once the situation has stabilised with injured persons off the site and receiving treatment and/or the dangerous incident is controlled, situation stable with little or no risk of further injury or damage, then the following actions can be considered.

- Begin to gather evidence regarding the Accident/Incident. Take photos, video and sketches as required. Identify witnesses to the event and record statements.
- Begin to fill out the Accident/Incident report for significant events – **Form HS16**.

**GUIDELINE GHS10**

- UNOPS senior management should meet as soon as possible to plan and establish roles and responsibilities for managing the incident.

Tasks which may be required include

- Establishing ongoing contact, support and relationship with injury parties and their families
  - Establish a project/site recovery plan to allow resumption of works
  - Establish an appropriate internal communications plan for communicating with the donor, donor community, and beneficiary, local media/press, police and general public
  - Insurance and or legal considerations to be reviewed
  - Possibility of external investigation? Plan to manage and co-operate with investigators if applicable
  - Consider the need to establish a UNOPS Accident/Incident investigation team
- Maintain all records of evidence and any materials or documents relating specially to the incident.
  - The aim of any report or investigation has to be to understand the causes of the incident in order to prevent recurrence. Ensure clear actions and tasks are identified and undertaken to eliminate the causes of the incident before operations on the project/site resume.

## **CONFINED SPACE**

### **1. Introduction**

Confined spaces can include unventilated rooms and spaces, cellars, tunnels, shafts, risers, ducts, tanks, sewers, excavations, manholes, pipelines and boreholes.

Any work carried out in a confined space is recommended to be controlled by the project work permit system and procedures, please refer to **Form HS12**.

Any work carried out in a confined space should be subject to a Hazard and Risk Assessment review as detailed in **Form HS09**.

All Personnel working in a confined space are required to be specifically trained to work in this environment.

### **2. Potential Hazards**

Oxygen depleted or enriched spaces, possible toxic and or flammable atmosphere i.e. gas fumes, biological hazards including disease and noxious substances and sludge, concentrated gas and vapour produced from the work task itself.

### **3. Safety/Planning Considerations**

- Trained, experienced and competent workforce and supervision to carry out the works
- Is the required safety equipment available, expertise and experience in to operation, e.g. Gas detection equipment, safety harness, lifeline, support and winch, breathing apparatus, specific PPE etc.
- Requirement for mechanical ventilation
- Emergency planning, communication methods and rescue plan
- Temporary safe lighting
- Non spark tools and equipment
- The entrance/opening to the space requires fall protection/barriers/fencing

## **SITE ESTABLISHMENT**

### **Preparation works**

Prior to work commencement on site, a survey of the site and site surroundings incl. condition of the existing access roads shall be carried out. The survey should be documented with the photography records.

It is recommended that, before work starts, any parties who will be affected by the works are notified of intention to commence work.

Particular attention shall be given to the landowners, where work has a potential to interface with the livestock. Appropriate measures shall be put in place to separate livestock from construction site and site facilities.

### **Protection to existing structures, materials and items**

Any structures which cannot be removed for the duration of the works and which may be affected by the works i.e. buildings, trees, overhead cables must be protected to avoid accidental damage.

Any items or materials which may be re-used on the site, or which may be contaminated or damaged as a consequence of the works, should be removed and stored in a safe area, so that it may be replaced upon completion of the works.

### **Site boundaries**

The site boundaries shall be established. They shall be clearly marked and preferably fenced off to prevent unauthorised access and minimise potential for theft and vandalism.

Fencing with lockable gates shall be provided if possible. Additionally, provision of the security guards can be considered.

Site boundary and fence shall be properly maintained and regularly checked throughout duration of the project. Any damage to the fence shall be fixed as soon as possible.

### **Information board**

Access to site shall be clearly marked and information board shall be displayed at the site entry. The board should contain information regarding project and safety rules on site. The sign shall be made of a durable material and maintained in good condition throughout project life. Any damage to the sign that makes the information posted on it unreadable shall be promptly repaired.

The information board shall be a minimum of 1.2mx1.5m or size that allows for easy reading of the posted information. It should be securely fastened and prevented from fall.

All descriptions shall be made in two languages: English and local language.

Depending on the local conditions and regulatory requirements, additional information may be required to be displayed on the notice board. Required information should be therefore incorporated for compliance purpose.

Following format is recommended to be used:

**GUIDELINE GHS12**

Project Name:					
Project Duration:					
Funded by: [name and logo of the Donor if available]		Partner: [name and logo of the Beneficiary, if available]		Implemented by:  <b>UNOPS</b> Operational excellence for results that matter	
					
<b>WARNING</b> Construction Site	<b>No unauthorised access</b>	<b>Safety helmet must be worn</b>	<b>High visibility clothing must be worn</b>	<b>Protective footwear must be worn</b>	<b>All visitors must report to the office</b>
[in local language]	[in local language]				

**Site clearance**

The site clearance shall prepare site for the construction activities. Depending on the scope of work defined in the contract, it may involve:

- demolition of the existing structures,
- removal of waste and vegetation,
- stripping the surface layer of soil (topsoil).

Any areas identified as areas of environmental, archaeological or cultural protection shall be fenced off or protected in accordance with the recommendations of the Environmental Management Plan.

Trees removal (only if necessary) shall be undertaken in accordance with the agreements with the relevant authorities, and loss of vegetation must be compensated by final landscaping design i.e. trees' planting.

If topsoil or other excavated material are stored on site, it should be stored in way that minimises the dust nuisance (stockpiles covered or sprinkled with water) and prevents washing out of stored material and siltation of the adjacent area (particularly roads and water bodies).

As much as possible, site clearance shall be limited to the area needed for construction and site facilities, to minimise ground erosion. If that is not possible, erosion control measures shall be implemented – refer to **Guideline GEM 01** – Generic Register of Environmental Impacts.

**Site planning**

Following elements should be considered and included in the site planning:

- Office accommodation
- Welfare facilities – refer to **Guideline HS13** for details
- First aid – provision of the first aid facilities in accordance with the national laws and regulations, as a minimum first aid kits and boxes should contain individually wrapped sterile plasters (assorted sizes), sterile eye pads; triangular bandages, preferably sterile; safety

**GUIDELINE GHS12**

pins; large and medium sterile, unmedicated wound dressings; disposable gloves, eye wash.

