

BSc. NAVIGATION AND MARITIME TRANSPORT
DISSERTATION

KEY SKILLS FOR MARITIME LABOR

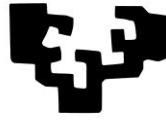
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Degree in Navigation and Maritime Sciences

Key Skills for Maritime Labor

Dissertation

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Abstract

Maritime navigation is a hard business, world's economy depends on it and shipping companies and seafarers depend on each other. People who navigate and work on board present ships require new and different skills. Technical skills and experience is the first thing companies look for, but what about key skills? Under this question, this dissertation puts forward and defines the necessity of new crewing policies that do value these competences.

Keywords: Key skills, competences, manning, human factor, core values.

Resumen

La navegación marítima es un negocio complicado del cual depende la economía mundial, así como dependen entre sí navieras y marinxs. Las personas que navegan y trabajan a bordo de los buques actuales precisan nuevas y distintas habilidades. Lo primero que buscan las compañías son competencias técnicas y experiencia, ¿pero qué es de las habilidades transversales? Tras esta pregunta, esta disertación describe y define la necesidad de valorar éstas en la conformación de tripulaciones.

Palabras clave: Habilidades transversales, competencias, tripulación, factor humano, valores fundamentales.

Laburpena

Itsasketa negozio latza da eta ekonomia mundiala honen baitan dago; halaber, ontzi-enpresen eta nabigatzaileen arteko interdependentzia existitzen da.

Eguno itsasontzietan nabigatu eta lan egiten duten pertsonen trebetasun berri eta desberdinak behar dituzte. Konpainien lehenengo eskakizunak konpetentzia teknikoak eta esperientzia dira, baina zein da egoera zeharkako gaitasunei dagokienez? Galdera honen atzean, gradu amaierako lan honek eskifaien osaketan hauek aintzat hartzeko beharra deskribatu eta definitu egiten du.

Hitz gakoak: Zeharkako gaitasunak, konpetentziak, eskifaia, giza faktorea, funtsezko balioak.

Dedication

To Eneko who taught me to catch waves.

<3

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I have to thank the individuals that have helped me during this process that has changed me, in a positive way, I think.

Thanks to all the people mentioned as sources, in special to my mentor, because I would not have chosen another.

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This could not have been possible without my father's support. He taught me the English language, revised my grammar and is there when I need him.

Not forgetting my mates Iván, Ane and Force.

I love you and owe you.

Glossary of acronyms

A	Answer
AE	Educational Attention
BBC	British Broadcasting Corporation
BRM	Bridge Resource Management
ERM	Engine Resource Management
FOC	Flags of Convenience
HSQE	Health, Safety, Quality and Environment
ICS	International Chamber of Shipping
ICT	Information and Communications Technology
IFAC	International Federation of Accountants
ILO	International Labour Organization
IMO	International Maritime Organization
ISM	International Safety Management Code
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973
MCA	Maritime Coastguard Agency
MLC	Maritime Labour Convention, 2006
MOU	Memorandum of Understanding
NI	Nautical Institute
PMA	Positive Mental Attitude
PSC	Port State Control

Q	Question
R&D	Recruitment & Development
RED	Respect, Effective communication and Discipline
SMCP	Standard Marine Communication Phrases
SOLAS	International convention for the Safety of Life At Sea, 1974
STCW	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea, 1982
WFF	Walk Free Foundation
WWW	World Wide Web

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Introduction

What you are about to read is an essay based on researches in many different fields (from marketing to psychology), which, in the end, are all related.

Diverse factors are to take into account when dealing with human beings.

On one side job satisfaction is dependent upon more than merely physical conditions, like the working atmosphere. On the other side job performance is dependent upon workers' engagement with the enterprise's mission, which has all to do with job satisfaction.

Our stance is that, in general, recruitment of seafarers is centered in bureaucracy and contacts, forgetting aspects that play role when addressing the human element.

Objectives

We want to know about the actual manning and safety policies for seafarers and explore organizational cultures, also from other points of view different from those of the merchant fleet.

