Guideline B4.3 - Health and Safety Protection and Accident Prevention

1. The provisions required under Standard A4.3 should take into account the ILO code of practice entitled Accident prevention on board ship at sea and in port, 1996, and subsequent versions and other related ILO and other international standards and guidelines and codes of practice regarding occupational safety and health protection, including any exposure levels that they may identify. (2016 Amendment - Addition) Account should also be taken of the latest version of the Guidance on eliminating shipboard harassment and bullying jointly published by the International Chamber of Shipping and the International Transport Workers’ Federation.

2. The competent authority should ensure that the national guidelines for the management of occupational safety and health address the following matters, in particular:
   (a) general and basic provisions;
   (b) structural features of the ship, including means of access and asbestos-related risks;
   (c) machinery;
   (d) the effects of the extremely low or high temperature of any surfaces with which seafarers may be in contact;
   (e) the effects of noise in the workplace and in shipboard accommodation;
   (f) the effects of vibration in the workplace and in shipboard accommodation;
   (g) the effects of ambient factors, other than those referred to in subparagraphs (e) and (f), in the workplace and in shipboard accommodation, including tobacco smoke;
   (h) special safety measures on and below deck;
   (i) loading and unloading equipment;
   (j) fire prevention and fire-fighting;
   (k) anchors, chains and lines;
   (l) dangerous cargo and ballast;
   (m) personal protective equipment for seafarers;
   (n) work in enclosed spaces;
   (o) physical and mental effects of fatigue;
   (p) the effects of drug and alcohol dependency;
   (q) HIV/AIDS protection and prevention; and
   (r) emergency and accident response.

3. The assessment of risks and reduction of exposure on the matters referred to in paragraph 2 of this Guideline should take account of the physical occupational health effects, including manual handling.
of loads, noise and vibration, the chemical and biological occupational health effects, the mental occupational health effects, the physical and mental health effects of fatigue, and occupational accidents. The necessary measures should take due account of the preventive principle according to which, among other things, combating risk at the source, adapting work to the individual, especially as regards the design of workplaces, and replacing the dangerous by the non-dangerous or the less dangerous, have precedence over personal protective equipment for seafarers.

4. In addition, the competent authority should ensure that the implications for health and safety are taken into account, particularly in the following areas:
   (a) emergency and accident response;
   (b) the effects of drug and alcohol dependency;
   (c) HIV/AIDS protection and prevention; and
   (d) (2016 Amendment - Addition) harassment and bullying.

Guideline B4.3.2 - Exposure to Noise

1. The competent authority, in conjunction with the competent international bodies and with representatives of shipowners' and seafarers' organizations concerned, should review on an ongoing basis the problem of noise on board ships with the objective of improving the protection of seafarers, in so far as practicable, from the adverse effects of exposure to noise.

2. The review referred to in paragraph 1 of this Guideline should take account of the adverse effects of exposure to excessive noise on the hearing, health and comfort of seafarers and the measures to be prescribed or recommended to reduce shipboard noise to protect seafarers. The measures to be considered should include the following:
   (a) instruction of seafarers in the dangers to hearing and health of prolonged exposure to high noise levels and in the proper use of noise protection devices and equipment;
   (b) provision of approved hearing protection equipment to seafarers where necessary; and
   (c) assessment of risk and reduction of exposure levels to noise in all accommodation and recreational and catering facilities, as well as engine rooms and other machinery spaces.

Guideline B4.3.3 - Exposure to Vibration

1. The competent authority, in conjunction with the competent international bodies and with representatives of shipowners' and seafarers' organizations concerned, and taking into account, as appropriate, relevant international standards, should review on an ongoing basis the problem of vibration on board ships with the objective of improving the protection of seafarers, in so far as practicable, from the adverse effects of vibration.

2. The review referred to in paragraph 1 of this Guideline should cover the effect of exposure to excessive vibration on the health and comfort of seafarers and the measures to be prescribed or recommended to reduce shipboard vibration to protect seafarers. The measures to be considered should include the following:
   (a) instruction of seafarers in the dangers to their health of prolonged exposure to vibration;
   (b) provision of approved personal protective equipment to seafarers where necessary; and
   (c) assessment of risks and reduction of exposure to vibration in all accommodation and recreational and catering facilities by adopting measures in accordance with the guidance
provided by the ILO code of practice entitled Ambient factors in the workplace, 2001, and any subsequent revisions, taking account of the difference between exposure in those areas and in the workplace.

