MEDICAL EXAMINATIONS OF SEAFARERS 2005

(Translation* of the formal text of the Ministerial Decree "Keuringsreglement voor de Zeevaart 2005")

Ministerial Decree with respect to establishing the rules concerning the medical suitability and medical examination of seafarers ("Medical Examinations of Seafarers 2005")

The Minister of Transport, Public Works and Water Management,

In view of article 48, subsection 2, of the Ships Manning Act [Zeevaartbemanningswet]s well as articles 104, subsection 3, and article 106, subsections 1, 2, en 3, of the Ships Manning Order for merchant ships and sailing vessels [Besluit zeevaartbemanning handelsvaart en zeilvaart] and articles 60, subsection 3, and 62, subsections 1, 2 and 3, of the Ships Manning Order for fishing vessels [Besluit zeevisvaartbemanning];

DECREES:

Article 1 Definitions

In this regulation the following terms shall mean:

- a. act: Ships Manning Act [Zeevaartbemanningswet]
- b. medical examination: medical examination as referred to in article 105, subsection 1, of the Ships Manning Order for merchant ships and sailing vessels [Besluit zeevaartbemanning handelsvaart en zeilvaart] or article 61, subsection 1, of the Ships Manning Order for fishing vessels [Besluit zeevisvaartbemanning]
- c. candidate: natural person who undergoes a medical examination
- d. risk area: area outside of the Netherlands, where the risk of infection with tuberculosis is greater than the infection risk for the Dutch population, as apparent from an annual prevalence of tuberculosis in the country concerned which is higher than 50 cases per 100,000 inhabitants and as determined by the World Health Organisation.

Article 2 Items to be submitted and checked during the medical examination

- 1. Prior to the medical examination, the examining physician checks:
 - a. the candidate's seaman's book, or
 - b. if the candidate is not yet in the possession of a seaman's book, the declaration by or on behalf of the shipping company that the candidate is in service or will enter into service, accompanied by valid identification, or
 - c. proof that the candidate has registered for a recognised nautical course, accompanied by valid identification.
- 2. Furthermore, the examining physician checks:
 - a. the result of a test for tuberculosis (chest X-ray or Mantoux test)
 - b. the presence of certificate of blood group and rhesus factor, and
 - c. if applicable, a valid dispensation, issued by the Medical Adviser of the Netherlands Shipping Inspectorate as referred to in Chapter 6 of the Ships Manning Order for merchant ships and sailing vessels, and Chapter 7 of the Ships Manning Order for fishing vessels.

Article 3 Medical examination and medical tests

- 1. The medical examination takes place with due consideration to the examination directions and in accordance with the medical standards, stated in annex I and II respectively.
- 2. During the medical examination the examining physician will make use of the Examination Form. The examining physician will retain the Examination Form and any other documents related to the examination, for the duration and in the manner determined by or pursuant to the Dutch Medical Treatment Contracts Act.
- 3. The medical examination of the general physical suitability comprises an examination into previously experienced diseases and accidents (anamnesis), inherited and chronic diseases which occur in the family (family anamnesis), a general assessment of the candidate's mental state of health, determination of the blood group and rhesus factor if these are unknown, chemical urine tests and tests for tuberculosis, as well as a general examination of the body, eyes and ears in order to determine whether the candidate satisfies the standards, as referred to in subsection 1 of this article.

Article 4 Specialist report or partial examination

- 1. The examining physician requests information from the attending physician if, according to Annex II, a specialist report is required or if there are doubts as to whether the standards have been satisfied. If there is insufficient information, the examining physician refers the candidate to a specialist for an additional examination.
- 2. Once the information from the attending physician or the report from the additional examination by a specialist has been received, the examining physician can complete the examination.

Article 5 Issuing the declaration of fitness

- 1. The examining physician who has performed a medical examination for which the result is favourable, will present the candidate with a Seafarers' Medical Certificate. The certificate will state the duty category, period of validity and area of validity.
- 2. The examining physician will authenticate the certificate with his signature and name stamp.

Article 6 Notice of Rejection

- 1. If the Seafarers' Medical Certificate is to be withheld, the examining physician will inform the candidate of this and state the reason or reasons for the rejection.
- 2. Candidates can only be rejected if the entire medical examination has been carried out in accordance with articles 3 and 4.
- 3. The examining physician also informs the candidate of his right to a re-examination.
- 4. For each rejection for maritime service, the examining physician immediately informs the Medical Adviser of the Netherlands Shipping Inspectorate using the "Notice of Rejection", and stating the reason or reasons for the rejection.
- 5. The examining physician presents the candidate with a copy of the "Notice of Rejection" and on this states the reason or reasons for the rejection.
- 6. If during an interim examination on the basis of article 23 of the act the examining physician notices that the candidate is temporarily or permanently unfit for maritime service, he will proceed as prescribed in subsections 1 to 5 of this article.
- 7. The candidate who wants a re-examination will approach a referee and submit his copy of the "Notice of Rejection".

Article 7 Re-examination

- 1. After a declaration of temporary unfitness has been issued, a re-examination can only be performed by the examining physician who rejected the candidate in the first place, unless the candidate wishes to make use of his right to re-examination by an appointed referee.
- 2. After a declaration of permanent unfitness has been issued, a re-examination can only be performed by an appointed referee.

