

Annex I

Seafarer Medical Fitness Standards

This annex to Decree No. 2015 - 1575 of 3 December 2015 on the health and medical fitness of seafarers is instrumental in the implementation of:

- The International Labour Organisation's 2006 Maritime Labour Convention;
- The International Labour Organisation's Convention No. 188 on work in fishing
- The International Convention on standards in relation to seafarer training, certification and watchkeeping (and an annex) agreed in London on 7 July 1978, all of the Code relating to seafarer training, certification and watchkeeping, published in Decree No. 84-387 on 11 May 1984, modified in its annex by the amendments adopted in 1995, published in Decree No. 97-754 on 2 July 1997, and the amendments to the annex adopted in Manila on 24 June 2010;
- The amended Council Directive 1999/63/EC of 21 June 1999 concerning the Agreement on the organisation of working time of seafarers concluded by the European Community Shipowners Association (ECSA) and the Federation of Transport Workers' Unions in the European Union (FST);
- Directive 2012/35/EU of the European Parliament and the Council of 21 November 2012 amending Directive 2008/106/EC on the minimum level of training for seafarers.

1. - General provisions

To work aboard ships, seafarers are subject to the medical fitness rules defined below.

Generally speaking, being medically fit to sail necessitates the functional and morphological integrity of the individual.

A medical contraindication to sail leading to a partial or total, temporary or permanent, if not irrevocable, ineptitude, includes any physical or psychological health condition and any detectable complaint or disability that is likely:

- To lead to create a certain level of risk for an individual who is performing his duties away from appropriate medical care because of its pathological characteristics, its progressive potential, or its therapeutic implications;
- To make it impossible for the individual to perform his duties on board normally;
- To be aggravated by the proposed professional activity;

- To put other team members or future passengers at risk.

These rules may be modified slightly according to the type of sailing proposed or practised and the supposed or performed functions.

2. - Somatic state

Decreased statural and ponderal growth, depending on its extent and etiology, may lead to an individual being found to be temporarily or permanently unfit for seafaring duties; the same can be said for delayed puberty.

Physiological strain characterised by a marked weakening of physical or psychological capabilities shall result in an individual being considered unfit for seafaring.

3. - Pathologies of the cranio-spinal axis

The following pathologies are incompatible with seafaring when they have functional repercussions:

- Disabling sequelae following fractures and cranial traumas;
- Significant sequelae following a spinal injury;
- Significant scoliosis and cypho-scoliosis, extreme deformations of the spinal axis.

4. - Pathologies of the limbs and girdles

Generally speaking, the following pathologies are not compatible with seafaring:

For the upper limbs, complaints and injuries which result in a significant alteration to the gripping capabilities of either hand, particularly in relation to the tripod pinch and the thumb and forefinger pinch, as well as stiffness or ankylosis of the elbow or shoulder when in an awkward position;

When these complaints occur during a person's employment, consideration is given to the possibility of functional compensation, the socio-professional impact of the disability, the duties performed on board and the type of seafaring carried out, with each decision being made on a case by case basis.

For the lower limbs, amputations and, more generally, complaints and injuries which result in significant difficulties standing still or walking;

However, for those who are already employed, an amputation below the upper third of the leg may be deemed compatible with seafaring if the prosthesis is acceptable and the knee is not stiff or unstable ;

In principle, hip and knee replacements are not compatible with seafaring. However, for those who are already employed, some prostheses with a satisfactory functional result may be tolerated, depending on the duties performed on board and the type of seafaring carried out.

5. - Infectious diseases

Any person suffering from a contagious disease is considered temporarily unfit for seafaring. When such a disease abates, seafaring cannot be resumed until the end of the expulsion period and after the production of a medical certificate attesting to the person's recovery and non-contagiousness.

In the case of a contagious disease, screening and prophylactic measures may be put in place for those who have been in contact with the infected individual.

An isolated positive HIV antibody test result does not in itself constitute being unfit for seafaring.

6. - Vaccinations

Seafarers and seafaring candidates must be up to date with mandatory vaccinations in accordance with the French Public Health Code, and for international travel those defined by International Health Regulations.

Other vaccinations may be offered to seafarers depending on the type of seafaring in question.

7. - Neoplastic diseases

In principle, neoplastic diseases result in a person being considered unfit for seafaring.

However, persons who have been treated or are receiving treatment for such a disease may be authorised to work depending on the nature of the disease, any existing injuries and their likely course, the type of seafaring envisaged, the duties performed on board and the psychological impact of a refusal.