Guideline B4.3.4 - Obligations of Shipowners

1. Any obligation on the shipowner to provide protective equipment or other accident prevention safeguards should, in general, be accompanied by provisions requiring their use by seafarers and by a requirement for seafarers to comply with the relevant accident prevention and health protection measures.

2. Account should also be taken of Articles 7 and 11 of the Guarding of Machinery Convention, 1963 (No. 119), and the corresponding provisions of the Guarding of Machinery Recommendation, 1963 (No. 118), under which the obligation to ensure compliance with the requirement that machinery in use is properly guarded, and its use without appropriate guards prevented, rests on the employer, while there is an obligation on the worker not to use machinery without the guards being in position nor to make inoperative the guards provided.

Guideline B4.3.5 - Reporting and Collection of Statistics

1. All occupational accidents and occupational injuries and diseases should be reported so that they can be investigated and comprehensive statistics can be kept, analyzed and published, taking account of protection of the personal data of the seafarers concerned. Reports should not be limited to fatalities or to accidents involving the ship.

2. The statistics referred to in paragraph 1 of this Guideline should record the numbers, nature, causes and effects of occupational accidents and occupational injuries and diseases, with a clear indication, as applicable, of the department on board a ship, the type of accident and whether at sea or in port.

3. Each Member should have due regard to any international system or model for recording accidents to seafarers which may have been established by the International Labour Organization.

Guideline B4.3.6 - Investigations

1. The competent authority should undertake investigations into the causes and circumstances of all occupational accidents and occupational injuries and diseases resulting in loss of life or serious personal injury, and such other cases as may be specified in national laws or regulations.

2. Consideration should be given to including the following as subjects of investigation:
   (a) working environment, such as working surfaces, layout of machinery, means of access, lighting and methods of work;
   (b) incidence in different age groups of occupational accidents and occupational injuries and diseases;
   (c) special physiological or psychological problems created by the shipboard environment;
   (d) problems arising from physical stress on board a ship, in particular as a consequence of increased workload;
   (e) problems arising from and effects of technical developments and their influence on the composition of crews;
   (f) problems arising from any human failures; and
Guideline B4.3.7 - National Protection and Prevention Programs

1. In order to provide a sound basis for measures to promote occupational safety and health protection and prevention of accidents, injuries and diseases which are due to particular hazards of maritime employment, research should be undertaken into general trends and into such hazards as are revealed by statistics.

2. The implementation of protection and prevention programs for the promotion of occupational safety and health should be so organized that the competent authority, shipowners and seafarers or their representatives and other appropriate bodies may play an active role, including through such means as information sessions, on-board guidelines on maximum exposure levels to potentially harmful ambient workplace factors and other hazards or outcomes of a systematic risk evaluation process. In particular, national or local joint occupational safety and health protection and accident prevention committees or ad hoc working parties and on-board committees, on which shipowners’ and seafarers’ organizations concerned are represented, should be established.

3. Where such activity takes place at company level, the representation of seafarers on any safety committee on board that shipowner’s ships should be considered.

Guideline B4.3.8 - Content of Protection and Prevention Programs

1. Consideration should be given to including the following in the functions of the committees and other bodies referred to in Guideline B4.3.7, paragraph 2:
   (a) the preparation of national guidelines and policies for occupational safety and health management systems and for accident prevention provisions, rules and manuals;
   (b) the organization of occupational safety and health protection and accident prevention training and programs;
   (c) the organization of publicity on occupational safety and health protection and accident prevention, including films, posters, notices and brochures; and
   (d) the distribution of literature and information on occupational safety and health protection and accident prevention so that it reaches seafarers on board ships.

2. Relevant provisions or recommendations adopted by the appropriate national authorities or organizations or international organizations should be taken into account by those preparing texts of occupational safety and health protection and accident prevention measures or recommended practices.

3. In formulating occupational safety and health protection and accident prevention programs, each Member should have due regard to any code of practice concerning the safety and health of seafarers which may have been published by the International Labour Organization.