- Fire prevention measures - refer to **Guideline HS05** for details
- Appropriate access and traffic routes that as much as possible segregate vehicles and pedestrian traffic, preferably traffic management plan should be developed that will show traffic routes, pedestrian routes, loading and unloading areas, turning points, carparks, refuelling point. Appropriate warning signage should be provided for the site and maintained throughout project duration.
- Storage for materials, tools, plant, waste etc. incl.
- Where possible and reasonably practicable connection to the services such as water, sewer, electricity shall be made, if not temporary supplies can be provided utilising generators, bowsers, mobile phones etc. Connection to the relevant services shall be agreed with relevant authorities, so that it does not have detrimental impact on the adjacent community.

Any connections shall be clearly marked for ease of identification and access.

Site accommodation (office, welfare facilities) shall be regularly cleaned and maintained throughout project duration.

**Storage**

Appropriate storage shall be provided for all materials, tools and plant.

All materials delivered to site shall be stored in secure location and prevented from damage. The materials shall not be stored in areas prone to flooding.

Any hazardous materials (incl. fuel, oil and chemical) shall be kept in the location that will prevent unnecessary exposure to staff and public (as much as possible away from neighbourhood houses) and minimise risk of contamination i.e. in one place, if possible away from watercourses, drainage, on impermeable surface, in bunded area or on trays. It is recommended that distance from the houses and human houses should be 50m.

It is recommended to store small amount of the materials that may contaminate ground or water.

Positioning of the equipment and equipment parking should consider potential nuisance: dust, noise, to the staff and neighbourhood.

Servicing of the plant, equipment and vehicles shall, whenever possible, be carried out at a designated area, which is constructed in a way to allow for containment any spillages.

**Generator**

If generators are used on site to produce energy, where possible they should be set up on an impermeable surface (hard standing, drip tray) away from drains and watercourse. If the generator has built-in bund, ensure that the bund does not contain holes drilled in.

Where generator is supplied from external fuel tank, hoses and couplings shall be protected from damage. The generator and connections shall be regularly checked and properly maintained. It will make generator to operate more efficiently and can reduce level of the noise and emissions.

It is recommended to use generators that pull fuel in from the external tank rather than fuel is being pumped into the generator. This will stop the flow of fuel if the generator breaks down.

**Site notice board**

It is important that the critical information related to the site operation and health and safety is visible. Each site shall display as a minimum the following information:

**GUIDELINE GHS12**

- Site plan, including emergency arrangements,
- Emergency contacts,
- Site rules,
- H&S and environmental alerts,
- Notes of the safety and environmental Task Force meetings,
- Permits applicable to the work undertaken.

Following layout may be used:

Project Name:			
Information about Donor/ Beneficiary Contractor Key personnel	Site Plan incl. emergency arrangements, traffic routes etc.		Emergency Contacts
Site Rules			
H&S, Env alerts	Notes of the Task Force meetings	Permits for the day	

Depending on the local regulations and other requirements, additional information such as insurance certificates, relevant policies may be required to be displayed. Such information should be also included in the information notice board.

**Site Reinstatement**

Unless the contract specification states otherwise, the site should be reinstated to its original condition. The area should be left in a condition that will facilitate vegetation growth and provide for a proper surface drainage and prevent erosion.

Site accommodation (offices, welfare facilities) shall be dismantled and removed from site.

Any damage arisen as a consequence of the works shall be repaired.

If ground has been contaminated, it shall be removed from site into the authorised disposal facility if possible. Removed material shall be replaced with uncontaminated materials.

Any services connected to site shall be disconnected, relevant authorities shall be notified.

A temporary fencing shall be removed and properly disposed, provided that is not required to be left in place by the contract. All post holes must be filled in. All warning and information signs shall be also removed from site.

Prior to leaving the site adjacent roads and footpaths that may have been affected by the construction shall be checked for cleanliness and fitness for use. If possible, photos shall be taken to document their condition.

## WELFARE FACILITIES

### General

Construction workers need adequate toilet and washing facilities, a place to prepare and eat their food and somewhere to store clothing. Good facilities can positively benefit health and well-being and can help to prevent disease.

When planning welfare provisions, the following should be considered:

- the nature of the work to be carried out - for example, provision of showers if the project involves hazardous substances or very dirty work,
- the distance workers will have to travel to the welfare facilities;
- the duration of the work and number of different locations;
- the numbers of people who will use facilities;
- the cleaning and maintenance of the welfare facilities;

Facilities should be easily accessible to the site workers. They should be cleaned frequently and kept in working condition. They shall be designed to provide workers with adequate privacy, including ceiling to floor partitions and lockable doors. As minimum facilities should include:

### Toilets

An adequate number of toilets should be provided. 1 toilet per 10-15 workers will be acceptable.

As far as is reasonably practicable they should be flushing toilets with running water connected to the sewer system. Toilets should be adequately ventilated, lit and cleaned frequently.

If provision of such toilets is not possible, other locally specific facilities shall be provided – refer to Guidance GEM 04 – Waste Management for further advice.

Provision of the toilets shall take both men and women into consideration – provision of unisex toilets may be acceptable, provided they are in a separate, lockable room, which can be used one person at a time, and that such arrangement is socially and culturally acceptable.

### Washing facilities

Adequate washing facilities shall be provided, preferably next to toilets and changing areas. Washing facilities shall consist of:

- a supply of clean water (as far as reasonably practicable – cold and hot running water)
- suitable means of cleaning i.e. soap and suitable means of drying i.e. towels
- sinks, preferably large enough to wash face, hands and forearms
- sufficient ventilation and lighting.

1 washing basin per 10-15 workers will be acceptable. Men and women can share sinks used for washing hands, face and arms, provided that such arrangement is socially and culturally acceptable. If not, separate washing facilities for men and women shall be provided.

If showers are provided, they should consider both men and women. Unisex shower facilities can be provided if they are in a separate, lockable room, which can be used by one person at a time and that such arrangement is socially and culturally acceptable.