8. - Blood disorders and diseases of the hematopoietic organs

Generally speaking, the following pathologies are not compatible with seafaring:

- Malignant hemopathies;
- Hemophilia and hemophilia syndromes;
- Congenital or acquired hemolytic anemia;
- Purpura depending on its type and form;
- Major polyglobulia;
- Biermer's anemia.

However, the following pathologies may be deemed compatible with seafaring:

- Effectively treated Hodgkin's disease;
- Biermer's anemia when neurological symptoms are not present and it is well controlled by treatment;
- Minor forms of thalassemia.

9. - Poisoning

Poisoning from industrial substances may, depending on its nature, degree, intensity and the location of the manifestation, lead to a person being considered temporarily or permanently unfit for seafaring. Each case is subject to a specialised assessment before any decision is made.

10. - Endocrine system diseases

In principle, endocrine system diseases lead to a person being considered temporarily or permanently unfit for seafaring.

However, following a specialised assessment of each case, certain forms of slight dysendocrinia may be deemed compatible with seafaring depending on the etiology, functional impact and therapeutic implications.

11. - Metabolic diseases

11.1. Diabetes – Insulin using:

Subjects with uncomplicated insulin-dependent diabetes, properly balanced with diet and drug treatment, and who have a good understanding of the disease, are subject to a specific decision. This takes into account the nature of the treatment, results of lab exams, navigation practised and functions performed on-board. These cases are examined by the Maritime Medical College upon entering the profession.

An insulin-dependent or insulin-requiring patient can only exercise the functions of a general service agent or non-marine seafarer on ships practising second-category navigation at a maximum.

Insulin-dependent or insulin-requiring diabetes is not compatible with navigation and watchkeeping functions.

The duration of the medical fitness cannot exceed one year.

11.2. Diabetes - non Insulin treated:

Subjects with non-insulin-dependent, uncomplicated diabetes, properly treated with diet alone or associated with oral treatment, and having a good understanding of the treatment, are subject to a specific decision which takes into account the nature of treatment, results of lab exams, navigation practised and functions performed on-board. These cases are examined by the Maritime Medical College upon entering the profession.

Unbalanced, complicated or progressive diabetes results in temporary or permanent inability to navigate. Non-insulin-dependent diabetes is not compatible with long-term navigation.

11.3. Others Metabolic diseases :

Significant lipid or uric acid metabolism disorders, even in the absence of an obvious clinical manifestation, may result in a person being considered temporarily or permanently unfit for seafaring depending on the therapeutic and nutritional constraints. Hyperuricemia complicated by

gouty arthritis or renal failure is not compatible with seafaring.

Morbid obesity may be deemed incompatible with seafaring either because of its complications, the need for strict treatment or a person's inability to perform the necessary duties in the event an emergency. Unfitness is temporary or permanent and every decision is made on a case by case basis.

12. - Cardiovascular diseases

Generally speaking, congenital heart defects are not compatible with seafaring duties, particularly:

- Cyanotic heart defects, including Ebstein's disease, even if operated on;
- Investigated and confirmed aortic narrowing;
- Unoperated coarctation of the aorta;
- Complex congenital heart disease;
- Pulmonary artery hypertension;
- Large left-right shunts;
- Pulmonary stenosis with a gradient greater than 40 mm; only small type 1 shunts and pulmonary narrowing with a low or moderate gradient are compatible with seafaring.

However, persons suffering from an operated acyanotic heart defect may be authorised to sail following a specialised assessment of sequelae.

Hemodynamically significant valvular heart diseases and prosthetic valves subject to anticoagulation treatments are not compatible with seafaring. Only mitral valve prolapses without breathing problems or heart rhythm disorders (isolated click) are compatible with seafaring.

However, persons with the following pathologies may be authorised to sail following a specialised assessment :

- Bioprostheses, without anticoagulant or functional problems;
- Certain well-tolerated valvular heart diseases, including prolapses with mitral valve regurgitation.

Heart failure is not compatible with seafaring.

Cardiomyopathy is not compatible with seafaring:

Chronic constrictive pericarditis and effusive pericarditis are not compatible with seafaring.

However, operated constrictive pericarditis may be compatible with seafaring, subject to a specialised assessment of sequelae.

However, antecedent acute pericarditis that is cured without sequelae is compatible with seafaring.

Among the ischemic heart diseases that are not compatible with seafaring are all forms of angina, symptomatic coronary insufficiency and sequelae of myocardial infarction.