Aiming towards higher safety and efficiency, one of the main objectives is to make visible the importance of non-technical skills on the working and living environment; highlighting the positive repercussion that a proper allocation of these abilities and good leadership has in the atmosphere on board.

Standing out that coexistence influences performance, the main objective is to raise awareness about the role psychosocial aspects should play in the selection methods of maritime labor.

Structure

We start this dissertation with some past history on the topic, explaining the main regulations of international maritime transport and how technology has changed this employment.

Then we focus on the interests organizations and seafarers have and how to come to an agreement. Not forgetting that ships are the living and working environment of sea labor, we describe some of its peculiar features.

Now centered on the main objectives we define what competences are and which elementary skills are required for work, coexistence and which ones in special have to be present in the behaviors of a competent leader.

Last part of the essay analyzes some companies' policies, practices that contributed to the success of the *Pakea* expedition and the key elements of a structured organizational culture, grounded on a code of conduct.

Methodology

After choosing the topic, we searched, founded, gathered, selected and analyzed relevant information about the subject, as you can see in Sources & Bibliography. Some dissertations of former students of our school have provided us a good vision about ships' ethnography.

We also assisted to conferences and interviewed three captains, of different sails, who on board work on non-technical skills.

Some archive material was also used; these are vectors and propaganda posters for aesthetics and inspections reports as examples of what we try to avoid.

A selection of different international shipping companies was made among the ones which had made public on their websites information and policies related to their staff; choosing one of each type.

State of Art

There are different approaches to the human element in the maritime industry, but we could not find one centered on non-technical skills. Sociological researches on the subject as Moreby's (1975) or Rodríguez-Martos (1996) set out the base for this dissertation.

Many psychologists' theories have been consulted in relation to the human element; Gregory and Shanahan (2010) provide us the best approach within the maritime scope.

Other behavioral theories have been a great help when addressing human necessities, intelligences and teamwork, particularly those of psychologists as Maslow (1970), Herzberg (1968), Gardner (2018), Goleman (1995) and Belbin (2014). Regulations (STCW) also refer to social abilities but very superficially.

Chapter 1 Context

1.1 Background

First of all a brief explanation of the past history of the subject and some descriptions for important concepts we are going to be working on will help us understand the context in which we are moving and avoid misunderstandings.

1.1.1 Evolution of crews

Throughout shipping history the design of vessels, their equipment and their routes have evolved and so have crews. First sails needed a vast amount of deckhands to sail them, the bigger the ship the larger the number of people operating it.

In the early days the management team was mainly formed by one or a couple of personalities: the shipowner and the master. The first one funded its enterprise and depending on its development could become a wealthy person, or not. The master, also called captain, took most of the duties of exploitation if not all of them often being also the owner.

It could happen that the master was not the ship's navigator, especially when he was the owner, in these cases the ones in charge of the navigation were the mariners.

Most of the crew served as deck ratings, whose rank on board was very low.

Things continued changing; steam became a powerful industrial tool, ships started to incorporate engines for propulsion along the 19th century, and engine department appeared. Now people wishing for sea adventure and working with machines had their place on board. With this departmental differentiation came the second main crew division (the first one is rank).

The largest ships that have existed were those ULCC built in the 20th century during the supertanker era. Vessels have stopped growing in size and nowadays they are evolving in technical and technological aspects aiming towards automation. This process was perceived as positive by the crews that earlier on lived crammed in shared cabins, and so were crew reductions.

1.1.2 Master's role

As mentioned above the masters in the early days of shipping were the ones in charge of the maritime expedition almost completely, and success was their liability, they were pure line managers (Moreby, 1975, p.12).

Most of the time the ship, the cargo and the crew were on his hands no matter what the shipowner said (mostly because of lack of communications). He was leader and law and was given names¹, among them *master under God, next after God* or *Lord of all he surveys*.

The captain has never been and is not considered as part of the crew.

1.1.3 Hierarchy

After God and the captain comes the crew with its rank differentiations.