### Rest Facilities

Workers shall be provided with shelter from wind, rain and sun. The rest facilities should have:

**GUIDELINE GHS13**

- adequate numbers of tables and seating
- a means for heating water for drinks and for preparing food
- adequate heating and ventilation

Rest areas shall not be used to store plant, equipment or materials.

A supply of clean and safe drinking water should be provided. Where possible, it should be supplied directly from the mains or boreholes.

If a borehole is provided, it should be established within the site, ideally located near the perimeter of the site, for potential use by the local community once construction is completed.

If water is stored, it must be protected from possible contamination.

**Storage for clothing**

Arrangements should be made for secure storage of personal clothing not worn on site and for protective clothing needed for site work.

Men and women shall be able to change separately with consideration for their privacy.

Provision should be made to allow wet clothing to be dried, however clothing should not be placed directly on heaters due to the risk of fire.

**Living accommodation**

Preferably, no living accommodation should be allowed on site.

However, if workers are from remote locations, where adequate transportation between the site and their homes or other suitable living accommodation is not available, suitable living accommodation should be made. For further guidance regarding provision of the living accommodation refer to Guideline GHS 14 – Construction Camp.

## **CONSTRUCTION CAMP**

### **General**

Preferably, no living accommodation should be allowed on site.

However, if workers are from remote locations, where adequate transportation between the site and their homes or other suitable living accommodation is not available, appropriate living accommodation should be provided.

Before constructing any facilities, other options should be considered (hire workers from the local area) and all potential impacts must be evaluated (impact of construction, effect of a new housed labour force on community, health and safety impacts etc.). These assessments should form part of a project's Environmental and Social Impact Assessment.

The key standards that need to be taken into consideration, as baseline, are those contained in the national local regulations. As they may not be explicitly related to the construction of the workers camps, they may provide guidance in terms of the general health, safety, security, fire safety, electricity and sanitation.

In case of absence of such standards, following guidelines should be followed.

### **Location**

Construction camps **SHALL** not be located in the areas prone to flooding, landslide, or other natural disasters. Construction camps must not be located in the conservation, ecologically or archeologically sensitive areas. If that is not possible a suitable mitigation measures **SHALL** be undertaken incl. screening, fencing etc.

If feasible, the camp should be located within a reasonable distance from the construction site to minimise the travel needs as much as possible. Transport from the camp to the construction site **SHALL** be safe and free. If the construction camp is located next to the construction site, a clear boundary between the camp and site **SHALL** be established.

Location of the camp must be agreed with the land owners and as much as possible minimise land intake.

The location of the camp must not compromise life of the local community, by restricting access to resources (water, land) and services (markets, communication).

The camps must not be located in the area where their presence may contribute to any conflicts with/between local communities.

### **Setting up**

The boundary of the construction camp shall be clearly marked. Preferably camp should be fenced off to prevent unauthorised access and provide protection from animals.

Clearing, levelling, grading of the site should be undertaken; however no clearing should take place beyond the established site boundary. Where feasible, cleared material should be stock piled and used for the reinstatement work.

Appropriate measures **SHALL** be implemented to prevent erosion of the camp area and protect adjacent areas from the impacts of the surface water run off. As a minimum suitable drainage should be provided – for more information refer to **Guideline GEM 03 – Protection of Water**.

A suitable communication routes (roads and walkways) and parking areas should be established, if necessary.

Fuel wood is a constant resource needed in the camp, so a site should be located where dead wood is available.

### **Services/Utilities:**

A supply of clean and safe drinking water **SHALL** be provided. Where possible, it should be supplied directly from the mains or boreholes.

If a borehole is provided, it should be established within the site, ideally located near the perimeter of the site, for potential use by the local community once construction is completed.

If water is stored, it must be protected from possible contamination.

Quality of the drinking water should be regularly monitored.

The camp shall be provided with the suitable storm water drainage to prevent land erosion and avoiding the stagnant water that may potentially create environment for disease vectors.

Waste management should be introduced to the camp. Where possible waste should be segregated: organic from non-organic, hazardous from non-hazardous. Opportunities for introduction of the waste recycling and reuse schemes should be investigated and implemented if appropriate.

Waste **SHALL** be stored in a separate area, at least 30m away from the water sources and accommodation rooms. The storage should be on a wooden, metal, or concrete stand.

The containers must be emptied at regular intervals (to be determined based on temperatures and volumes generated) to avoid unpleasant odours associated with decaying organic materials.

Waste disposal should be undertaken according to the instructions outlined in the Guideline GEM 02 – Solid Waste Management.

Waste water facilities shall be provided in accordance with the guidelines specified in the Guideline GEM 04 – Wastewater management.

Adequate first aid and medical facilities must be provided in accordance with the national laws and regulations. As a minimum first aid kits and boxes should contain individually wrapped sterile plasters (assorted sizes), sterile eye pads; triangular bandages, preferably sterile; safety pins; large and medium sterile, unmedicated wound dressings; disposable gloves, eye wash. First aiders or medics must be identified.

Fire prevention measures must be established within the site, provision of the fire extinguishers and emergency protocol in case of the fire detection is necessary.

### **Accommodation - Room**

Living accommodation should meet requirements for the health, safety and security of individuals and take into consideration the local cultural context.

Following requirements should be considered in the design of the accommodation:

- As much as possible room/dormitory design and equipment should strive to offer workers a maximum of privacy; that may include provision of the curtains as a minimum,
- As a minimum 4m<sup>2</sup> per person (no separate space for cupboards), 3m<sup>2</sup> per person (if separate space for cupboard is provided) should be assured,
- Number of the collective room should be minimised, 2-8 workers per room will be acceptable,

**GUIDELINE GHS14**

- A separate bed for each worker **SHALL** be provided.
- Space between the beds **SHALL** be as a minimum 1m.
- Double deck bunks should be avoided, triple deck bunks are prohibited.
- Facilities for the storage of personal belongings for workers should be provided.
- Rooms should be adequately lit, heated and ventilated. If feasible both artificial and natural lighting should be provided.
- Exposure to noise and odour should be minimised
- The living accommodation must be separate from quarters for animals
- Sanitary and washing facilities shall be provided in accordance with the Guideline GHS 13 - Welfare Facilities. Men and women workers should be provided with separate sanitary, washing and sleeping facilities.

