



ORGANISATION OF THE ISLAMIC COOPERATION (OIC)

GENERAL GUIDELINES ON OCCUPATIONAL SAFETY AND HEALTH

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(OIC-OSHNET)**

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FOREWORD

This guideline has been prepared by the OIC Network for Occupational Safety and Health (OIC OSHNET), in pursuance with the relevant action stipulated in the OIC Framework for Cooperation on Labour, Employment and Social Protection (Framework), adopted by the Resolution on The Cooperation on Labour, Employment and Social Protection Among the OIC Member States at the Second Session of the Islamic Conference of Labour Ministers, held on 25-26 April 2013, in Baku, Republic of Azerbaijan.

For this, SESRIC jointly organised with the Standards and Metrology Institute for Islamic Countries (SMIIC), Islamic Development Bank (IDB) and the Ministry of Labour and Social Security of Turkey a workshop on “Occupational Safety and Health Regulations and Standards” on 4 May 2014 with the participation of Occupational Safety and Health Authorities of OIC Member Countries. The Workshop revised the first draft of the Occupational Safety and Health (OSH) Regulations and Standards, which was prepared by the General Directorate of Occupational Health and Safety of the Ministry of Labour and Social Security of the Republic of Turkey, the SESRIC and the Standards and Metrology Institute for Islamic Countries (SMIIC). The workshop also explored ways and means of the adoption and enforcement of International OSH Regulations and Standards and to popularize occupational health and safety standards with regard to projects financed by relevant OIC Institutions in line with the Baku Declaration adopted by the Second Session of the Islamic Conference of Labour Ministers.

The draft Framework was then submitted to the First Steering Committee Meeting for the Implementation of the OIC Framework for Cooperation on Labour, Employment and Social Protection held in Baku, Republic of Azerbaijan, on 17-18 June 2014. The Committee took note of the General Guidelines on Occupational Safety and Health. In this regard, the Committee requested the General Directorate of Occupational Health and Safety of the Ministry of Labour and Social Security of the Republic of Turkey, the SESRIC and the SMIIC to finalize an OIC-OSHNET Draft Standards. The Committee also agreed to submit the General Guidelines on Occupational Safety and Health to the 3rd ICLM which was scheduled to be held Jakarta, Indonesia.

The revised Framework was shared with the OSH Authorities of the OIC Member Countries to collect all views or comments, and then was incorporated and finalised by the OIC Network for Occupational Safety and Health (OIC-OSHNET) to be submitted to the 3rd ICLM in 2015.

The Occupational Safety and Health Network is a transnational network among similar local, national and regional institutions operating in public and civil domain, under the framework of the Vocational Education and Training Programme in OIC Member Countries (OIC-VET). It was kicked-off in May 2011 in Ankara, Turkey, in line with the recommendation of OSH institutions, and in continuation to the efforts already exerted in the area of occupational safety and health, with the aim of establishing closer cooperation for sharing knowledge and experience, conducting joint research and training, and organising new initiatives, projects and programmes in the field of OSH.

GENERAL GUIDELINE ON OCCUPATIONAL SAFETY AND HEALTH

1. SCOPE

The scope of this guideline is to standardize the Occupational Safety and Health (OSH) level in all OIC countries.

This guideline shall apply to all sectors of activity, both public and private (industrial, agricultural, commercial, administrative, service, educational, cultural, leisure, etc.).

In that event, the safety and health of workers of OIC members must be ensured as far as possible.

This standard is not intended for certification, regulatory or contractual use.

2. NORMATIVE REFERENCES

The following referenced documents are indispensable for the application of this standard.

- ISO / IEC Guide 73, *Risk Management – Vocabulary – Guidelines for use in standards*
- ISO 31000, *Risk management – Principles and guidelines*
- BS OHSAS 18001:2007 - *Occupational health and safety management systems*

3. TERMS AND DEFINITIONS

For the purposes of this Standard, the following definitions shall apply:

Employee: A person who works for a public or private employer and receives remuneration in wages, salary, commission, tips, piece-rates or pay in kind.

Employer: A person who operates his or her own economic enterprise, or engages independently in a profession or trade, and hires one or more employees.

Hazard: Any source of potential damage, harm or adverse health effects on the employees or the workplace itself under certain conditions at work.

Risk: represents an exposure of employee or other person to a hazard, expressing probability of the injury and at the same time the seriousness of the consequence.

Workplace: covers all places where employees need to be or to go by reason of their work and which are under the direct or indirect control of the employer.