However, persons with a healed infarction or having had a threatening syndrome may be authorised to sail following a specialised assessment of sequelae if there is no residual angina, no cardiac insufficiency, no heart rhythm disorder and following favourable results from paraclinical tests, including a stress test and the measurement of the ejection fraction of the left ventricle.

The same applies to persons who have undergone revascularisation procedure or a coronary angioplasty.

Seemingly isolated heart rhythm disorders are subject to an accurate and precise assessment to eliminate an underlying heart disease.

The following are not compatible with seafaring:

- Sustained ventricular tachycardia;
- Poorly tolerated paroxysmal tachycardia;
- Permanent fibrillation and flutters;
- A complete, high degree or Mobitz 2 second degree atrioventricular block;

However, following a specialised assessment, persons with the following may be authorised to sail:

- Extrastyles, whatever the origin;
- A pre-excitation syndrome;
- Other heart rhythm disorders and sinoatrial and atrioventricular conduction problems;
- An automatic defibrillator.

This assessment will take into account the type of duties performed and the seafaring in question.

Uncontrolled permanent or paroxysmal atrial hypertension is not compatible with seafaring.

The following disorders of the aorta and peripheral vessels are not compatible with seafaring:

- Aortic and peripheral aneurysms;
- Advanced arterial disease;

- Severe manifestations of postthrombotic syndrome;
- Extensive or voluminous varicose veins or those accompanied by trophic disorders.

However, following a specialised assessment, persons with stage II arterial diseases and arterial diseases that have been operated on with good functional results may be authorised to sail.

Among the different types of cardiovascular therapeutics, any anticoagulation treatment is, in principle, not compatible with sailing. However, in exceptional cases and in the absence of remoteness, heavy work and traumatic risk, some individuals may be authorised to sail.

13. - Pleural, pulmonary and bronchial diseases

Pleural, pulmonary and bronchial disorders which, when accompanied with acute or chronic respiratory or ventilatory failure, with constant dyspnea or repeated paroxysms, which prevent a person from exerting themselves physically or performing their duties normally, are not compatible with seafaring. Decisions are made on a case by case basis following a specialised functional assessment.

14. - Allergy and immunity diseases

Whether persons with allergy or immunity diseases are considered unfit for seafaring, and whether this is temporary or permanent, partial or total, is decided on a case by case basis depending on the physical or functional impact that these diseases may have on the various equipment and their etiology.

15. - Digestive system diseases

Generally speaking, any disease of the digestive system or its appendages which, because of its pathological characteristics, likely course and potential complications, may pose a degree of risk to an individual who finds themselves professionally beyond the reach of emergency medical services, leads to a person being considered unfit for seafaring.

In particular, the following are not compatible with seafaring:

- Peptic ulcer esophagitis or esophageal stenosis;
- Gastroduodenal ulcers and their complications;
- Repeated outbreaks of ulcerative colitis;

- Chron's disease;
- Cirrhosis of the liver;
- Portal hypertension; oesophageal varices;
- Hemochromatosis affecting the liver, heart or endocrine glands;
- Cholecystitis;
- Chronic pancreatitis.

However, persons with a gastroduodenal ulcer that has been treated medically or surgically with a favourable result confirmed by fibroscopy may be authorised to resume or take up seafaring activities.

Similarly, persons who are in remission from asymptomatic or chronic pancreatitis may be authorised to continue seafaring activities.

16. - Hernias, eventrations

Hernias and eventrations are not compatible with seafaring: After the radical cure and the satisfactory reconstruction of the abdominal wall, seafaring may be authorised depending on the results obtained.

17. - Diseases of the genitourinary tract

Generally speaking, the following pathologies are not compatible with seafaring:

- Chronic nephropathy;
- Nephrocalcinosis;
- Polycystic kidney disease;
- Chronic ureteropelvic junction obstruction;
- Hydronephrosis;
- Permanent proteinuria;
- Prostatic adenoma affecting the upper tract or having already been complicated by an obstructive episode;
- Enuresis.

However, the following pathologies may be deemed compatible with seafaring:

- Intermittent, transient or orthostatic proteinuria; unilateral nephrectomy with normal renal function;
- When already working, certain non-transient proteinuria when anatomical injuries remain discreet and when the prognosis is good; the same applies to discreet hydronephrosis when there is no infection or thinning of the renal cortex; this is also the same for isolated and asymptomatic renal obstructions and isolated microscopic hematuria when the etiologic assessment is negative.