**Management**

The contractor is encouraged to set the camp management plan that will address following:

- Code of conduct for the camp (standards for behaviour of the workforce incl. appropriate dress code and standards of the hygiene)
- Camp emergency plan (fire and medical emergency, evacuation rules)
- Security arrangements,
- Liaison with the local community,
- Disciplinary measures for breaking camp rules

Following activities should be forbidden:

- gambling,
- fighting,
- distribution and use of drugs, alcohol, firearms and weapons,
- prostitution and distribution of the pornography
- no hunting, fishing or unauthorised gathering

**Decommissioning**

Following removal of the temporary camp the site shall be reinstated to at least the condition existing prior to establishment so the camp to the satisfaction of the owner or relevant authority.

**GUIDELINE GHS 15**

1. Always wear PPE.



2. No site induction - no work.



3. No work for people under influence of alcohol or drugs.



4. Our site is tidy and organised – keep good housekeeping.



5. All ladders and scaffolds must have safety tags.



6. All excavations must be secured/fenced off.



7. Notice risk, hazards, unsafe conditions – report them to your (UNOPS) supervisor

**FORM HS07****VISITORS INDUCTION BRIEFING**

<b>Project Title</b>	UNOPS office in Ukraine UAOC. Support the Rule of Law Reforms in Ukraine in the Areas of Police and Public Prosecution and Good Governance (PRAVO POLICE) Project		
<b>Contractor</b>			
<b>Date of issue</b>		<b>Revision</b>	

- The purpose of this briefing is to help prevent accidents and keep your visit as safe as possible. Construction sites are inherently dangerous environments presenting potentially hazardous conditions and situations which change regularly. UNOPS works diligently to maintain a safe workplace, but ultimately you must be responsible for your own personal safety while on site.
- No Visitor is permitted to carry out any physical work on the site.
- All Visitors must be accompanied on site by a person who has been fully inducted under the UNOPS Health and Safety Induction and Site Safety Rules procedure.
- All Visitors must wear a hard hat, reflective safety vest and closed toe sturdy shoes while on site. UNOPS will provide hard hats and reflective safety vests for the Visitors. Visitors may wear their own protective equipment provided it is inspected and approved by the UNOPS representative.
- No persons under the influence of alcohol or drugs, or appearing to be impaired will be allowed onto the construction site.
- Smoking is not permitted on the construction site as it presents a health and fire hazard. Smoking is permitted in designated areas only.
- Use of mobile phones is limited to site office area only.
- There may be tools, materials, cables, or other tripping hazards on the floor. There may also be open pits, steps in the floor level, suspended walkways and other fall hazards. Please watch where you step to avoid a fall.
- There may be workers operating directly above you as well have scaffolding, formwork or other equipment and materials at head height. Please beware of overhead obstructions and always observe the activities being carried out above you.
- Vehicles and heavy equipment may be operating on the site. Please remain outside the operating envelope of heavy equipment at all times. Do not stand or walk under any load being lifted by a crane. Do not stand behind operating vehicles, remember, if you can't see the vehicle operator, then they can't see you.
- List and identify the significant current Site Hazards requiring the attention of the Visitor: [ .....]
- Outline the project Site Emergency and Evacuation procedures as detailed on Form H&S02.

**FORM HS07**

- All Visitors must follow the instructions and directions regarding issues of Health and Safety of the appointed visit supervisor.

# HOW TO IMPLEMENT THE UNOPS HSSE LEVEL ONE AND LEVEL TWO REQUIREMENTS

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## SECTION A: General

### Introduction

The purpose of this Guideline is to assist anyone who wants to implement HSSE Level One or Level Two for a UNOPS location.

### At which Level has your country been classified?

The Country Level is determined by the Regional Director in consultation with country or hub directors.

### What is the significance of the Levels?

The Levels are meant to address the realisation that the operating environments and maturity of different locations require different Levels of detail and emphasis for HSSE:

Level 1 is for particularly challenging locations where the security situation and/or exposure to natural disasters or other hazards make it difficult for personnel to implement the full requirements of the HSSE system. It is the minimum that any UNOPS operation should have in place. No UNOPS operation should operate below this level if we are to avoid harm to people and the environment. This Level is not meant to be the final target for UNOPS operations, but to be a first step towards fulfilling all the requirements of the UNOPS HSSE policy.

Level 2 meets the mandatory HSSE requirements found in the HSSE policy but does not go beyond compliance.

Level 3 seeks to establish excellence and has a focus on international best practices and continuous improvement. The operations at this Level meet the requirements of certification to ISO standards for HSSE.

**GUIDELINE GHSE 01**

### What help is available?

The HSE team may be contacted ([hse@unops.org](mailto:hse@unops.org)) for assistance with your general questions, the use of templates for the system, and training via Webex/Skype.

Requests for face-to-face training for operational centres or operational hubs should be sent to [hse@unops.org](mailto:hse@unops.org) with the training coordinator at the regional office in copy.

## SECTION B: Level 1 requirements

### Applicability of the requirements

The HSSE requirements apply to all operations in a country. This means that they apply to project sites, office premises, warehouses and other facilities under UNOPS control. Specific practices that are applied to construction sites such as working at heights controls, risk assessment for key tasks and handling of concrete washings apply to any maintenance or refurbishment work done at the office facilities. Refer to section 4 of the Executive Office Instruction (EOI.CSG.2017.01) on HSSE levels to see the type of UNOPS services that are exempted from the application of the HSSE requirements.

### Putting in place Level 1 requirements for your country operations

The following are actions that may be carried out to establish Level 1 requirements:

1. Find out the HSSE level of the country from the HSSE intranet site under the SSC unit.
2. Choose an HSSE Coordinator (Focal point).