4. GENERAL OCCUPATIONAL SAFETY AND HEALTH REQUIREMENTS

A. The general Occupational Safety and Health (OSH) requirements are as follows:

- a) There shall be a National OSH policy approved by the relevant authorities at work places.
- b) Occupational diseases, work accidents and near misses occurred at workplaces shall be recorded and reported to relevant authorities.
- c) Appropriate work equipment shall be provided for employees to conduct their work.
- d) Health surveillance of employees shall be done in certain periods according to the nature of the work.
- e) Floors where appropriate shall be made of flat even and non-slip material.
- f) Vehicle and pedestrian paths shall be clearly separated and demarcated inside and outside of the buildings.
- g) Proper conditions shall be provided to vulnerable employees (i.e. disabled, young employees, pregnant etc.) in workplaces.
- h) Appropriate signs to remind and inform employees on hazards and steps to take shall be made available at workplaces.
- i) Necessary training shall be provided on the use of work equipment and personal protection equipment.
- j) A professional staff shall be designated to be responsible for health and safety at the work place as well as their names should be displayed in accessible places.
- k) All information related to work hazards and preventive measures as well as emergency rules and exit plans in case of a serious incident shall be displayed in accessible places.
- l) First aid facilities such as first aid boxes and first aid rooms, where appropriate, shall be provided. All workplaces shall have trained enough first aiders, according to the number of employees in the workplace, and ensure that medical teams are available at the work place whenever needed.
- m) Information, dialogue and balanced participation on safety and health at work must be developed between employers and workers and or their representatives by means of appropriate procedures and instruments, in accordance with national laws and/ or practices.
- n) Undertake periodic inspection of work equipment by qualified professionals and/or companies.

B. Occupational Safety and Health requirements for employers:

- a) The employer shall have liability to ensure the safety and health of employees in every aspect related to the work. In this frame; the employer has the responsibility for hazard identification, prevent occupational risks, provide necessary organization, tools and adjustment of health and safety measures according to changing circumstances and aim to improve existing situations.

- b) The employer must provide a platform for workers and employers to sit together and discuss all issue on OSH at workplace.
- c) Outcomes of the health surveillance shall not be used to the detriment or against the employee's employment status.
- d) Collective preventive measures shall be taken by employers, as a matter of priority over individual preventive measures.
- e) Workers shall be granted the right to leave the work place in the event of extreme danger or anything that may threaten his life or health.

C. Occupational Safety and Health requirements for employees:

- a) The employees' suitability regarding the work shall be taken into consideration.
- b) The employees shall be provided with Personal Protective Equipment (PPE) appropriate to the nature of the work.
- c) The employees shall be required to act complying with training and instructions given by employer.
- d) Compensatory mechanisms shall be in place at the national level for employees injured or suffering from occupational diseases.

5. RISK ASSESSMENT

Risk assessment is a process performed in order to identify the hazards which may exist in a workplace, to analyze and grade the factors which cause the hazards turn into risks and to determine the precautions to reduce the risk that shall be taken.

Risk assessment is done by the employers or he shall provide it to be done by an expert. Risk assessment shall be done with cooperation of employees and other experts and shall be revised and updated on a regular basis. The risk assessment shall be both qualitative and quantitative.

The hierarchy that followed under the scope of risk assessment is:

- a) The risks at work place shall be abstained first and they shall be eliminated at its source.
- b) If elimination is not possible, substitution of dangerous one with less dangerous one shall be done.
- c) If substitution is not possible, engineering and administrative control measures shall be applied.
- d) Appropriate PPE shall be used, as last resort, in order to minimize adverse effects of the risks.

6. OCCUPATIONAL HEALTH AND SAFETY TRAINING

The employer shall provide to the employees both fundamental OSH training and special vocational training appropriate to the nature of the work being carried out (free of charge to the employees). In these training:

- a) Training need analysis should be performed according to the need before performing the job. Result of risk assessment may be used in this analysis
- b) Knowledge, skills, behaviours and attitudes of employees on occupational safety and health issues shall be borne in mind.
- c) The inadequacies of the trainees shall be taken into consideration while determining the subjects of the training program for an efficient training.
- d) The training shall be assessed and evaluated for its effectiveness and modification to the modules may be needed.
- e) Retraining is needed if the process, substance used, procedure or location of the workplace changed, the training shall be repeated.