Article 8 Procedure to be followed by arbitrator during a re-examination

- 1. For the re-examination, articles 3 and 4 are equally applicable, with the understanding that the elements for which the candidate has already been declared fit by the examining physician during the medical examination do not need to be repeated, unless there are doubts about the result.
- 2. In some cases the re-examination can solely consist of assessing the medical data available.
- 3. In the case of a declaration of fitness, article 5 is equally applicable.
- 4. In the case of rejection, subsections 1 and 5 of article 6 are equally applicable.
- 5. For the issuing of a dispensation, the referee sends a recommendation to the Medical Adviser of the Netherlands Shipping Inspectorate.

Article 9 Test for tuberculosis

- 1. For candidates who originate from or live in a risk area, a Seafarers' Medical Certificate can only be issued after a favourable test result for tuberculosis.
- 2. Candidates who do not originate from a risk area are free to refuse a tuberculosis test.
- 3. If the candidate has decided not to undergo the tuberculosis test, the area of validity on the Seafarers' Medical Certificate will be limited to travelling between ports in North and West Europe situated between Kirkeness and Gibraltar, in the Baltic Sea as far east as 20°, and ports on the northern coast of the Mediterranean Sea.

Article 10 Recording the results of the medical examination

The results of the medical examinations are recorded by the examining physician in the designated register, with due consideration to the instructions from the Medical Adviser of the Netherlands Shipping Inspectorate, and are kept for the period decreed by the Adviser.

Article 11 Forms

- 1. The model of the Seafarers' Medical Certificate is the model as included in Annex III.
- 2. For the Seafarers' Medical Certificate, the Rejection Report and the Examination Form, the examining physician will solely use the forms that are provided to him free of charge by the Medical Adviser of the Netherlands Shipping Inspectorate.

Article 12 Revocation of the Ministerial Decree "Medical examinations of seafarers 2002"

The Ministerial Decree "Medical examinations of seafarers 2002" [Keuringsreglement voor de zeevaart 2002] will be revoked.

Article 13 Commencement

- 1. This decree will enter into force on the second day after the date on which it is placed in the Dutch Government Gazette [Staatscourant].
- 2. If this regulation is placed in the Dutch Government Gazette [Staatscourant] after 30 December 2004 this regulation will be retroactive to 1 January 2005.

Article 14 Official title

This decree will be cited as: Medical examinations for seafarers 2005 [Keuringsreglement voor de zeevaart 2005].

This decree with the explanatory notes will be placed in the Dutch Government Gazette [Staatscourant].

EXAMINATION DIRECTIONS

(Translation* of the formal text of the Ministerial Decree "Keuringsreglement voor de Zeevaart 2005") Annex I)

The maintenance and promotion of the safety at sea entail inter alia conscientious medical examinations of those seafarers to whom Dutch legislation applies. In general, the person involved should be free from any abnormality, disease or injury which obstructs a safe performance of the duties in order to qualify for a medical certificate.

A seafarer should at all times be able to act adequately in case of an emergency. He must not only be able then to bring himself in a safe position, he must also be able to assist in extinguishing a fire, launching of life-saving devices and the assistance of crew members and passengers.

Furthermore, his (her) presence may cause no danger to the health of the other persons on board.

In this connection it is of particular importance to promptly recognize and treat (or have treated) those disorders which clearly increase the risk to the safety on board.

Assessment of an experienced seafarer

At the examination of the fitness of those who have performed a maritime job for a length of time, it is reasonable to be flexible in a number of cases.

The issue of a Seafarer medical certificate, incidentally and in an individual case, when there are grounds for unfitness, requires that agreement has been reached upon this beforehand with the Medical Adviser of the Netherlands Shipping Inspectorate.

Consultation with the medical adviser

If the assessment of fitness or the degree of unfitness gives rise to doubts, consultations should be held with the Medical Adviser of the Netherlands Shipping Inspectorate.

Specific working conditions on board

In conducting the examination, the examining doctor should give consideration to the specific working conditions on board, which depending on the vessel type and sailing area may very greatly though:

- a. the pattern of work on board exhibits physical and mental peaks at irregular intervals;
- b. The work on board is not infrequently performed in bad weather conditions or powerful winds and in alternating cold and hot circumstances;
- c. depending on the vessel type one has to work in more or less restless surroundings with much background noise and movement;
- d. the work on board is accompanied by considerable physical stress, in addition to which plenty of going upstairs and downstairs, manoeuvring among obstacles and limited room for movement with sometimes an unfavourable position during work, bring along additional stress to the musculo-skeletal system;
- e. the nature of duties is such that there is not always an opportunity to eat and sleep at regular times, and
- f. the number of crew members on board has reduced considerably compared to the past.

 If a person on board is out of circulation through ill-health, his job has to be taken over by colleagues.

Vigilance and concentration

In this connection it is also important to realize that many activities on board call for constant alertness:

- a. navigating, whereby particular alertness is called for when sailing at night, in fog or in bad weather conditions;
- b watch keeping in the engine room, particularly in so-called "stand-by" situations, which call for constant alertness in order to be able to manoeuvre at any given moment;
- c. working with and being responsible for the transport of dangerous goods;
- d. working on and in the vicinity of machinery with moving parts, such as cranes, winches and windlasses etc.;
- e. the performance of work on electrical wiring and steam conduits, and
- f. the performance of work a great heights both inside and outside deep holds.