The head of office must approve the HSSE coordinator appointment and allow the individual to devote 10 % of his/her time to HSSE coordination. The coordinator must ensure that all units/projects and facilities are on track with HSSE implementation and have the necessary records (where records are needed). The Coordinator must also follow up on any issues and get additional support from HQ on behalf of the team, if necessary. He/she also follows up on corrective actions needed. In addition to having an HSSE Coordinator for each country, every project with a site needs an HSSE coordinator. For projects with low HSSE risk (the HSE team at HQ may help to determining the level of risk as necessary), this person does not have to be exclusively dedicated to HSSE. HSSE coordination could be an additional role, in addition to their regular duties. On the other hand, projects with high HSSE risk may require at least one dedicated HSSE practitioner. Because of the nature of duties that the HSSE coordinator

**GUIDELINE GHSE 01**

undertakes, it is important to ensure that the person chosen for the HSSE coordinator role has adequate authority and influence. It is also important to ensure that adequate funding is included in project proposals to cover the cost of HSSE coordinators. HSSE coordinators shall receive training and support from the HSE section at HQ.

3. Prepare HSSE Plans

The HSSE plans are key to being able to meet the HSSE requirements. Meeting requirements is not possible without having the applicable HSSE plans. Each project in an HSSE Level 1 country must have plans HS02 - Health and Safety (HS), and EM02 - Environment and Social (ES). HS02 and EM02 are the short versions of the project HSSE plans.

**ES Screening**

Note that projects must undergo environmental and social screening during the pre-engagement stage. The results of the screening informs the project on whether the Social & Environmental Management System (SEMS) is applicable, and whether an external assessment (ESIA) rather than an internal assessment of impacts is required. Refer to section 2 of the Executive Office Instruction (EOI.CSG.2017.01) on HSSE levels to see the type of UNOPS services that are exempted from ES screening.

Appendix 1 has a list of templates that must be filled in to support the abovementioned plans.

4. The project manager and his/her team must communicate HSSE requirements clearly to contractors throughout the project life cycle.

Carry out meetings with contractors to explain the HSSE & Quality performance you expect from the contractor. The required meetings are:

*Pre-bid meetings*

*Commencement meetings and periodic progress meetings for reviewing HSSE performance*



**GUIDELINE GHSE 01**

\*Note that the meetings do not have to be dedicated to HSSE. They can be part of regular meetings that discuss other issues such as progress of project implementation.

5. Weekly HSSE (project) site inspections must be carried out by UNOPS project personnel, to identify problems and rectify them. The inspections should also be used to reinforce positive behaviours. During inspections, UNOPS personnel must also check to ensure that there is no child labour, discrimination, human rights abuses and other social issues. Results of this check must be formally recorded. This can be done on an inspection form. In addition, there must be at least one HSSE inspection per year, of the office and other facilities under UNOPS control.
  
6. Maintain awareness of HSSE among UNOPS and contractor personnel, through induction, toolbox talks, discussion points in meetings
  - a. Use Guidance Notes on UNOPS site rules (GHS01 & GHS 15) to create site rules that may be displayed on site and used for awareness in induction materials. Make sure you modify the information to make it relevant to your context. Include aspects on environmental management that are relevant to your site. Consider translating the rules into the local language if this will enable workers to understand better.
  
  - b. Ensure that all employees have had an HSSE induction that gives them information about the key issues that they need to be aware of at your location. All employees should be reminded of key aspects of the HSSE system at least once a year. All new employees must attend induction. All visitors to project sites must also be inducted.

*Meeting with personnel*



*Site rules*



*Induction for contractor personnel*



**GUIDELINE GHSE 01**

7. Secure premises and sites

In line with UN Security Management System requirements, it is assumed that UNOPS premises in any country already have access control established.

Access control should be established for project sites, warehouses and other operations related-premises. In this case, access control refers to a physical barrier that stops unauthorized or unsupervised entry into UNOPS operations. The reason for access control is to ensure that members of the public are not exposed to hazards at UNOPS sites. The other reason is also to ensure the security of people and equipment. For construction sites, ensure there are signs (including in local language), that show that access is restricted. Additionally, ensure there are adequate signs to warn people and advise them on mandatory Personal Protective Equipment (PPE) required on the site.

The nature of the site and its surrounding areas is important in choosing the appropriate fencing. Below are some examples.

*Mesh wire fencing with site access signs*

*Zinc sheet fencing site access signs*



8. Emergency arrangements

Every UNOPS facility must have emergency arrangements in place. These arrangements consist of the identification of emergency scenarios possible at the location, emergency procedures and checks for emergency preparedness (use form HS03 and HS 04 for documenting this).

**GUIDELINE GHSE 01**

*First aid equipment*



*Firefighting equipment and evacuation plan*



*Safety and Emergency Instructions*



9. All individuals at construction sites, including visitors must have PPE. PPE for working at heights such as safety harnesses need to be regularly inspected.
  
10. UNOPS does not tolerate discrimination based on ethnicity, gender, place of origin, religion etc. Ensure that there is no discrimination at your work places and at contractor project sites. For instance, provide conditions and opportunities favourable for both men and women.

*Good site practice: Men and women working together with appropriate PPE*



**GUIDELINE GHSE 01**

*At this site improvements are needed: Only men given head and hands protection*

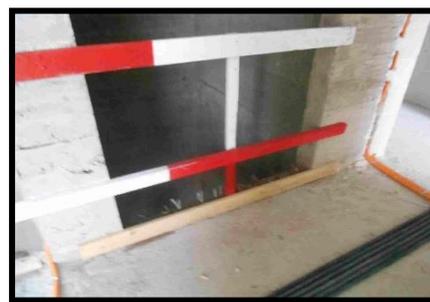


The ES Plans should include actions or a description of how gender is going to be mainstreamed. Guidance materials for gender mainstreaming are available.

11. Fall from height prevention and physical barriers

All work places where there is the possibility of a fall of 2m or more must have edge protection installed. Edge protection refers to a physical barrier that stops someone from falling. If the work is to be carried out from a platform, then the platform must be a standard scaffold or standard mobile platform.