18. Obstetric gynaecology

Any gynaecological condition which may, because of its characteristics, likely course or therapeutic requirements, may pose a degree of risk to an individual who is likely to find themselves professionally out of reach of appropriate medical care is not compatible with seafaring.

Pregnancy is subject to a specialised assessment which takes into account prohibited work in the sense of work regulations, working and living conditions on board, the remoteness imposed by the type of seafaring, professional exposure to infectious, chemical and physical agents, including substances that are mutagenic or toxic for reproduction, and organisational factors, particularly night work.

Pregnant women and mothers during the six months following childbirth and as long as they are breastfeeding shall benefit from additional medical support. Pathological pregnancies are not compatible with seafaring.

19. - Neurological disorders

The following are not compatible with seafaring:

- Brain disorders and injuries, meningitis and spinal chord injuries, regardless of the etiology; only acute conditions cured without sequelae are compatible with seafaring.
- Paresis and peripheral paralysis that could compromise static positions or coordinated gripping with the upper limbs or even walking. The same applies to neuro-muscular disorders affecting the same or other vital functions:
- Paralysis of cranial nerves; however, an isolated and slight impairment of facial or spinal nerves may be deemed compatible with seafaring;

- Disorders and injuries likely to lead to repeated losses of consciousness, the occurrence of which cannot be totally avoided, in all circumstances, regardless of the etiology. However, when the person's career is under way, these same conditions when recognised clinically but in the absence of an exact diagnosis, particularly in the case of a verified absence of a precise EEG test, shall be subject to a specialised assessment comprising an observation period of at least six months: following this clinical and paraclinical assessment, a decision shall be made on a case by case basis, taking into account the type of seafaring in question and the duties performed on board; confirmed absences, which are in principle incompatible with seafaring, should be considered on a case by case basis;

- Generalised epileptic syndromes;

- Muteness;

- Marked stuttering will prevent candidates applying for roles involving the oral transmission of orders or information to other crew members or passengers.

20. - Psychiatric and behavioural disorders, addictions

I. - Certain psychiatric and behavioural disorders are not compatible with seafaring, particularly:

- Dementia;

- Schizophrenia, delusional disorders, psychotic disorders;

- Manic-depression and other mood affective disorders;

- Neurotic disorders including anxiety, phobic anxiety disorder, obsessive compulsive disorder, post-traumatic stress disorder and dissociative disorder;

- Personality disorders;

- Pervasive developmental disorders, mental disabilities;

- Psychiatric and behavioural disorders related to the use of psychoactive substances.

When these same psychiatric disorders are recognised during the course of a person's professional life they shall be subject to an expert assessment which takes into account, in particular, the living and working conditions on board, the environmental adaptation, the type of seafaring in question and the potential therapeutic implications. The seafarers' doctor must obtain all relevant information. Following this assessment, the person's fitness for seafaring may be revised.

II. - A biological study of psychoactive substances is carried out:

- For seafarers during their initial visit;
- For all seafarers offered positions on board requiring a permanent high level of vigilance and in particular the following safety and security positions:
 - Ship command and navigational positions;
 - Security and safety staff;
- When the medical examination reveals certain information that could suggest the consumption of psychoactive substances;
- When seafarers are involved in an incident on board that could suggest the consumption of psychoactive substances and which gives rise to a detailed report prepared by the captain for the attention of the seafarers' doctor.

A positive test is likely to call into question the person's fitness for seafaring and their ability to fulfil a security or safety position on board.

Addiction to a psychoactive substance, including alcohol, and its implications in terms of vigilance and behavioural control are not compatible with seafaring.

III – Sleep disorders :

Sleep disorders causing excessive daytime drowsiness and impairment of vigilance can question the fitness at sea and the capability to resume a safety or security work station.

Excessive drowsiness whose origin is behavioural, organic, psychiatric or iatrogenic, is not compatible with seafaring.

Moderate or severe obstructive sleep apnoea syndrome is not compatible with seafaring.

Insomnia whose origin is behavioural, organic, psychiatric or iatrogenic, causing an excessive sleepiness, is not compatible with seafaring.

Each case shall be subject to a specialised assessment taking into account working conditions and the type of seafaring.

Resumption of work can be authorised one month after the start of the treatment upon the opinion of the doctor responsible for treating the drowsiness. He/she will decide on the exams needed,

including performance in a wakefulness test to confirm return to normal vigilance.

If the sleepiness is persistent under treatment, then the seafarer is unfit for work at sea.

When the treatment is started, the validity of the medical fitness certificate cannot exceed one year.