Limited medical care on board

It should be borne in mind that if careless examination for example results in an ulcer or inguinal hernia being overlooked, the life of the seafarer may be endangered if he suffers a severe stomach haemorrhage or if his inguinal hernia becomes strangulated.

Adequate medical assistance is very remote at such a moment. It is therefore important to recognize during the examination the disorders for which treatment is to be expected. Thus one, for example, has to reckon with the limited -and often late- opportunities for dental assistance.

Risk of infection

Seafarers are living close together for quite a long time. Infectious diseases are therefore a serious problem and may endanger the safety of the vessel. Especially during the examination of personnel which is involved in preparing food and catering extra attention has to be paid to it.

Safety

Wearing personal protective means must be possible without any problem and must not be obstructed by physical disorders or restrictions.

One should think in this case of safety helmets and safety goggles, masks, ear protection, safety shoes and physical condition. Wearing a compressed-air apparatus of 15 kg for minimally 20 minutes requires a good physical condition. Special protective clothing is worn then.

While extinguishing a fire one has to work under great pressure in a warm atmosphere where manoeuvres through narrow holes and corridors are possible.

Examination directions, directives for rejection, medical standards

In addition to the examination directions in this Annex I (page 2-6 / 2-7) and the directives for rejection given below, the medical standards in Annex II (2-9 / 2-16) should be applied during the examination of seafarers.

Directives for rejection

While deciding upon rejection, the doctor is guide by the following general guidelines.

Medically unfit for service at sea is the person who suffers from a disease, abnormality or injury:

- a. which can obstruct a safe performance of the duties;
- b. because of which the seafarer is not at all times able to act adequately in case of an emergency;
- c. which may deteriorate during his stay on board, in such a way that this causes an unacceptable risk to the health or safety of himself or other crewmembers, or a serious nuisance to other persons on board, or
- d. which needs a treatment, which requires prolonged medical supervision or which can necessitate immediate medical intervention.

MEDICAL STANDARDS

(Translation* of the formal text of the Ministerial Decree "Keuringsreglement voor de Zeevaart 2005") Annex II)

Explanation of the terms

1. Fitness:

The examinee is fit, if he completely satisfies the medical standards for all aspects, with due consideration to the examination directions, stated in Annex I of this regulation.

- a. the examinee is temporarily rejected, if on medical grounds it is expected that he will not be unfit for more than 3 years.
- b. the examinee is permanently rejected, if on medical grounds it is expected that he will be unfit for more than 3 years.

3. Specialist report:

If a specialist report is required then sometimes it is sufficient to request information from the attending specialist. If sufficient information is lacking a non-attending specialist is referred to.

4. Experienced:

A seafarer can be viewed as <u>experienced</u> if sufficient sailing time has been acquired in a specific position.

General physical condition and physical skills

Seafarers must have sufficient physical condition and physical skills to adequately function onboard at all times (ref. STCW code, table B-I/9-2).

In addition to the guidelines arising from the other articles it is required that the seafarer can:

- 1. satisfactorily climb up and down vertical ladders and stairways without assistance;
- 2. sufficiently step over 60 centimetre high coamings without assistance;
- 3. sufficiently grasp and lift, and can also use common shipboard tools without problems, can open and close valve wheels, and handle lines and ropes;
- 4. sufficiently reach above shoulder height;
- 5. sufficiently stoop, crouch, kneel and crawl;
- 6. sufficiently stand and walk for at least the duration of a watch;
- 7. move through a restricted opening of 60x60 cm without assistance.

Use of medication Ш

- 1. The use of anticoagulants, other than platelet aggregation inhibitors the mode of action and pattern of side effects of which are comparable to acetylsalicylic acid is a reason for unfitness. The use of immunosuppressives is a reason for unfitness.
- For the use of anti-diabetics and anti-epileptics the guidelines in the relevant articles should be referred to. 2. Being dependent on the use of drugs with a narrow therapeutic spectrum is a reason for unfitness.
- 3. Being dependent on the use of drugs which have side effects in the sense of: dizziness, reduced ability to concentrate and respond, psychological disorders or which affect the circulation, can be a reason for unfitness.
- 4. If drugs are used that do not interfere with the safety of navigation, then in issuing the seafarers medical certificate it must be considered whether the person concerned understands the mode of action and side effects of the drug and has strictly complied with the physician's instructions.
- 5. If drugs are used which do not interfere with the safety of navigation, the extent to which the sudden withdrawal of the drugs (sea sickness, emergency), leads to problems should be considered.

Ш Infectious diseases

- 1. All infectious diseases are a reason for unfitness until adequate treatment has been given. In case of gastrointestinal diseases special attention should be paid to the personnel which is involved in preparing food and catering.
- 2. Pulmonary tuberculosis: if after treatment the seafarer is certified cured by a lung specialist, a medical certificate may be issued.
- 3. Seropositivity (HIV) generally is no reason for unfitness.
 - Prophylactic use of AIDS-inhibiting drugs is usually a reason for unfitness.
 - AIDS is a reason for unfitness in all affirmed cases.
- 4. Hypersensitivity or contraindications for vaccinations or prophylactics which are necessary in the sailing area of the seafarer, are a reason for unfitness or restriction of the sailing area.

IV Malignant tumours

These are usually a reason for unfitness.

Approval requires a favourable specialist report, which shows that complete remission has been reached and that there is no reason to expect acute problems.