Guideline B4.3.9 - Instruction in Occupational Safety and Health Protection and the Prevention Of Occupational Accidents

1. The curriculum for the training referred to in Standard A4.3, paragraph 1(a), should be reviewed periodically and brought up to date in the light of development in types and sizes of ships and in
their equipment, as well as changes in manning practices, nationality, language and the organization of work on board ships.

2. There should be continuous occupational safety and health protection and accident prevention publicity. Such publicity might take the following forms:
   (a) educational audiovisual material, such as films, for use in vocational training centers for seafarers and where possible shown on board ships;
   (b) display of posters on board ships;
   (c) inclusion in periodicals read by seafarers of articles on the hazards of maritime employment and on occupational safety and health protection and accident prevention measures; and
   (d) special campaigns using various publicity media to instruct seafarers, including campaigns on safe working practices.

3. The publicity referred to in paragraph 2 of this Guideline should take account of the different nationalities, languages and cultures of seafarers on board ships.

Guideline B4.3.10 - Safety and Health Education of Young Seafarers

1. Safety and health regulations should refer to any general provisions on medical examinations before and during employment and on the prevention of accidents and the protection of health in employment, which may be applicable to the work of seafarers. Such regulations should specify measures which will minimize occupational dangers to young seafarers in the course of their duties.

2. Except where a young seafarer is recognized as fully qualified in a pertinent skill by the competent authority, the regulations should specify restrictions on young seafarers undertaking, without appropriate supervision and instruction, certain types of work presenting special risk of accident or of detrimental effect on their health or physical development, or requiring a particular degree of maturity, experience or skill. In determining the types of work to be restricted by the regulations, the competent authority might consider in particular work involving:
   (a) the lifting, moving or carrying of heavy loads or objects;
   (b) entry into boilers, tanks and cofferdams;
   (c) exposure to harmful noise and vibration levels;
   (d) operating hoisting and other power machinery and tools, or acting as signalers to operators of such equipment;
   (e) handling mooring or tow lines or anchoring equipment;
   (f) rigging;
   (g) work aloft or on deck in heavy weather;
   (h) nightwatch duties;
   (i) servicing of electrical equipment;
   (j) exposure to potentially harmful materials, or harmful physical agents such as dangerous or toxic substances and ionizing radiations;
   (k) the cleaning of catering machinery; and
   (l) the handling or taking charge of ships’ boats.

3. Practical measures should be taken by the competent authority or through the appropriate machinery to bring to the attention of young seafarers information concerning the prevention of accidents and the protection of their health on board ships. Such measures could include adequate
instruction in courses, official accident prevention publicity intended for young persons and professional instruction and supervision of young seafarers.

4. Education and training of young seafarers both ashore and on board ships should include guidance on the detrimental effects on their health and well-being of the abuse of alcohol and drugs and other potentially harmful substances, and the risk and concerns relating to HIV/AIDS and of other health risk related activities.

Guideline B4.3.11 - International Cooperation

1. Members, with the assistance as appropriate of intergovernmental and other international organizations, should endeavor, in cooperation with each other, to achieve the greatest possible uniformity of action for the promotion of occupational safety and health protection and prevention of accidents.

2. In developing programs for promoting occupational safety and health protection and prevention of accidents under Standard A4.3, each Member should have due regard to relevant codes of practice published by the International Labour Organization and the appropriate standards of international organizations.

3. Members should have regard to the need for international cooperation in the continuous promotion of activity related to occupational safety and health protection and prevention of occupational accidents. Such cooperation might take the form of:
   (a) bilateral or multilateral arrangements for uniformity in occupational safety and health protection and accident prevention standards and safeguards;
   (b) exchange of information on particular hazards affecting seafarers and on means of promoting occupational safety and health protection and preventing accidents;
   (c) assistance in testing of equipment and inspection according to the national regulations of the flag State;
   (d) collaboration in the preparation and dissemination of occupational safety and health protection and accident prevention provisions, rules or manuals;
   (e) collaboration in the production and use of training aids; and
   (f) joint facilities for, or mutual assistance in, the training of seafarers in occupational safety and health protection, accident prevention and safe working practices.