*Good site practices: Appropriate edge protection in place*



**GUIDELINE GHSE 01**

*Good site practice: Suitable scaffold netting*



12. Machine guarding, ensuring there is no exposure to moving parts:

*Before*



*After*



13. Traffic must be managed at road construction sites to ensure the safety of construction personnel and the public. Control measures include temporary diversions, barricades, light signals and other warning signs. There must be a distinct separation between working or walking areas and the route that construction vehicles and ordinary vehicles follow. There must be no excuse for not using proper light signals and signs.



*Site with road signs, light signals and demarcation of the work area*

**GUIDELINE GHSE 01**

14. Borrow pits developed during road construction or any other construction that requires borrowing of materials should be managed so that they do not present a hazard to people and wild animals. Examples of how to manage these pits include profiling slopes to reduce steepness and water carrying capacity, barricading or fencing to reduce access.
  
15. Provide an eating area where personnel may store and eat their food without risk of contamination from the work area. Also, provide toilet facilities for men and women. Ensure these facilities have clean, running water and appropriate waste disposal facilities. The facilities should be hygienic and culturally acceptable. If there is no municipal sewer line, the site must have a septic tank and soak away system or similar system, or use standard disposable toilets.

*i.*



*ii.*



*iii.*



*These pictures show i. a portable toilet at site, ii. eating area, and iii. provision of clean water, soap and paper towels.*

16. Check for compliance requirements:

Compliance requirements come from:

- a. National policy and legislation,
- b. Donor requirements,
- c. UNOPS policies and procedures,
- d. Stipulations from other affected and interested parties.

**GUIDELINE GHSE 01**

These requirements must be documented and checks must be made to ensure that the requirements are being met (a template for this is available).

17. Hazardous waste such as used batteries, oil contaminated materials and asbestos must be separated from the rest of the waste and handled appropriately so that they do not pollute the environment. Adequate bins/waste storage containers must be provided. Fenced (access controlled) storage areas for waste must be put in place.
18. All locations must have secondary containment for the storage of hydrocarbons and other chemicals. This means the containers are placed in a tray that can hold the liquid if it all spills. Instead of a metallic tray, secondary containment could be put in place by building a small wall around the storage area to contain spillage.

*Appropriate secondary containment in place to contain hazardous chemical release until proper cleaning up, neutralization or disposal*



Infrastructure projects and any other projects that have sites should have spill kits for controlling and cleaning up spillages. Contaminated soil must be removed and disposed appropriately.

GUIDELINE GHSE 01



i. A simple locally made spill kit



ii. Commercial spill kit

19. Mixing of cement should be done in a tray or a protected surface so that cement containing runoff water does not contaminate the ground. Concrete washings from concrete mixing trucks and other equipment should be gathered into a concrete washings pond to avoid polluting the environment.



The picture show a concrete washout area, located at the appropriate distance from natural drainage pathways, waterbodies, wells or other water drinking sources

20. All HSE incidents must be recorded and reported using the appropriate forms. Major incidents must be disclosed immediately to the Head Office. See the Executive Office Instruction on Incident Reporting.

**GUIDELINE GHSE 01**

21. At the end of each quarter, each country office must review its HSSE performance using the self-assessment tool.

**GUIDELINE GHSE 01****SECTION C: Additional requirements for achieving HSSE Level 2**

HSSE Level 2 requirements are an extension of HSSE Level 1. All Level 1 requirements need to be in place together with some additional requirements listed below.

1. Instead of the short format plans (HS 02 & ES 02), the projects at HSSE Level 2 use the long format plans (HS 01 & ES 01).
2. There is greater emphasis on training. Relevant personnel are enrolled for IOSH online HS training. Face-to-face theoretical and practical training is also provided to selected people.
3. Use of the permit to work system to control safety critical tasks should be applied. The permits issued should be formally recorded on UNOPS forms. In addition, there must be a formal inspection and tag system e.g. to show machinery that is under energy isolation or to show scaffolding that is safe or not safe for use.

*Tag prohibiting use of unsafe scaffold*



**GUIDELINE GHSE 01**

*Scaffold inspection tag,  
detailing name of inspector and date*



*Examples of scaffold tags*



- Level 2 offices should have a formal waste management plan (template is available) that records monitoring data for the available waste streams and there should be actions to ensure that waste generation is minimised. The unavoidable waste should be segregated into different streams that allow it to be reused, recycled or safely disposed.

*Segregation of waste at project site*



*Segregation of waste at an office*



**GUIDELINE GHSE 01**

5. All chemicals in use must have a Material Safety Data Sheet (MSDS) that is provided by the supplier at the time of purchase. This document provides information on the safe use of the chemical and the environmentally safe way of final disposal of residues.
  
6. Construction sites at Level two should have more formalised arrangements for separating mobile construction equipment from pedestrians within the site and members of the public. This means that there must be a site plan that shows where everything is supposed to be, where people should work and where people are permitted to walk.

*These planned arrangements must be implemented on the site*



7. Polluted water must be treated before disposal. Here are some examples:
  - a. A treatment system (e.g. septic tank and soakaway) should be put in place if there is no municipal system to carry effluent from a facility constructed by UNOPS.
  - b. Structures such as oil interceptors should be put in place to capture and separate hydrocarbons from oil contaminated water.
  - c. Silt traps should be put in place to remove sediments from site wastewater before releasing it to the natural drainage system

**GUIDELINE GHSE 01**

*Passing silted water from a site through quarry stones before it goes to the natural drainage*



8. Offices at Level 2 are part of the peer review process that is coordinated by the HSE Manager at HQ. This means that someone from another UNOPS location reviews how well UNOPS operations in a country are meeting requirements and points out possible opportunities for improvement. The reviews are done in-person or via video/audio conference. These reviews are formally recorded on an internal review template and issues requiring correction should be attended to in reasonable time.
9. Ensure that the land used by the project is kept to a minimum and that the impact of the project on nearby social services during and after construction, is kept at a minimal.
10. Have a formal plan for protecting historical, cultural and archaeological findings if there is high probability of finding them in the area of the project.