Benignant tumours which because of their localization may cause complications constitute grounds for unfitness.

V Endocrine disorders

- 1. Both insulin-dependent and non-insulin-dependent diabetes mellitus are a reason for unfitness. Only in the case of NIDDM among <u>experienced</u> seafarers can treatment with metformin, acarbose or thiazolidinediones be permitted, if a good and stable condition has been achieved. Treatment with SU-derivatives is a reason for unfitness in all cases.
- 2. Manifest hyperthyroidism and hypothyroidism are a reason for unfitness.
- 3. Other endocrine disorders: approval requires a favourable specialist report, which shows that there is no reason to expect acute problems.

VI Blood diseases

- 1. Immunodeficiencies are a reason for unfitness.
- 2. After splenectomy a medical certificate may be issued for non-tropical sailing areas, provided the candidate is aware of the risks and complies with the instructions to precautions and vaccinations.
- 3. Coagulopathy is a reason for unfitness. Approval requires a favourable specialist report, which shows that there is no reason to expect acute problems.

 The use of anticoagulants, other than platelet aggregation inhibitors the mode of action and pattern
 - The use of anticoagulants, other than platelet aggregation inhibitors the mode of action and pattern of side effects of which are comparable to acetylsalicylic acid is a reason for unfitness.
- 4. Other chronic blood diseases, anaemia, leukocytopenia and thrombocytopenia: approval requires a favourable specialist report, which shows that there is no reason to expect acute problems.

VII Psychological disorders

- 1. Psychotic symptoms at the time of the medical examination or psychoses in the case history with a chance of recurrence are a reason for unfitness.
- 2. Bipolar disorders or isolated manias in the case history are a reason for unfitness.
- 3. Depressive symptoms at the time of the medical examination or depressions in the case history which do not fall under the term bipolar disorder are usually a reason for unfitness. Approval requires a favourable specialist report.
- 4. Personality disorders or antisocial, borderline, theatrical, narcistic, deviant, dependent or obsessive-compulsive patterns are usually a reason for unfitness.
- 5. a. Chronic alcoholism, whether continuous or during certain periods in the previous 5 years, is usually a reason for unfitness.
 - b. Addiction to a sedating, stimulating or other psychotropic substance in the case history during the previous 5 years is usually a reason for unfitness.
- 6. ADHD or ADD is a reason for unfitness. Approval requires a favourable specialist report, which shows that there is no reason to expect acute problems

 The examinee should be aware of the international customs regulations concerning his medication.
- 7. Other psychiatric disorders: approval requires a favourable specialist report.
- 8. Concentration or imprinting disorders are a reason for unfitness.
- 9. Cognitive function disorders are a reason for unfitness.
- 10. Acrophobia and claustrophobia to the extent that these affect safe working are a reason for unfitness.

VIII Conditions of the nervous system

- 1. All disorders accompanied by consciousness or balance disorders, as equally attacks of vertigo or uncontrollable sleep are a reason for unfitness.
- 2. All forms of epilepsy in the case history, whether or not treated medicinally, are a reason for unfitness. Exceptions:
 - a. Declaration of fitness is possible if the last seizure took place <u>before 5 years of age</u> and no antiepileptics have been used since.
 - b. Declaration of fitness (see sub d.) is possible 2 years after an <u>isolated epileptic seizure</u>, without a clear cause and without treatment with anti-epileptics, if no epileptic abnormalities were seen on a standard, sleep deprivation and sleeping EEG.
 - c. Declaration of fitness (see sub d.) is possible 5 years <u>after treatment with anti-epileptics was stopped</u> if after this no seizures have occurred and no epileptic abnormalities were seen on the standard, sleep deprivation and sleeping EEG.
 - d. The period of validity of the seafarers medical certificate in the case of exceptions as described in sub b. and c. is initially 6 months. If the person concerned remains free of seizures, the period of validity is then extended by 1 year and thereafter by 2 years.

- 3. Systemic diseases of the Central Nervous System, such as multiple sclerosis or Parkinson's disease, are usually -depending on the stadium of the disease- a reason for unfitness.
- 4. Migraine, coupled with a reduced availability, is usually a reason for unfitness.
- 5. Somnambulism is usually a reason for unfitness.
- 6. Sensitivity disorders in the hands or feet to the extent that this affects safe working is a reason for unfitness.

IX Speech

Speech disorders which affect safe communication are a reason for unfitness.

Also with backgroundnoise there has to be sufficient speaking ability while raising one's voice.

X Disorders of the nose, mouth and throat

- 1. A serious impediment of the inhalation through the nose, for example as a result from a strong deviation of the nasal septum, is a reason for unfitness.
- 2. Extensive caries or disorders of the gingiva is a reason for unfitness.
- 3. Recurrent tonsillitis and focal infections are a reason for unfitness.

XI Thoracic deviations

Thoracic deviations accompanied by obstruction of normal cardiac and/or pulmonary function are a reason for unfitness.

XII Respiratory disorders

- 1. All chronic lung conditions with the possibility of acute deterioration of the lung function are a reason for unfitness.
- 2. Bronchial asthma coupled with a reduced availability is a reason for unfitness.
- 3. Chronic bronchial infections and COPD with serious pulmonary function disorders are usually a reason for unfitness.
- 4. a. A first episode of pneumothorax is a reason for unfitness for a period of 1 year, unless sufficient treatment to prevent recurrence has taken place.
 - b. Recurrent pneumothorax is a reason for unfitness, unless sufficient treatment has taken place.