21. Medical treatment

Medical treatments are compatible with professional seafaring subject to the risks associated with their use.

The decision of fitness shall take into account:

- The potential negative side effects of drugs, particularly on vigilance, eyesight and the physical ability to perform the work safely;
- Possible serious complications related to their use and their potential to jeopardize the health of seafarers;
- The potential consequences of a sudden withdrawal from the drug;
- The specific monitoring required by the use of certain drugs that cannot be provided on board.

22. - Skin diseases

Chronic skin conditions resulting in a significant functional impairment are not compatible with seafaring.

23. - Teeth

Fitness for seafaring is dependent on finding a masticatory coefficient equal to or greater than 40% with a minimum of six pairs of healthy or treated antagonists, including two pairs of molars or premolars and two pairs of canines or incisors.

Teeth that have been treated or replaced by a denture and that are in a good condition and allow normal masticatory function are considered to meet the required conditions.

Prior to boarding, carious teeth must be filled or extracted. Wisdom teeth that have been problematic must be extracted.

24. - Eye wear, vision

Medical fitness for seafaring is subject to the visual acuity and chromatic perception conditions defined in paragraph 26.

Generally speaking, the following pathologies are incompatible with seafaring, whether temporarily or permanently: Acute or chronic diseases of or injuries to the eye or its adnexa having or likely to have an impact on the functional value of the equipment or which would impose therapeutic constraints that would be impossible to manage in normal seafaring conditions.

Upon entering the seafaring profession:

- Candidates who meet the required visual acuity conditions by using a corrective lens but do not, with this correction, have visual activity of 10/10 in each eye shall be subject to a specialised assessment in order to determine the nature of the ametropia in question, its etiology and the prognosis;
- Monophthalmic individuals or those with a similar functional amblyopia may only perform the functions of doctor, general services officer, seaweed collector, shellfish farmer and sailor on small fishing boats, as long as the remaining or dominant eye presents a visual acuity without correction of at least 5/10 and a normal visual field. They cannot participate in watchkeeping or perform navigational functions.

When currently working and after a review of their case by the Maritime Medical College:

- Seafarers who become monophthalmic may be authorised to continue seafaring after an adaptation period of six months and following the favourable opinion of the specialist, as long as the remaining eye presents a visual acuity without correction of at least 5/10 without visual field impairment, with however the following restrictions; they cannot participate in watchkeeping, claim certification or carry out navigational functions;
- Seafarers who become monophthalmic are not authorised to continue seafaring unless they have received a prosthesis and have experienced a good functional result: the decision as to their fitness is then made on a case specific basis after a specialised assessment of their vision and in the absence of major problems with their visual field.

In all cases, a significant strabismus and severe abnormalities in the visual field result in a person being deemed unfit to perform navigational and gangway watchkeeping functions.

Myopia surgery:

Resumption of navigation is accepted after refractive surgery, provided that the surgery is more than three months past and an eye examination shows no post-surgical complications. At the end of this three-month period, a specialist opinion is required. This advice must include the technique used, acuity obtained, healing and good recovery of visual function.

Attention of those concerned is drawn to the three-month period during which they will, at a minimum, be declared temporarily unfit for standard I. This is particularly related to candidates for piloting, lookout and watchkeeping duties who, on their own initiative, have surgery to correct a visual impairment in order to meet the standards.

Presbyopia surgery:

- for presbyopia intervention, known as tilting for those who are myopic, the resumption of ship management, watchkeeping and command duties are possible, subject to wearing corrective glasses during performance of these functions;
- for presbyopia procedures with implant placement, specialist advice is required some time after the procedure. Frequent glare phenomena after this type of intervention can lead to an inability to perform the duties of watchkeeping and command of the ship, as long as they persist.

25. - Otorhinolaryngology

Medical fitness for seafaring is subject to the auditory acuity conditions defined in paragraph 26.

(1) Methods and frequency of examination of the hearing

A pure tone audiometry examination will be performed upon entry into the profession and then at a frequency of at least five years. This periodicity will be reduced to two years if the seafarer is exposed to noise during its duties. All examinations are performed without hearing aids

(2) Substandard hearing acuity

2.a When entering the profession, candidates who do not have the auditory acuity required by the standards shall be subject to a specialised assessment in order to determine the nature of the hearing loss, its etiology and the prognosis.

2.b During career

A seafarer presenting a substandard hearing acuity can be declared fit for navigational and watchkeeping functions if he meets the following standard at speech audiometry using a dissyllabic list of words :

- speech reception threshold (SRT) of a hundred per cent at 50 dB.

