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Improving the Mental Health of Seafarers and Eradicating Bullying at Sea - a Course for Seafarers

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Introduction

Seafarers' work in vessels at sea is one of the hardest, most demanding and under very difficult conditions. Seafarers often work for very long hours, far from their relatives, isolated in a multicultural, highly hierarchical micro-society. Studies have also shown that bullying is an often phenomenon in ships. This situation often generates mental health problems, which put at risks lives, the vessel, passengers, cargo and the environment from pollution and local coastal economies. PROMoting MEnTal HEALth at Sea (PROMETHEAS) is an Erasmus+ KA2 Strategic partnership for VET, development of innovation for the merchant maritime industry.

The central aim of this project is to develop an online training course and learning resources for seafarers and maritime workers concerning the preservation and improvement of their mental health. It will focus on the various issues that derive from mental health problems and it will provide learners with necessary information and consultation on how to deal with these problems.

Main target group of PROMETHEAS project are captains of merchant navy, seafarers and cadets, whilst additional beneficiaries will be trainers on mental health and bullying, VET centers and consultants of the sector as well as nautical academies and shipping companies.

Partners are seven organizations (3 maritime universities, 3 private training companies-consultants experienced in the sector and an association of companies of the marine sector with strong links with social partners) coming from 6 countries (Poland, Finland, Greece, Slovenia and Spain).

More specifically, PROMETHEAS will produce three core intellectual outputs:

1. Repository of resources on mental health for maritime staff
2. E-learning course for captains and seafarers
3. Digital app- self evaluation.

Research Process

The initial kick off meeting was held in November and it was discussed that desk research was due to begin in December 2019. The desk research would feed into the e-learning course for IO2 which would be to provide seafarers with a variety of tools and ways to preserve their mental health and/or to mitigate the impact of high pressure on their mental health or to use symptoms as an early warning sign to go to see a specialist when ashore, if they feel they need to know more they can retake the course, which will be available online so they can use whenever they have internet connection.

The e-learning course will cover two units:

1. Improving mental health and



2. Facing bullying.

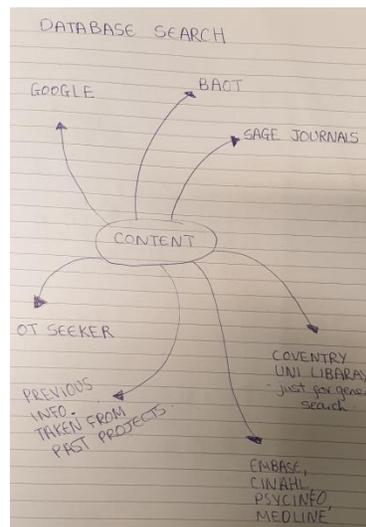
From the content point of view, e-learning course (mental health) will include:

1. Factors putting pressure on mental health at sea.
2. Organisational factors and how to mitigate them.
3. Positive attitude and tips to think positively.
4. Physical exercise and its impact.
5. Reflection on the situation.
6. Distinction between facts and statements.
7. How to think constructively.
8. Human relations.
9. Group Dynamics.

The bullying unit content will include:

1. Bullying and Harassment, similarities and differences.
2. Specificities of bullying in vessels.
3. Types of bullying and their effects on victims.
4. Proper ways of dealing with bullying at the workplace.
5. Effective strategies for dealing with bullies.

The desk research began by considering a literature search. The consideration of what databases could be utilised to support the literature search. Please see the diagram below:



The initial search began by using the google website to get a general idea of what current information is available and if there are any current services available to the seafarers. Keywords linked to the project title along with the items listed in the contents above enabled the researcher to come up with the items to support the desk research. These included:



- Well-being
- Interventions
- Self Care
- Self management
- Telephone coaching
- Peer support.
- Suicide
- Mental Health
- Anxiety
- Depression

An exclusion set of key words were initiated, following the understanding of the project. These included:

- Adolescents.
- Teenagers.
- Older Primary Care.
- Physical Disability.

The above could be considered as a 'sign-posting' support which could potentially be used whilst at sea or when back ashore. It was discovered that there is a large wealth of information including reports of incidences and also services that provide this support including being able to contact a specialist psychologist via skype whilst on board the ship at sea. There is also a set of guidelines developed by the European Community Ship-owners Associations and European Transport Workers Federation who have also developed a video clip which captures a range of potential scenarios and provides useful analysis into the behavior of each character to enable an improved understanding of a situation from another's perspective. Please see the link to watch the video clip:

https://www.youtube.com/watch?v=sqA_JuE32cc

Course Chapters

Shipping is the ultimate 24/7 industry. Inherently globalised in its nature, the industry is complex, capital-intensive, increasingly technologically sophisticated and of immense economic and environmental significance. More than 80% of world trade moves by sea, almost 90% of EU external freight trade is seaborne, and some 40% of intra-EU freight is carried by shortsea shipping. Around 40% of the world fleet is beneficially controlled in the EEA and EU-registered tonnage accounts for more than 20% of the world total. On average of around four million passengers embark and disembark in 27EU ports every year – the vast majority being carried by ferries.