A classical crew structure, adapted from Rodríguez-Martos' (1996, p. 34) scheme for a modern cargo ship can be the following:

Leadership:

<i>Master</i>	<i>Chief Engineer</i>
<i>First Officer (Chief Mate)</i>	<i>Second Engineer</i>
<i>Second Officer</i>	<i>Third Engineer</i>
<i>Third Officer</i>	<i>Fourth Engineer</i>

Cadets/Trainees:

<i>Deck cadets</i>	<i>Engine cadets</i>
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Senior ratings:

(deck)	(engine)	(catering)
<i>Boatswain</i>	<i>Motorman</i>	<i>Chief steward</i>
	<i>Electro Technical Officer</i>	<i>Chief cook</i>

Ratings:

<i>Able Seamen</i>	<i>Oilers</i>	<i>Stewards</i>
<i>Ordinary Seamen</i>	<i>Wipers</i>	<i>Messmen</i>

¹ See, for instance, Rodríguez-Martos (1996, p. 39) or Moreby (1975, p. 157)

The different departments on ships nowadays are the deck department, engine department and catering department, their size can vary depending on the type of vessel.

On a passenger ship, steward's department will be much larger and needing a leader this will be an officer, the *purser*, who historically had even more power than the master because of the large amounts of money he managed.

Most of us accept hierarchy on our jobs, it is a practical tool; it allows us to know where we fit in the social structure and what our duties are inside the organization.

In the shipping industry it is especially useful to follow where orders should come from and who is responsible for each action, ratings at the base of the hierarchy and (especially) masters have to understand that *with great power comes great responsibility*.

1.1.4 Regulations

Seafarers are frequently asked by shore people: *you can do anything in international waters, don't you?*

The best answer we have heard: *international waters have international regulations*.

Three of the four law pillars² of maritime international transport have been issued by the International Maritime Organization (IMO).

The International Convention for the Safety of Life at Sea (**SOLAS**), 1974, as amended. Including the International Safety Management (**ISM**) Code in its annex. It was adopted after the Titanic accident and aims towards safe management and operation of ships, for human life and the environment.

The International Convention and Code on Standards of Training, Certification and Watchkeeping for Seafarers (**STCW**), 1978, as amended. It was the first one establishing on an international level the basic requirements on training, certification and watchkeeping for seafarers.

The International Convention for the Prevention of Pollution from Ships (**MARPOL**), 1973, as amended. It covers the preservation of the marine environment by prevention of pollution by ships from operational or accidental causes.

² Other international agreement is the United Nations Convention on the Law of the Sea (UNCLOS)

The forth one was issued by the International Labor Organization (ILO): the Maritime Labour Convention (MLC), 2006, as amended. It joins together existing and new international working standards about minimum requirements, employment and working conditions for seafarers.

These set off the minimum requirements for a ship to go on a legal maritime expedition and we will talk about some of these minimum standards in the following pages.

1.1.5 Safety, Hygiene and Health

When talking about shipping the word safety is almost in every sentence, similar with hygiene when talking about working conditions, these concepts are so important that it is worth some time explaining them.

Safety refers to a state or condition in which someone or something is safe, this means not in danger or at risk. Maritime safety depends on features of the ship or from what is inside of it.

Security is a different thing, it refers to protection against external threats, when we are secure we feel free from worry, we feel protected.

World is uncertain, more is the sea and so is human perception, this implies that we can never eliminate risk. We live in a risky world with a perception of risk that, as all perceptions, is going to be different from those of others.

Why would we consciously make things in a riskier way?

First answer is because we need it, with no risk perception we get bored. Second possible answer is to make things in a more efficient way, which usually means more quickly (in less time) (Hollnagel, 2009).

When thinking about hygiene we often think about cleanliness, but it is a wider concept that refers to the preservation of health. First step for being healthy is to live in a clean environment.

Applied to the workplace psychologist Frederick Herzberg (1968) developed the two-factor theory, in which motivators towards work are separated of hygiene factors. It is kind of evident what motivators are and as Herzberg (1968, p. 4) pointed out, they are intrinsic of the work itself or, in other words, job-content.

The second set of conditions is considered as external to the work, meaning the job-context, and in their absence the worker will feel dissatisfied. Safety is a hygiene factor.

Nowadays the term health rather is used and it depicts better the need for safety in a healthy working environment.

“Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”³.

We cannot forget that health is not just physical and that it does not only depend on physiology.