XIII Cardiovascular disorders

- 1. Heart valve abnormalities and congenital heart defects with haemodynamic consequences are a reason for unfitness.
 - An artificial valve is usually a reason for unfitness.
- 2. Rhythm or conduction disorders for which there is a chance of cerebrovascular accidents, haemodynamic complications or consciousness disorders are a reason for unfitness.
- 3. The wearing of a pacemaker is usually a reason for unfitness. Approval requires a specialist report from which it is clear that the person concerned has sufficient escape rhythm should the pacemaker fail and that the pacemaker cannot be influenced by electromagnetic radiation.
- 4. The wearing of an ICD is a reason for unfitness.
- 5. Myocardial disorders, resulting in a reduced ergometrically-determined load tolerance of the heart are a reason for unfitness.
- 6. Angina pectoris is a reason for unfitness.
 - Approval requires a favourable specialist report, which shows that there is no reason to expect acute problems.
- 7. Aortic aneurysm is usually a reason for unfitness.
 - Approval requires a favourable specialist report, which shows that there is no reason to expect acute problems.
- 8. Hypertension: a diastolic pressure of > 105 mm Hg upon repeated measurement is a reason for unfitness.
- 9. Symptoms of peripheral vascular disorders, arterial or venous, are a reason for unfitness. A vascular prosthesis is usually not a reason for unfitness.
- 10. Every cerebrovascular accident, including a TIA, in the case history, is usually a reason for permanent unfitness.

XIV Gastrointestinal disorders

- 1. A gastric or oesophagic disorder with an increased chance of bleeding or perforation, including the peptic ulcer, is a reason for unfitness.
 - Approval is only possible after endoscopic recovery has been diagnosed.
- 2. Chronic intestinal diseases are usually a reason for unfitness.
- 3. A Seafarer Medical Certificate can be issued in the case of a stoma of the colon or jejunum if the underlying intestinal disease has completely healed, as long as the person concerned understands

the risks and complies with the requirements with respect to the daily caring and hygiene.

4. Inguinal hernia is a reason for unfitness.

Umbilical hernia for which there is a risk of strangulation is a reason for unfitness.

XV Disorders of the liver, gall bladder and pancreas

Disorders of the liver, gall bladder and pancreas including the presence of gall stones, are a reason for unfitness.

Approval requires a favourable specialist report, which shows that there is no reason to expect acute problems.

XVI Disorders of the urinary passages

- 1. Disorders of the higher or lower urinary passages, resulting in recurrent complaints or a reduced kidney function, are usually a reason for unfitness.
- 2. A kidney stone is a reason for unfitness.
- 3. Having one kidney is usually not a reason for unfitness, as long as the renal function is unimpaired.

XVII Gynaecological disorders

Menorrhagia, metrorrhagia, prolapse of the uterus, endometriosis and recurrent salpingitis are a reason for unfitness.

XVIII Pregnancy

The seafarer herself finally decides whether she wants to qualify for approval.

Extra attention needs to be paid to a first pregnancy and to a history of prior pregnancy complications. Sailing can only be allowed in case of an uncomplicated pregnancy from the 13th till the 28th week. The first and last trimester and the recovery period post partum should be considered as a period of unfitness. Sailing in the second trimester can only be allowed on vessels in a limited sailing area in which adequate medical treatment is available.

Sailing in the second trimester in an unlimited sailing area is allowed on vessels with a doctor with sufficient skill in obstetrics.

XIX Skin disorders

Skin disorders which recur frequently or which repeatedly form a serious impediment to the performance of duties on board, are a reason for unfitness.

XX Disorders of the musculo-skeletal system

- 1. Recurrent back pain accompanied by absenteeism is a reason for unfitness.
- 2. Arthritic disorders and other diseases of the musculo-skeletal system are a reason for unfitness if the disorder is progressive, results in pain or limited functions.
- 3. Contractures resulting in a significant restriction on movement are a reason for unfitness.
- 4. Mutilations or congenital abnormalities which have resulted in a reduced ability to work or an increased risk of accident, are a reason for unfitness.
- 5. Limb protheses are usually a reason for unfitness.
- 6. Artificial joints are usually a reason for unfitness. Approval of a hip prosthesis requires a favourable specialist report, which shows that the chance of dislocation is as good as negligible and that problems are not expected with working in a moving environment with an increased risk of falling and bumping.

XXI Overweight

- 1. Uncomplicated overweight: a Quetelet-index ≥ 30 with a significantly reduced capability and indications that the candidate is impeded in performing his function, is a reason for unfitness.
- 2. Complicated overweight: a Quetelet-index ≥ 30 with a normal physical capacity, but with additional risk factors such as, for example, hypertension and increased serum lipids, is a reason for unfitness.

XXII Allergies

Serious allergic reactions as a consequence of contact with substances available on board, are a reason for unfitness.

XXIII Eves and vision

A. All seafarers charged with look-out or watch duties.

1. Visual acuteness is assessed with the help of the Chart of Landolt TNO, the Snellen character chart or another test which may be considered to be equivalent.

a. Service on deck and on the bridge with look-out or watch duties

With each eye separately, if necessary with own (spare) glasses or contact lenses, a vision of 0.7 for the best eye and 0.5 for the worst eye should be reached.