7. PHYSICAL FACTORS

Risk hierarchy shall primarily be applied in workplaces. Besides, the employer shall take the precautions as follows:

- a) Machines or work benches shall be maintained at regular intervals.
- b) Employees exposed to physical risks at workplaces shall be trained and information resulting from these risks should be communicated. The training shall include in particular:
 1. The nature of such risks,
 2. The measures taken to eliminate or reduce to a minimum the risks, including the circumstances in which the measures apply,
 3. The exposure limit values of national legislation,
 4. The correct use of PPEs,
 5. Why and how to detect and report symptoms of health effects of physical risk factors exposure,
 6. The circumstances in which employees are entitled to health surveillance and the purpose of health surveillance.

Besides the general liabilities given above, the employer shall take further precautions to eliminate or minimize physical risk factors which can be examined under seven headings as follows:

7.1 Noise

Minimum requirements for the employees to be protected from safety and health risks especially from those related to noise exposure are given as follows:

- a) In order to prevent the sound from propagating in the air sound-absorbing materials shall be used to the extent of facilities in the workplace.
- b) Where applicable, the distance between the noise source and the person exposed shall be increased.
- c) Noisy machinery shall be enclosed as far as practically reasonable.

- d) Proper maintenance of machines and equipment shall be done on a regular basis.
- e) Hearing protection device shall be used in order to minimize adverse effects of the noise.

7.2 Vibration

The employer fulfils the minimum requirements for the employees to get protected from safety and health risks that may be caused by exposure to mechanical vibration. In this context proper working schedule, using less vibration equipment and adequate rest shall be planned and applied.

7.3 Thermal Comfort

The employer is to provide workplace with a good thermal comfort conditions. In this context:

- a) Thermal comfort conditions in the workplace shall be in a way that would not disturb employees tasks performed and would not affect their physical and psychological situation.
- b) Devices used for heating and cooling shall be placed in a way that would not disturb the employees and would not create risk of accidents. They shall be maintained and checked regularly.
- c) Regarding the nature of the work, in case of working continuously in extremely hot or cold environments and windows and roof lights, so as to avoid the negative effects of sunlight that should be provided.
- d) Adequate exchange of air appropriate to the task and environmental conditions shall be provided.

7.4 Illumination

The employer shall provide a sufficient illumination for employees to perform the job safely. In this context, workplaces shall be illuminated sufficiently by day light. In cases which beneficiation from day light is not possible or during night work, artificial light shall be provided for adequate lighting.

7.5 Dust

The employer shall provide a dust-free environment, to extent which is practicably applicable, for the employees to get protected from safety and health risks. In this context:

- a) Water shall be used at places where dust is released. (Aqueous working-wet method).
- b) Proper ventilation and control equipment shall be provided.

- c) Appropriate PPE shall be provided and employer shall ensure proper use of PPE.
- d) The exposure of employees' shall be monitored and documented regularly.
- e) Chambers of high air pressure shall be placed in between dust releasing and dust free parts; passage of dust particles to dust free part shall be avoided.
- f) Pre-employment and periodical medical examination of employees shall be done.

7.6 Ventilation

Pertaining to gases, dust and odor existing in the work environment, adequate ventilation shall be provided. The ambient air shall be changed according to nature of the work periodically.

For the environments where works emitting dust, mist and fume are carried out, chimneys and air vents of capability to extract those shall be provided and in cases where these precautions are not sufficient, other technical precautions, according to the nature of the work done, shall be taken.

At the workplaces where suffocating, toxic or irritating gas and smoke arising, ventilation installation shall be designed to protect the health of employees and masks and other protective equipment, according to the nature of the work done, shall be provided.

7.7 Radiation

The employer shall protect employees from the adverse effects of radiation. In this context:

- a) All workplaces working with radioactive substances shall be labeled as "Attention-Radioactive Substance".
- b) All equipment containing radioactive materials shall be labeled with the "radiation" symbol.
- c) Workplaces working with radioactive substances shall be adequately ventilated and shielded.
- d) Detailed procedures related to work with radioactive substances shall be prepared and available at the workplace.
- e) Radioactive wastes shall be collected with impermeable waste collectors and kept in lockable cabinets/closets or rooms.
- f) Only authorized staff is allowed to work with radioactive substances shall access to the locked cabinets or rooms.
- g) All employees working with radiation and radioactive substances shall be provided with appropriate radiation monitors, appropriate PPE as well as undergo regular periodic medical examinations

8. CHEMICAL FACTORS

Working with chemical substances, the employer shall arrange a procedure or precaution that will minimize the exposure of chemical to the employees:

- a) Keeping the number of employees exposed, or likely to be exposed, to minimum number as possible.
- b) Labeling the chemicals according to national and international standards and/or Safety Data Sheets (SDS) and informing the employees on chemical hazards through marking the chemical substances.
- c) Training employees on the use of the available information on SDS, occupational safety practices, and appropriate use of PPE's.
- d) Providing emergency apparatus in cases of accidental exposure

The employer shall also ensure that employees who are exposed to chemical risk factors at work at or above the lower exposure action values receive information and training relating to risks resulting from the exposure. The training shall include in particular:

- a) Emergency arrangements,
- b) The results of the risk assessment,
- c) The hazardous chemical agents present at the workplace with access to SDSs,
- d) Training on the appropriate precautions and on the personal and collective protection measures that are to be taken.