1.2 Technology

Maritime industry as all industries has suffered enormous changes with technical and technological progress, but, unlike the automobile industry that is pioneer and willing to implement new inventions, is more reluctant to change.

Rodríguez-Martos (1996) draws attention to the fact that we are working with navigational techniques of the present century and crew structures from two centuries ago.

We are on a career in which the human is more and more at the service of technology when it should be the other way (Rodríguez-Martos, 1996, p. 209). Or as Moreby (1975) visualized, the social system is dominated by the technical system (p. 107).

These artificial changes are continuous and present, because humanity keeps pushing on.

1.2.1 Mechanization

Machines help us reduce manual work; ancient sails were fully manual operated, cargo was loaded and discharged in sacks, barrels or bales and sailors were strong and tough.

Nowadays we have bigger units of cargo, great engine-powered handling equipment and a variety of power sources feeding our machines.

³ Preamble to the Constitution of World Health Organization (WHO) as adopted by the International Health Conference, New York, 19 June - 22 July 1946; (Official Records of WHO, no. 2, p. 100).

Manual work has become so infrequent that some merchant vessels are now equipped with gyms and swimming pools, and if they do not have these facilities seafarers may end up using the stairways for fitness (this is a real case of a master that did training cycles consisting on a combination of stair climbing and push-ups).

The higher the rank the more paperwork has substituted manual work.

There is less and less sea adventure, young people should forget about it when considering working on board, but what students do not realize until their first embarkation is how much leadership on board has become a bureaucratic work (another real case of a deck cadet that ignored the existence of the ship's office).

Bureaucracy is seen as an unattractive task by most seafarers, and according to the literature boring tasks lead to fatigue (Gregory & Shanahan, 2010).

Another effect mechanization has on the manning of a ship is crew reductions, if less hands are needed, less hands are hired.

Some effective fatigue reducing measures considered by seafarers are to increase manning and reduce paperwork before increasing leaves or enforcing regulations (Gregory & Shanahan, 2010).

1.2.2 Specialization

Along with mechanization ships are growing hard on specialization. Containerships have become the regular general cargo vessel, and general cargo vessels are suffering extinction, nowadays mainly being used for engineering projects.

Specialized equipment operation requires higher technical knowledge, this is, qualification.

Well qualified staff is more expensive and harder to find, but it is essentially what the modern fleet needs.

Navigation and maritime engineering are now superior studies delivered frequently in universities; this means a minimum of three or four years of study on shore, which are not enough.

In Spain the four years university degree includes three months of training that can be complied on board or ashore.

Learning is a continuous process, we do not finish our degrees being fit for work, praxis is needed and this problem is best solved by on board training. This means that a seafarers' qualification depends on their studies, but mainly on the companies that recruit them.

Shipping companies have to understand that if they require qualified personnel for their highly specialized ships best way to find it is to raise it.

1.2.3 Communication

Thanks to the wireless, great advances on the Information and Communications Technology (ICT) have been made; this has affected shipping a lot.

In the ancient days, the master had so much power because communications across the ocean where impossible, until we laid the telegraph wire connecting distant places. The next step was radio telegraphy, then the internet and now we are connected to the World Wide Web (WWW) by cell phones that fit in our pockets.

Although internet is not as available in open sea as ashore, for a vessel that is on course it is always possible to communicate with shore. We can nowadays send not only verbal messages but full documents, and more and more of the information is only processed by digital means.

These immediate exchanges of information have allowed taking away many duties of the master's role and allocating them to different and new professionals, most of them agents.

ICT has also influenced the way in which we, as individuals, share our thoughts; social media addiction is a real issue that can affect anyone in developed countries.

Social relations are not simple and, for many, it is easier to confront other people behind a screen than face to face.

The web offers great diversity of forums and platforms in which we chose the type of content we seek and know what public will probably see ours. If we think that real life is hard and unfair we may look for online kinship.

Smartphones are now a necessity, as bank accounts.

1.2.4 Globalization

All of the above leads to globalization, more when thinking about international trade and containerization. This dynamic process is based on free market.

Maritime transport is a cornerstone as over 90% of the world's trade is carried by sea (George, 2014).