Vision without optic correction devices with each eye separately should total not less than 0.1.

b. Services in the engine room with watch duties

With each eye separately, if necessary with own (spare) glasses or contact lenses, a vision of 0.4 should be reached.

Vision without optic correction devices with each eye separately should total not less than 0.1.

- 2. To close vision applies that, if necessary with own correction devices, a visual acuteness corresponding to one of the following results should be achieved:
 - Precision Vision test at 40 cm;
 - Laméris "The Dutch" at 30 cm D=0.6;
 - Oculus Landolt C's at 30 cm line indicator=0.9;
 - Nieden Jaeger at 30 cm J=3.

Visual acuteness for reading monitors of computers or radars and for reading navigation devices or measuring and control devices at a distance of 70 cm should be sufficient, if necessary corrected adequately.

- 3. If optic correction devices have been used at the examination, adequate spare glasses both for close or remote vision must be shown to the medical examiner.
 - Making use of coloured correcting lenses or contact lenses during the medical examination is a reason for specialist examination by an ophthalmologist.
- 4. For the examination of the colour discrimination, performed under lighting conditions prescribed for the test concerned, a score of 2 mistakes in the Ishihara test is a reason for further examination with a specialist colour test, unless it is already clear from a report of earlier tests performed by an ophthalmologist that the following limits are not exceeded.

A reason for rejection is a larger deviation than the following outcomes:

- Hardy, Rand and Rittler: "mild"; or
- Tokyo Medical College: "second degree"; or
- an equivalent outcome with a comparable colour test.
- 5. A visual field disorder found during the confrontation method according to Donders is a reason for specialist examination by an ophthalmologist.
- 6. Refractive surgery:
 - a. Within 2 years of the intervention: a specialist report is required, from which it is apparent that all of the criteria for vision have been satisfied and that there are no detrimental effects with respect to observing contrast, for glare or for nocturnal myopia.
 - b. More than 2 years after the intervention: a one-off specialist report is required from which it is clear that at all of the criteria for vision are satisfied, that there are no detrimental effects with respect to observing contrast, for glare or for nocturnal myopia and that also in so far as it can be established no more changes will occur in the area operated on.
- 7. Assumption of night-blindness (because of case history or behaviour of the candidate) is a reason for specialist examination by an ophthalmologist.
 - An adaptation disorder larger than 1 log is a reason for unfitness.
- 8. Double vision may not exist.
- 9. A progressive or chronic eye disorder is a reason for specialist examination by an ophthalmologist. Approval requires the determination that the vision will not be endangered within 2 years in such way that compliance with the criteria is no longer possible.

B. All seafarers without look-out or watch duties.

- 1. Visual acuteness is assessed with the help of the Chart of Landolt TNO, the Snellen character chart or another test which may be considered to be equivalent.
 - With both eyes simultaneously, if necessary with own (spare) glasses or contact lenses, a vision of 0.4should be reached.
 - Vision without optic correction devices with each eye separately should total not less than 0.1.
- 2. If optic correction devices have been used at the examination, adequate spare glasses must be shown to the medical examiner.

XXIV Ears and hearing

- 1. An active infection of the middle ear or auditory passage at the time of the medical examination is a reason for unfitness.
- 2. Recurrent c.q. chronic otitis media is a reason for unfitness, unless the condition has been settled for some considerable time (about 6 months) so that it can be assumed that it is completely healed.
- 3. A perforated tympanum is a reason for unfitness, unless the underlying condition has been settled

- for some considerable time (about 6 months) so that it can be assumed it is completely healed.
- 4. Grommets are a reason for unfitness for a period of at least 6 months after these have been placed. Approval requires that the underlying condition has settled after this period of time so that it can be assumed that this has completely healed.
- 5. An open surgical cavity is a reason for unfitness, unless this has settled for 6 months and requires no other treatment except the occasional removal of cerumen.
- 6. Recurrent c.q. chronic otitis externa associated with pain and intense itching is a reason for unfitness.
- 7. Menière's disease is a reason for unfitness.
- 8. All disorders accompanied by consciousness or balance disorders, as equally attacks of vertigo or uncontrollable sleep are a reason for unfitness.

A. All seafarers charged with look-out or watch duties: service on deck and bridge or in the engine room.

- 1. A test with the tone audiometer is performed once every 2 years.
 - A hearing loss of on average 30 dB (HL) or more for the best ear is a reason for unfitness.
 - A hearing loss of on average 40 dB (HL) or more for the worst ear is a reason for unfitness.
 - The applicable criterion is the arithmetic mean of the unmasked conducting thresholds at 500, 1000, 2000 and 3000 Hz.
 - If the equipment does not allow for measurement at 3000 Hz, the threshold at 3000 Hz per ear may be calculated on the basis of the average of thresholds at 2000 and 4000 Hz for the same ear.
- 2. The use of a hearing aid is usually a reason for unfitness.
 - For <u>experienced</u> seafarers a dispensation for this requirement is possible if in the opinion of the referee the hearing loss is sufficiently compensated by the hearing aid.

B. All seafarers without look-out or watch duties.

- 1. The auditory acuity should be such that conversational speech at a distance of 2 metres is perfectly understood by <u>each ear separately</u>.
 - This test should be performed according to the applicable guidelines and procedures.
- 2. The use of a hearing aid is usually a reason for unfitness.
 - For <u>experienced</u> seafarers a dispensation for this requirement is possible if in the opinion of the referee the hearing loss is sufficiently compensated by the hearing aid.