The employer shall determine whether any hazardous chemical agents are present at the workplace. If so, the risks of affecting safety and health of the employees due to presence of those chemical agents shall be defined by taking into consideration the following:

- a) Hazardous properties of the chemicals,
- b) Information on safety and health that shall be provided by the supplier,
- c) The level, type and duration of exposure,
- d) The circumstances of work with such agents, including their amount,
- e) Any occupational exposure limit values or biological limit values given in national legislation,
- f) The effect of preventive measures taken or to be taken,
- g) If it appears that the use of chemical in the process may risk injury to the health of the employee, the employer shall provide health surveillance.

8.1 Fire and Explosions

In order to avoid, control and properly manage fire and explosions resulting from ignition of flammable substances such as chemicals or gases:

- a) Flammables substance or material shall be stored away from ignition sources, inlets, exits and ventilation systems.

- b) Workplace environment shall be equipped with sufficient number of appropriate fire extinguishing devices
- c) Warning signs shall be placed at zones of fire risk
- d) Employees shall be trained on working with flammable substances and fire response.

8.2 Asbestos Containing Materials (ACM)

The use of asbestos containing materials shall be avoided in construction of new buildings or in restoration or renovation activities as a new material in accordance with the highest standards.

In order to be protected from health effects of asbestos exposure during removal, destruction, repair and maintenance, all necessary and crucial precautions shall be taken.

9. BIOLOGICAL FACTORS

Biological factors are microorganisms and cell culture which may cause any infection, allergy or poisoning, including ones that are genetically modified.

In order to avoid and reduce the risks caused by biological factors, use of harmful biological agents shall be abstained and these harmful agents shall be substituted by less dangerous agents. Where this substitution is not possible, required precautions shall be taken to keep the risk of exposure as low as possible.

10. ERGONOMICS

Mental and/or physical overexertion, manual handling of heavy weights, poor postures while performing any task, repetitive movements for prolonged periods can be considered to exemplify such ergonomic factors. In order to eliminate and/or alleviate risks due to ergonomic factors;

- a) Workplace shall be ergonomically designed with regard to appropriate anthropometric measurements for current and prospective employees.
- b) By providing workstations fulfilling the requirements of the tasks performed, poor postures shall be avoided and remedial actions shall be taken. Adjustable workstations, where possible and practicable, shall be provided.
- c) Work organization shall be established in such a way to eliminate the need of manual handling of heavy materials, or to reduce it as much as possible.
- d) Proper tools and mechanical assists that reduce manual exertions and holding times and improve postures shall be employed.
- e) Rest breaks of sufficient length for employees shall be allowed during work hours.
- f) Job rotation shall be conducted especially for tasks that require repetitive movements within constant postures or manual handling of heavy weights.

11. MACHINERY AND HAND TOOLS

11.1 Machinery

The employer shall take the measures necessary to ensure that the work equipment, made available to employees or self-employed persons at the workplace is suitable for the work to be carried out or properly adapted for that purpose and may be used by employees or self-employed persons, without impairment to their safety or health.

Rules to be followed in the course of using machinery:

- a) Machinery shall be operated for intended purpose
- b) The operator shall get training on the use of machinery and be informed of safety measures and safe work practices.
- c) Emergency stop button of machine and easily access during emergency shall be provided. Operator shall be informed on how and when to use the button.
- d) Work equipment carrying the risk of flying or falling object shall be equipped with suitable safety devices to eliminate those risks.
- e) Maximum load of lifting equipment shall be visibly marked.
- f) Appropriate work method shall be selected using suitable lifting devices pertinent to type, shape and other physical features of load that shall be lifted by lifting equipment.
- g) All reciprocating, rotating, and transverse moving parts shall be covered with appropriate machine guards.
- h) Electrically powered machines shall be grounded.
- i) Machines releasing dust, gas, vapor etc. shall be equipped with suitable ventilation systems.
- j) Repair, maintenance and cleaning shall not be carried out unless the machine is stopped.
- k) Work done with machine shall not expose the employee to vibration above the determined limit value.