Great shipping companies are powerful multinationals.

We do not have to mistake globalization for progress. Technological advancements feed globalization and the shipping industry, but are these changes an improvement in the human condition?

This process has allowed the emergence of flags of convenience (FOC, open register), which are tax havens in foreign countries, and setting of second registers, in response, by developed countries.

Open registers have lax standards and this allows cunning shipowners to employ cheaper foreign labor often in worse living conditions. In any case the main reason for using FOCs is to avoid taxes.

Globalization has also led to multiculturalism, this is visible in crews. A cross cultural environment can be positive when it provides us different perspectives and points of view, but first we need to overcome cultural differences.

Having a culture implies having common values, a common language (that includes nonverbal communication) and a similar way of thinking with the people sharing it.

On board most of ships the working language is English, this does not mean that seafarers are fluent speakers, but that they know the technical terms needed for seafaring.

Actually, the English spoken on board is sometimes called *Broken English* ("*Yes pero muy poco*") and it is even considered as a *pidgin*⁴.

Capitalism gets moving because seafarers keep transporting its goods.

⁴ A pidgin language is a simple form of a language that is used when the parts involved in communication do not share a common language.

Chapter 2 Needs & Interests

Words are tricky; they can mean different things in different contexts.

A need is something that you must have or do in order to live properly. Needs are beyond desire but also desired.

Your interests are the things that you enjoy doing or that will benefit you in some way.

Usually speaking about needs we think about basic necessities and when speaking about interests we think about money and taking advantage.

In this chapter we will be talking about needs and interests as if they were the same.

2.1 Organization's

Most shipping companies are commercial organizations; they exist to provide a service (that is usually needed) and obtain some benefit by doing it (interests). However they need this reward to survive.

Moreby (1975) defined their "production process as the movement of ship and cargo from one place to another" (p. 94).

2.1.1 Efficiency

The general idea of efficiency is to expend the less time and energy (resources) in performing a task. For commercial organizations this is minimizing the costs and maximizing the profits, so for them efficiency is economics.

Every enterprise seeks efficiency.

Everything can be measured in monetary terms: time is money, accidents are money and people are money.

Earnings are initially used for covering the initial outlay and fixed costs; this is why it is not possible to set the selling price below the cost price, unless

dumping practices occur. They must also be sufficient for survival by keeping up the service.

Benefit is then invested in the development and growth of the company, but the sea is wild and free market is savage, so companies have to face its competitors.

They might even ally themselves with other organizations by agreements like consortium or conferences, some of them being declared illicit.

We can see that there are physical limits in efficiency and, although human race is constantly pushing them forward by technological means, the process of change in equipment and practices is slow, or better, not immediate.

With limiting conditions for efficiency, already efficient companies' race is on quality.

2.1.2 Safety

Safety is essential for a company's survival; it should be the first thing an organization looks for. Nobody wants to lose the ship (with its cargo and crew).

As we saw in the previous chapter there are regulations concerning safety, these impose the compliance of certifications and inspections. Ship operators have to respect them should they be willing to do legal business.

How these compulsory minimum safety standards are enforced depends on the flag state's laws.

Safety limits can also be pushed to a minimum in seeking higher efficiency, as a result from this, accidents can occur, and the subsequent claims will become profit losses being far distant from high efficiency.

Perhaps no incidents take place but when taking riskier decisions we should be aware that higher probability exists that they come about.

Organizations need to be efficient and safe, but the deal is that safety is first related to thoroughness, and efficiency and thoroughness are trade-offs (Hollnagel, 2009).

First time we perform a task we have to be thorough when balancing demands and resources, but as we practice we become more efficient, this is expertise developing (see Fig. 2.1).