Explanatory notes

General

This regulation serves to implement the recent changes in the Ships Manning Order for merchant ships and sailing vessels and the Ships Manning Order for fishing vessels and is an elaboration of the completely integrated medical examination for seafarers, as already detailed in both orders. The changes with respect to the decree "Medical examinations for seafarers 2002" are explained below.

The experiment in which a number of examining physicians performed the six-yearly examination of the eyes and ears for was successfully completed. No notable problems were reported with regard to general physicians' carrying out these examinations, providing that they had the necessary equipment and were sufficiently competent. In case of doubt or if indicated in the directions and standards, an additional examination by a specialist must be carried out.

The integration of the three medical certificates into a single document increases the efficiency. In addition to this, the period of validity has been adjusted, and has now been set at a maximum of two years, instead of the period of one year adopted up to now. This is in accordance with the international regulations from ILO Convention no. 73, concerning the medical examination of seafarers. International regulations of the International Labour Organisation (ILO) of the United Nations.

Up until now, the specific function of the seafarer was always stated on the medical certificate. This gave the impression that there were also many different function-specific medical requirements: an officer could not be declared fit for the position of captain and vice versa. In order to remove this apparent precision, the duty category for which a declaration of fitness has been issued will be stated from now on. The Decree "Medical examinations for seafarers 2002" was already geared to this and no adjustment was needed with respect to the medical standards.

The Examination Form for the anamnesis and physical examination was previously made available to examining physicians on a voluntary basis. Their use has now become compulsory. The underlying intention is to realise a greater uniformity in the medical examination whilst at the same time standardising the recording of the data. If further tests are necessary, data can easily be exchanged.

The examination results have always been recorded by the examining physician in the register designated for this purpose. An electronic register is now available as well, and the Medical Adviser of the Netherlands Shipping Inspectorate will soon make the use of this compulsory by enforcing article 10 of the Decree "Medical examinations of seafarers 2005". This will prevent delays due to the manual transfer of the examinations in the database. The phenomenon of "doctor shopping" can be detected at an early stage and eventually it will be possible to analyse trends in the numbers and types of rejections. The examination card has been a valuable instrument for detecting doctor shopping, but places an extra administrative burden on the examining physician. With the introduction of the compulsory use of the electronic register, this card will become obsolete. The Medical Adviser of the Netherlands Shipping Inspectorate will receive a warning as soon as the database detects a declaration of fitness following a previous rejection.

With the present medical standards, Table B-I/9-2 of Code B (Guidance on assessment of minimum entry-level and in-service physical abilities for maritime personnel) has also been implemented. This Code is part of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers that was amended in London on 7 July 1995 (Trb. 1996, 249).

Administrative burdens

This regulation is part of a project aimed at considerably reducing the administrative burdens involved in the medical examination of seafarers.

The reduction is quantified and further explained in the explanatory notes of the Decree of 13 December 2004 (Bulletin of Acts and Decrees 2004, 711), concerning amendments to the Ships Manning Order for

¹ Approved for the entire Kingdom of the Netherlands by an Act of Parliament dated 24 July 1948, Bulletin of Acts and Decrees I 326. The ILO Convention No. 73 concerning the medical examination of seafarers came into force for the Kingdom (the Netherlands) on 17 December 1958 (Trb. 1958, 84).

merchant ships and sailing vessels [Besluit zeevaartbemanning handelsvaart en zeilvaart] as well as the Ships Manning Order for fishing vessels [Besluit zeevisvaartbemannin]) (revision of the system of medical certificates for seafarers and several other amendments).

Medical examination procedure

The periodic examinations will be carried out by physicians, who in accordance with article 40, subsection 1, of the Ships Manning Act [Zeevaartbemanningswet] (hereafter referred to as: the act) have been appointed for this purpose by the Minister of Transport, Public Works and Water Management. Prior to the actual examination, the person who subjects himself to the - legally required - examination hands over a number of documents which will be checked by the examining physician. The fitness examination will then take place, including a complete examination of the eyes and ears. In the case of doubt or if required in the medical standards, the examining physician will request information from the attending physician or will refer the candidate for an additional examination. The examination can be completed once the respective reports have been received.

Article 1

The World Health Organisation (WHO) periodically publishes information about the prevalence of tuberculosis. The basic premise of the current regulation is that countries where the prevalence of tuberculosis is higher than 50 cases per 100,000 residents should be viewed as risk areas. The risk of infection here is greater than that for the Dutch population in general.

Article 2

Prior to the medical examination, the examining physician should verify the identity of the candidate and establish whether the additional tests have been performed.

Article 3

The examining physician carries out the examination on the basis of the examination directions and medical standards, and records and enters the data in accordance with the Examination Form. The medical examination data are archived and retained for the applicable periods. The medical examination should be completed in full before a judgement is made.

Article 4

If the examining physician does not have sufficient information to reach his judgement then he can, with the candidate's consent, request information from the attending physician. Should this information not be available or transpire to be insufficient, the examining physician will refer the candidate for an additional examination by a specialist. This will also happen if the regulation specifically requires this. For the examination, the examining physician can refer the candidate to a specialist of choice. When all of the information is available, the medical examination can be completed.