The increasingly intensive nature of shipping operations means that seafarers frequently work long and irregular hours. Under the International Labour organisation regulations (social provisions) it is permissible for seafarers to work up to 91 hours a week – and, under the International Maritime Organisation's STCW 2010 amendments (safety provisions), a 98-hour working week is allowed for up to two weeks in 'exceptional' circumstances. Noise, vibration, sailing patterns, port calls, cargo handling and other activities can all reduce the ability of the seafarer to gain quality sleep during rest periods. Fatigue is generally understood to be a state of acute mental and/or physical tiredness, in which there is a progressive decline in performance and alertness. The term is often used interchangeably with 'sleepiness', 'tiredness' and 'drowsiness'. Fatigue is often considered to be a generic term, of which sleepiness is one of the major sub-components. In this project, the emphasis



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has been placed upon 'sleepiness' as the most effective description of the physical and physiological conditions under examination. Seafarers are already usually covered by company, sector-specific, flag state or IMO rules banning or severely restricting alcohol use at sea. Studies have shown that around 22 hours of wakefulness will have a similar effect upon the impairment of an individual's performance as a blood-alcohol concentration of 0.10% – double the legal driving limit in most EU member states. Laboratory research and studies in other transport modes have demonstrated that severe sleepiness (and even sleep onset) and performance deterioration is common amongst workers undertaking night shifts. Fatigue is also an important health issue, with significant evidence to show the way in which long-term sleep loss can be a risk factor in such conditions as obesity, cardiovascular disease and diabetes.

The issue is also one of great relevance to the recruitment and retention of skilled and experienced seafarers. Reducing excessive working hours is of critical importance in delivering working conditions for maritime professionals that reflect the increasingly high levels of training and qualifications required to safely operate modern-day merchant ships. Project Horizon was established in response to growing concern about such issues and the increased evidence of the role of fatigue in maritime accidents. Over the past 20 years, the shipping industry has become increasingly aware of the importance of the 'human factor' in safe shipping operations. Marine insurance statistics have shown 'human error' to be the key contributory factor in around 60% of watchkeeper had only had 5 or 6 hours of sleep:

- the grounding of the feeder containership Cita in the Isles of Scilly in March 1997, after the mate fell asleep and the ship sailed for two and a half hours with no one in control;
- the grounding of the general cargo ship Jambo in Scotland in June 2003, after the chief officer fell asleep and missed an intended change of course;
- the grounding of the bulk carrier Pasha Bulker near the port of Newcastle in Australia in June 2007, in which an investigation report stated that 'the master became increasingly overloaded, and affected by fatigue and anxiety';
- the death of a Filipino AB in a fall onboard the Danish-flagged general cargo ship Thor Gitta in May 2009. Investigators who used FAID fatigue assessment software found that the seafarer's 6-on/6-off work pattern was at a score of 111 on the morning before the accident – a level considered to be in the very high range; and
- the grounding of the bulk carrier Shen Neng 1 on the Great Barrier Reef in April 2010. The Australian Transport Safety Bureau investigation found that the grounding occurred because the chief mate did not alter the ship's course at the designated position. His monitoring of the ship's position was ineffective and his actions were affected by fatigue. Investigations showed that he had only two and a half hours sleep in the 38.5 hours prior to the casualty. Concern about such incidents was also mirrored by a growing weight of evidence gathered from research among seafarers.

It is generally accepted that fatigue at sea has been subjected to considerably less research than in other modes of transport or safety-critical industries, but from the 1980s onwards increasing academic attention was paid to working hours in the maritime sector – with a 1989 Medical Research Council report on hours of work, fatigue and safety at sea, by Professor ID Brown, serving as something of a watershed. In 1990, a report on shipboard crew fatigue, safety and reduced manning, by JK Pollard, ED Sussman and M Sterns noted that work at sea is characterised by longer working weeks, more non-standard work days, extensive night operations, and periods of intense effort preceded by periods of relative inactivity.



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In 1995, the UK National Union of Marine Aviation & Shipping Transport Officers (NUMAST) published the result of a survey of 1,000 officers. Just over three-quarters of those surveyed said they believed that fatigue had increased significantly in the previous three to 10 years. In a further survey of 563 members, NUMAST found 50% reporting that they worked more than 85 hours a week.

A 2006 report on one of the most extensive research projects, carried out by the Centre for Occupational and Health Psychology at Cardiff University, found evidence that as many as one in four watchkeepers reported having fallen asleep on watch. As many as 53% of respondents reported having no opportunity to have six hours of uninterrupted sleep. A Swedish survey carried out in 2008 and 2010 showed that about 70% of officers had nodded off on watch one or more times during their career.

Another significant research study was published by the UK Marine Accident Investigation Branch (MAIB) in 2004. This analysed the role of fatigue in 66 collisions, near-collisions, groundings and contacts investigated between 1989 and 1999. Fatigue was considered to be a contributory factor to 82% of the groundings in the study which occurred between 0000 and 0600 and was also a major causal factor in the majority of collisions. This latter point was also highlighted in research published by the Karolinska Institute in Sweden in 2004, which found levels of sleepiness to be highest during the 00:00- 06:00hrs watch period.

In 2005, a report published by TNO in the Netherlands, recommended the setting up of a framework for the development of a fatigue management programme or tool to help shipping companies to take measures to manage fatigue. Other seafarer fatigue studies have also highlighted such factors as:

- the long working hours experienced by many crew members;
- problems in gaining quality sleep;
- the impact of watchkeeping patterns: notably six hours-on/six hours-off;
- stress and workloads ■ frequent port calls and associated cargo work; and
- tour lengths.

The course will have chapters, one issues relating to Mental Health as outlined above and the other on Bullying. The bullying chapter will focus on the following areas:

- Bullying and Harrassment, similarities and differences.
- Specificities of bullying in vessels.
- Types of bullying and their effects on victims.
- Proper ways of dealing with bullying at the workplace.
- Effective strategies for dealing with bullies.