**GUIDELINE GHSE 01**

Appendix 1: List of templates that support HSSE plans

HEALTH & SAFETY (HS)		
TOPIC	HS01	HS02
Legal review	HSE02 Register of interested parties HSE03 Legal register HSE04 Check for legal compliance	HSE03 Legal register
Risk Assessment	HS05 Risk Assessment HS06 RA briefing register	HS05 Risk Assessment HS06 RA briefing register
Site induction and training	HSE07 Site induction register HSE08 Visitor induction register HSE18 Training matrix	HSE07 Site induction register HSE08 Visitor induction register
Site weekly inspections	HSE05 HSE inspection report – site HS13 Ladder inspection record HS14 Scaffold inspection checklist HS15 Small tools inspection record HS16 Lifting devices inspection record	HSE05 HSE inspection report – site
Emergency and evacuation procedures	Site emergency and evacuation plan HS03 Emergency contact numbers HS04 Emergency drill record	Site emergency and evacuation plan HS03 Emergency contact numbers HS04 Emergency drill record
Accident/incident reporting	HSE09 Incident report form HSE10 Incident review form HSE11 Incident highlight form	HSE09 Incident report form HSE10 Incident review form HSE11 Incident highlight form
Communication and reporting	HSE12 Quarterly HSE report – site	HSE12 Quarterly HSE report – site
Audit and Monitoring	HSE16 Internal review (audit)	-
Work Permits	HS08 Confined space permit HS09 Hot works permit HS10 Excavation permit HS11 Lifting permit HS12 Working at heights permit	-

**GUIDELINE GHSE 01**

ENVIRONMENT & SOCIAL (ES)		
TOPIC	EM01	EM02
Legal review	HSE02 Register of interested parties HSE03 Legal register HSE04 Check for legal compliance	HSE03 Legal register
Social and environmental screening	EM03 Environmental and social screening report	-
Social and environmental assessment	EM05 Environmental review report TOR for EIA	-
Analysis of environmental and social risks and opportunities	EM04 Register of environmental and social risks and opportunities	-
Waste management	EM06 Waste management plan – site EM07 Waste management plan – office	-
Office inspection	HSE06 Office Inspection Report	-
Emergency and evacuation procedures	Site emergency and evacuation plan HS03 Emergency contact numbers HS04 Emergency drill record	Site emergency and evacuation plan HS04 Emergency drill record
Accident/incident reporting	HSE08 Incident report form HSE10 Incident review form HSE11 Incident highlight form	HSE08 Incident report form HSE10 Incident review form HSE11 Incident highlight form
Communication and reporting	HSE12 Quarterly HSE report – site	HSE12 Quarterly HSE report – site
Audit and Monitoring	HSE16 Internal review (audit)	-

■ = UNOPS responsibility (usual set-up in assurance position)

■ = Contractor responsibility (usual set-up in assurance position)

## **Attachment 1 : Health and Safety measures under coronavirus epidemics**

### **Managing COVID-19 risks on UNOPS construction sites**

**These requirements should be for UNOPS personnel and all contractors as mandatory, issued in a formal, written instruction to the contractor using the [template provided here](#).**

*Requirements:* Construction sites should be treated like offices, with the following steps to be discussed with the Contractor, and enforced by the UNOPS site supervisor.

#### **General**

1. Ensure that the people meeting the following criteria will not come to site:
  - any personnel showing symptoms of coughing, difficulty in breathing, fever, tiredness, aches and pains, nasal congestion, runny nose, sore throat or diarrhea, until a medical certificate is provided;
  - vulnerable persons (by virtue of their age, underlying health condition, clinical condition or are pregnant)
  - any person living with someone in self-isolation or a vulnerable person.
2. In the case that a worker is detected with COVID-19 the site will be closed and workers in contact with the individual will be required to self-isolate for 14 days until medical all-clear is granted.
3. Social distancing of at least 1 meter should be maintained at all times between personnel. Handshakes, hugs and other close contact interactions are therefore prohibited on site.
4. Hand washing station posted at the site entrance, with soap for all workers and people entering the site, and additional stations at locations in the site that make it possible for workers to frequently wash their hands. Hand sanitisers should be provided where hand washing facilities are unavailable to point.
5. A focal point to implement and monitor prevention measures should be designated by the Contractor.
6. No masks are needed on site for work unless hazardous materials are being used.
7. In case of any infringements, UNOPS will stop work of the contractor and delays that incur penalties will be the responsibility of the contractor.
8. UNOPS will refuse access to the site to any individuals seen breaking the hygiene protocols and may require the contractor to stop all works immediately.
9. UNOPS projects must cooperate with the local country directives in response to the COVID-19 pandemic.
10. All cases should be reported to the head of the office as soon as detected, as well as to local health authorities.
11. These protocols are to be recorded as part of the HSSE requirements for the site.

### **Travel to sites**

12. Wherever possible workers should travel to site alone using their own transport.
13. Risk assessments should be used to determine the risks for local travel to project sites and precautionary measures should be applied if these are deemed necessary.
14. Sites need to consider:
  - Parking arrangements for additional cars and bicycles
  - Other means of transport to avoid public transport e.g. cycling
  - How someone taken ill would get home.

### **Site Access Points**

15. Focal point appointed by the contractor, with the site supervisor, will check the temperature and ensure hand washing prior to site entry of all personnel.
  - Focal point should have a thermometer to do so.
  - For larger sites, a nurse or medical staff may be provided, however, the goal is not to treat personnel who may have COVID-19, but identify any symptoms and ensure personnel are immediately removed from the site.
16. Focal point should ask the following questions to the staff:
  - Have you had a fever or other symptoms of the COVID-19 in the past 2 weeks?
  - Is there anyone in your household who has the symptoms or is ill with COVID-19?
  - Is there any person in your neighborhood or community who has been diagnosed with COVID-19?
  - Have you been abroad or in contact with travelers from different countries?
17. Ensure personnel wash or clean their hands before entering or leaving the site.
18. Stop all non-essential visitors.
19. Introduce staggered start and finish times to reduce congestion and contact at all time, if possible.
20. Monitor site access points to enable social distancing – site supervisor may need to change the number of access points, either increase to reduce congestion or decrease to enable monitoring.
21. Remove or disable entry systems that require skin contact e.g. fingerprint scanners
22. Reduce the number of people in attendance at site inductions and consider holding them outdoors wherever possible, also ensure 1 metre distance between participants during the inductions.
23. Drivers should remain in their vehicles if the load will allow it and must wash or sanitise their hands before unloading goods and materials.