Article 5

After the seafarer is declared fit, he receives the Seafarers' Medical Certificate.

Article 6

If the examining physician is of the opinion that the candidate cannot be declared fit, he gives the candidate a so-called Notice of Rejection. The examining physician is expected to state the reasons for rejection and to draw the candidate's attention to his right to a re-examination. The Notice of Rejection states how the candidate can request a re-examination.

Article 7

After a period of temporary unfitness, a candidate can be re-examined by the same examining physician who rejected him. If the examining physician is of the opinion that the original objections are no longer present, the candidate will be declared fit. The re-examination will be performed by the referee if the candidate does not want to be re-examined by the first physician or in the case of permanent unfitness. Article 43, subsection 1, of the act states that a declaration of fitness issued by a physician other than one of the approved physicians, is not valid.

Article 8

The refereer follows the same procedures and standards, with the understanding that elements for which the candidate has already been declared fit, do not need to be repeated. Furthermore, for a reexamination it is not always necessary to perform a physical examination on the candidate. The assessment of medical data can be sufficient to allow the referee to reach a result.

The re-examination by the referee is organised along the same lines as the first examination. A general referee takes the advice from additional examinations by specialists and then decides whether to declare fit, reject or issue a dispensation.

In cases concerning the vision and hearing, advice will be requested from a professor in ophthalmology or otolaryngology.

Article 9

The decree of 2002 already offered the possibility of exemption or dispensation from this examination for crew members on sea fishing vessels with sailing area II, crew on sailing ships with sailing area IIIa and crew on seagoing vessels travelling near the coast from a named Dutch working harbour. For this, copies of the certificate of seaworthiness, accompanied by the employment contract or the partnership contract, a declaration from the Vereniging Beroepschartervaart BBZ or a declaration from the Head of the Netherlands Shipping Inspectorate had to be submitted to the examining physician. Allowing seafarers who do not stay in a risk area to choose whether or not they want to undergo a test for tuberculosis, with the consequence that -if they decide not to- the permitted sailing area will be geographically limited, has led to a number of administrative duties being scrapped.

Article 10

After a transition period the examining physicians will supply the examination results electronically. This will enable "Doctor shopping" to be monitored efficiently and as a consequence of this the examination card will be withdrawn.

Article 11

With the new regulation the quantity of forms has been more than halved. Examining physicians should make use of the models of the Seafarers' Medical Certificate, the Notice of Rejection and the Examination Form supplied by the Medical Adviser (of the Netherlands Shipping Inspectorate in order to prevent fraud and abuse.

The Seafarers' Medical Certificate is presently available on paper with a watermark.

Annex II Medical standards

In general, small modifications have improved the text of the medical standards. Sections for which an explanation was frequently requested from the Medical Adviser of the Netherlands Shipping Inspectorate have been explained in greater detail. The examining physicians have been given greater responsibilities, as a result of which the time-consuming re-examinations for seafarers can be limited. Where possible, the requirements have been adjusted to take into account new medical developments and changed insights.

General physical condition and physical skills

Up until now the general physical requirements were overlooked, due to the focus on detecting diseases and conditions. Yet these also form an essential part of being able to function safely onboard ship. This issue was tackled by a workgroup in 2000, and following their deliberations a supplement to the STCW Code was published: Chapter B-I-9 with Table B-I/9-2. Being able to negotiate stairs without any problems and the ability to move around on a swaying ship are important in terms of safety, as is the physical ability to be able to stand and walk during a full watch. The regulation about being able to move through an opening of 60x60 cm relates to the requirement with respect to obesity, which has been effective since 1 July 2000.

Element VIII.2 Conditions of the nervous system

Epilepsy has long been a reason for rejection. For the re-examination by a referee an internal policy has developed over the years for making exceptions based on an individual consideration of the risks. Discussions with experts and literature research has made it possible to realise a differentiation in this as well. The conditions under which the general medical examiner can issue a declaration of fitness are specified.

Element XIII.3 Cardiovascular complaints

Wearing a pacemaker has also long been a reason for rejection. Modern developments have opened up the possibility of introducing a distinction with respect to these medical devices. If the candidate wears a pacemaker which cannot be deregulated by electromagnetic radiation and if the condition is satisfied that a life-threatening situation does not immediately arise should the pacemaker fail, a declaration of fitness can be issued by the general medical examiner.

Element XXIII Eye and vision

The requirements for visual acuity had already been adjusted in line with the international guidelines of the ILO and WHO. The use of these has led to few problems.

The inability to distinguish colours remains a reason for rejection in about 8-10% of cases, which is in line with the expected prevalence of colour blindness amongst men in general. Under the present criteria a mild form of colour blindness can be accepted. However with the tests currently used, the problem remains that seafarers do not see the relationship between the coloured numbers in the textbooks and, for example, the red and green lights which they must be able to observe at sea. They therefore experience difficulties in accepting the rejection. Yet at present no better test methods can be recommended.

The number of seafarers that undergo refraction correction is increasing. Also students at nautical college are increasingly deciding to undergo the operation in order to make it possible to start a career at sea. This operation does not form a reason for rejection, as long as all of the criteria for visual acuity are satisfied and there are no negative side effects.

Element XXIV Ear and hearing

There are no changes with respect to the Decree "Medical examinations of seafarers 2002".