These cases are examined by the Maritime Medical College.

(3) Prosthetic correction is not permitted with the exception of bioprotheses providing a satisfactory level of hearing.

For those currently working and following the favourable opinion of the Maritime Medical College, a case-specific decision as to the person's fitness may be made after a specialised assessment for other prosthetic means of correction for staff not exposed to noisy environments, not participating in navigational or watchkeeping functions, not working outside and not exposed to bad weather because of their work.

(4) Single-sided deafness makes impossible navigational and watchkeeping functions while entering the profession or during career.

Temporary or permanent, acute or chronic injuries and disorders affecting the otorhinolaryngological sphere that have or are likely to have an impact on hearing, balance, phonation or even impose therapeutic constraints that are impossible to manage on board given the sailing conditions are also not compatible with seafaring. In particular:

- Chronic otitis media with effusion;
- Cholesteatoma;
- Otosclerosis;
- Labyrinthitis;
- Rhino-laryngologic problems which, because of their intensity, complications or sequelae, result in a significant respiratory dysfunction.

26. Sensory standards

STANDARDS	VISUAL ACUITY	COLOR VISION (e)	AUDITORY ACUITY
<p>Standards I</p> <p>Fitness for all functions, all seafaring.</p>	<p>For entry into and those currently working in the seafaring profession</p> <p>1) Distance vision: 7/10 for the weakest eye;</p> <p>Correction authorised subject to a visual acuity without correction of 1/10 for the weakest eye;</p> <p>2) Satisfactory near vision at level 2 of the Perinaud scale, authorised correction;</p> <p>3) Binocular visual field normal;</p> <p>4) Absence of night blindness;</p> <p>5) Normal sensitivity to contrasts.</p>	<p>SPC 2 (f)</p>	<p>Entry to the seafaring profession</p> <p>In pure tone audiometry, deficit for the worst ear not exceeding:</p> <p>25 dB for frequencies of 500 Hz and 1,000 Hz;</p> <p>30 dB for frequencies of 2,000 Hz;</p> <p>40 dB for frequencies of 4,000 Hz.</p> <p>When currently working</p> <p>30 dB for frequencies of 500 Hz and 1,000 Hz;</p> <p>35 dB for frequencies of 2,000 Hz;</p> <p>50 dB for frequencies of 4,000 Hz.</p>
<p>Standards II</p> <p>Fitness for all functions, all Seafaring except navigational and watchkeeping functions</p>	<p>For entry into and those currently working in the seafaring profession</p> <p>1) Distance vision: 4/10 for the weakest eye.</p> <p>Correction authorised subject to a visual acuity without correction of 1/10 for the weakest eye.</p> <p>2) Satisfactory near vision at level 3 of the Perinaud scale,</p> <p>3) Binocular visual field normal.</p> <p>4) Monophthalmic persons, upon advice from the Maritime Medical College</p>	<p>SPC 2 (f)</p>	<p>Entry to the seafaring profession</p> <p>High channel perceived at least three metres away, two metres for the worst ear.</p> <p>Deficit for each ear in pure tone audiometry not exceeding:</p> <p>- For the best ear: 30 dB for frequencies of 500 Hz, 1,000 Hz, 2,000 Hz and 3,000 Hz;</p> <p>- For the worst: - For the worst: 40 dB for the same frequencies;</p> <p>No minimum standard for the frequency of 4,000 Hz</p>

(a) For those currently working, any decision concerning the overruling of sensory standards is at the discretion of the Maritime Medical College.

(c) When the required standards are met using a corrective lens, a spare pair of glasses on board is mandatory.

Correction using orthokeratology is prohibited.

(d) Mechanics, radio technicians, electricians and crew members performing the engineering watch must meet the minimum requirements of standards II and undergo a professional chromatic aptitude test with satisfactory results.

(e) Colour perception test:

SPC 1: No errors when reading the ishihara test plates;

SPC 2: Errors when reading the plates but no errors when identifying the coloured lights emitted using the Beyne seafaring lantern (specific wavelength for the red and green);

SPC 3: Errors in both tests (plates and lights).

(f) SPC 3 is compatible with the positions of doctor, captain, general service officer and staff employed solely to the work with fish.

SPC3 is also compatible with the positions of mechanic and radio technician as long as the parties in question pass the professional chromatic aptitude test.

Standards I with SPC3 can perform all functions on fishing boats and those with shellfish breeding equipment, sailing up to 5 miles from shelter.