- l) Only operators shall be allowed to enter operator cabins in all types of work equipment.
- m) Periodic inspection of machines shall be provided.

11.2 Hand tools

Hand tools include a wide variety of non-powered devices such as wrenches, pliers, hammers, and screwdrivers. Training on proper use of hand tools should be provided to employees. These tools may seem harmless, but they are known as the cause of many injuries.

Rules to be followed while using a hand tool:

- a) Right type and size of tool for the job shall be used.
- b) Any work shall not be done with greasy or oily hands.

- c) Sharp edged and pointed tools shall be handled with care.
- d) All small and short work shall be secured with a vise or clamp.
- e) Tools which are loose or cracked shall not be used.
- f) File shall not be used without a handle.
- g) Tools shall not be used for jobs they were not meant for.

12. SAFE WORKING AT HEIGHT

Working at height is defined as any job performed at an elevation difference and where injury and loss of life due to falling are possible. Only trained employee is permitted to work at height. While working at height;

- a) Safety of employees shall be primarily ensured by taking collective protection measures such as platforms, scaffoldings, safety nets, air bags, safe guardrails.
- b) Personal protective fall prevention measures such as safety harness and safety net which are appropriate to the nature of works being performed shall be provided.
- c) Measures shall be taken to prevent employees falling from openings on the floor and openings between vertical structural components.
- d) Guardrails to be used shall include a top rail, mid rail or other side protection elements to provide same protection and a toe board to prevent materials from falling. The platform decking should be covered completely.

13. EMERGENCY

Provisions that shall be taken into account in case of an emergency are:

- a) Probable emergencies shall be identified by evaluating emergencies which may affect employees and work environment (natural disasters, fire, explosion, sabotage, food poisoning, other emergencies identified as a result of risk assessment etc.) in advance. In determining these emergencies; working environment, materials used, working equipment and environmental conditions shall be kept in mind.
- b) Measures preventing and restricting the negative effects of emergencies shall be taken.
- c) Emergency drills shall be conducted periodically for raising preparedness to emergencies.
- d) An emergency action plan that includes operations, processes, information and practice-oriented actions in emergencies shall be established. In this plan:
 - 1) Probable emergencies,
 - 2) Preventive and restrictive measures shall be taken,
 - 3) Emergency response methods,

- 4) Evacuation plans that are prepared to be hung on different locations in the workplace,
 - 5) Emergency teams and drill forms shall be involved.
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- e) Emergency action plan shall be revised taking into consideration of results of emergency drills and emerging deficiencies during routine work. Even if there are no changes and obligations, the emergency action plan shall be updated periodically.
 - f) Escape routes and doors shall be arranged properly. Evacuation shall be enabled smoothly in possible emergencies with the aid of marking and lighting. All evacuation routes and exits shall not be obstructed and exits tested for proper functioning on a regular basis.
 - g) Necessary arrangements that provide communication with other agencies especially about first aid, emergency medical intervention, rescue and firefighting shall be made.
 - h) Alarm and detection systems, fire extinguishing systems, fire extinguishers and other emergency equipment shall always be available. Equipment shall be visible and easily accessible.
 - i) To respond to emergencies, sufficient number of employees which are equipped and trained in prevention, protection, emergency drill, firefighting, first aid etc. shall be assigned taking into account the size of enterprise and its special hazards, type of work, number of employees and considering other people in the workplace. The name of these trained personnel shall be displayed prominently.

14. PERSONAL PROTECTIVE EQUIPMENT

PPE include all protective devices, tools and materials used by the employees and manufactured in order to protect the employees from risks arising from the work being conducted affecting safety and health. Proper PPE shall be provided to employees' according to nature of work. Training should be given on proper use and maintenance of PPE.

All PPEs shall;

- Prevent risks without creating additional risks.
- Be suitable for workplace conditions.
- Comply with ergonomic requirements and health status of the employees.
- Be a suitable size and fit and reasonably comfortable for the person wearing it.
- Be provided and maintain for fit for service.

Acknowledgement of contributions:

This guideline has been prepared by the representative of following OIC Member Countries and the relevant OIC Organs:

I-

Republic of Turkey	Republic of The Sudan
Islamic Republic of Afghanistan	Republic of Yemen
Islamic Republic of Mauritania	Republic of Kazakhstan
Malaysia	State of Palestine
People's Democratic Republic of Algeria	State of Qatar
Republic of Albania	
Republic of Indonesia	
Republic of Iraq	

II-

The Statistical, Economic and Social Standards and Metrology Institute for Research and Training Centre for Islamic Countries (SMIIC)
Islamic Countries (SESRIC)