### **Communication and awareness**



24. Daily briefing on how to prevent exposure to COVID-19 and on the control measures in the site should be delivered.
25. Post posters about proper handwashing and respiratory hygiene at different project sites (work fronts, temporary offices, and the project operations campus)

### **Canteens and Eating Arrangements**

26. Hand washing is enforced before mealtimes.
27. All personnel should be advised to observe safe distances during eating times.
28. All personnel should avoid sharing food and drinks with colleagues
29. The workforce should be asked to bring pre-prepared meals and refillable drinking bottles from home.
30. Site eating areas will be disinfected daily by the contractor.
31. All rubbish should be put straight in the bin and not left for someone else to clear up.
32. Where catering is provided on site, it should provide pre-prepared and wrapped food only. Where possible payment arrangements should be made such there will be no need to exchange money e.g. contactless cards or pre arranged monthly payments. Crockery, eating utensils, cups etc. should not be used.

### **Changing Facilities, Showers and Drying Rooms**

33. Introduce staggered start and finish times to reduce congestion and contact at all times.
34. Consider increasing the number or size of facilities available on site if possible.

### **Avoiding Close Working**

There will be situations where it is not possible or safe for workers to distance themselves from each other by 1 metre. The following general principles should be applied:

35. Safety critical work should still be carried out with adequate personnel and under adequate levels of supervision to avoid incidents that may lead to loss of life.
36. Non-essential physical work that requires close contact between workers should not be carried out.
37. Work requiring skin to skin contact should not be carried out.
38. Plan all other work to minimise contact between workers.
39. Establish working groups to minimize the movement of people in the project area to facilitate traceability and control, in case any possible contagion is identified.
40. Re-usable PPE should be thoroughly cleaned after use and not shared between workers.
41. Single use PPE should be disposed of so that it cannot be reused.
42. Stairs should be used in preference to lifts or hoists.
43. Where lifts or hoists must be used, reduce their capacity to avoid congestion and clean touchpoints, doors, buttons etc.
44. Increase ventilation in enclosed spaces.



45. Regularly clean the inside of vehicle cabs and between use by different operators.

### **Site Meetings**

46. Only absolutely necessary meeting participants should attend.

47. Attendees should be 1 metre apart from each other.

48. Rooms should be well ventilated / windows opened to allow fresh air circulation.

49. Consider holding meetings in open areas where possible.

### **Cleaning**

50. Enhanced cleaning procedures should be in place across the site, particularly in communal areas and at touch points including:

- Taps and washing facilities
- Toilet flush and seats
- Door handles and push plates
- Hand rails on staircases and corridors
- Lift and hoist controls
- Machinery and equipment controls
- Food preparation and eating surfaces
- Telephone equipment
- Key boards, photocopiers and other office equipment

51. Rubbish collection and storage points should be increased and emptied regularly throughout and at the end of each day

52. Hired vehicle vendors should be informed to sanitize the interior of their vehicles daily. Drivers to be informed about the preventive measures as well.

53. Personnel using motorbikes should also sanitize the areas of the bike most touched.

### **Procedure in case of contagion**

Any worker with symptoms of the COVID-19 should:

- Notify the supervisor that he/she is not fit to work
- Stay home for at least 14 days
- Maintain a minimum temperature control twice a day
- Report any person in his/her household of these symptoms and inform the supervisor
- Notify the doctor or health service if symptoms do not disappear or worsen.

Any personnel who is confirmed to be diagnosed with COVID-19 should report to the Health and Safety Advisor and the Manager on the site immediately. The reporting procedure should be in line with the EOI.CSG.2017.02 on Reporting and Management of Health & Safety and Social & Environmental incidents.



## **UNOPS Construction Site Supervision:**

Guidance: UNOPS Personnel are expected to continue to work with contractors and other site personnel, unless there is a stop work order issued by the government. In the case that UNOPS personnel need to visit home in order to support family / relatives, this is understood and personnel may take leave. The project will, if possible, seek additional UNOPS personnel to cover the gap in supervision, to ensure the quality of work continues to be maintained and that work site safety and COVID-19 procedures are followed.

### **Field Offices < 6 People and Field Monitoring:**

*Requirements:* In the general case that personnel are working and living in the same office, “work from home” is similar / same in terms of people as the office. In this case, personnel may continue to work in the office that they live in, however, “Reduced Contact Work” is advised. For field monitoring this involves:

- Ensure when visiting project sites, physical distancing is maintained.
- Avoid consultations, meetings, gatherings which involve a large number of people, beyond the government advice, both for organizing and being a part of. For essential business requirements, limit the number of people (below 10) ensuring physical distance.
- Minimize travel which requires personnel traveling in a partner's vehicle or vice versa. Ensure adequate measures are taken.
- Any discussions with home owners or contractors are outdoors, at 1 meter distance.
- Offices maintain the same protocols with washing hands prior to entry.

In case travel restrictions involve being restricted from any movement at all, personnel will be encouraged to work from home.

### **Short monitoring/handover missions (for multiple sites):**

- Create clusters of 10/15 sites to visit. Sites should be geographically close and visitable in a one (long) day mission.
- Prepare maps of those clusters of sites, including travel distances.
- Prepare mission timetables with detailed timing for each activity (visit of site A, movement, visit of site B, etc.).
- Ask the contractor to submit pictures and videos of sites ready for handover in a pre-handover evidence folder of the teamdrive shared with the contractor.
- Review submissions in detail and pre-clear the sites ready for handover.
- Coordinate with the client and make precise appointments for handover activities, update the mission timetable according to availability of client's representatives.
- Arrange cars for standalone trips of our Site Supervisors (cars should be provided with water tanks, soap, sanitizer, PPE, lunchboxes, etc.).
- Brief and debrief our Site Supervisors prior/after each handover mission.