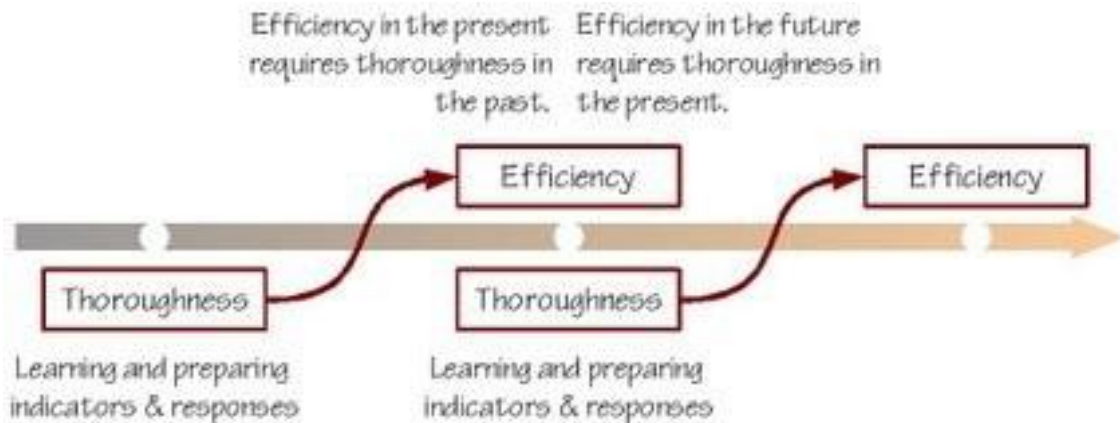


Fig. 2.1. Thoroughness in the past and in the present. Source: Hollnagel, E. (2009).

Safety is a quality standard.

In the long-term it is more efficient to be safe and thorough than risk prone, especially for those who are competing for quality.

As we will see next, this has all to do with having stable competent labor force.

2.1.3 Reputation

According to Moreby (1975), "Survival in shipping is almost wholly dependent upon exporting the best possible reputation to one's sources of finance." (p. 73), but the "social survival of the company depends upon it exporting a 'good' reputation to that section of society from which it recruits its people." (p. 101).

Reputation is thus a company's way not only to be provided with financial backing, but also a way of attracting and retaining customers and labor.

Everyone can see the benefits in having faithful customers, what is sometimes ignored by some companies are the positive aspects of having a stable labor force.

Seafarers that stay in the same company are trained to work for it in its way and as Moreby has shown (1975, p. 159), they are less reluctant to changes in its policies and working practices.

Having a stable labor is also a company's way of developing an organizational culture.

From its part what seafarers seem to want are higher salaries with the same (or better) working conditions. This is the first thought that comes to our minds but we will dive into this topic in the following section.

From the point of view of a customer higher quality of service for the same price (or less) is desired.

As all businesses maritime industry has to be customer oriented and making a difference is their way to compete. In the service sector the way in which enterprises present themselves and treat customers is vital.

Sometimes cheap is expensive.

2.2 Seafarers'

For this section we are going to be following the order (not the theory) of Maslow's Hierarchy of Needs (1970) (See Annex I).

2.2.1 Physiology

These are what we usually considered the 'basic necessities'. The following needs in Maslow hierarchy are psychological.

Physiological needs are to be satisfied for normal body function, some of the more evident ones are oxygen, liquids, food, sleep, sex and a moderate temperature.

By this, seafarers cannot achieve homeostasis that easily when on board as the ship is their full-time environment.

While at sea they better forget about having sex with another person.

Seafarers must be available at all time; in addition the ones doing watches will have their circadian rhythm fully destroyed (see Annex II), this affects sleep patterns (Finkel, 2018) and promotes sleep debt.

Some other environmental factors that can damage seafarers' physiology are noises, vibrations, hard changes in temperature and acceleration (motion) and light levels.

Except for sex deprivation, all the above, along with diet, workload, fitness and perceived risk or interest, are causes of fatigue (Gregory & Shanahan, 2010, p. 61)

Although it is well known that fatigue plays a major role in maritime accidents it is largely overlooked. Fatigue kills. (Gregory & Shanahan, 2010, p. 66)

Most of the causes of fatigue depend on ship and crew design.

2.2.2 Safety

During our lives, apart from the instincts that make us avoid physical pain, more or less stability is desired depending on the person and its circumstances, but in general we all enjoy certain safeness.

As said in the previous chapter, world is uncertain, more is the sea and so is human perception. All of this makes seafaring a safety-critical enterprise, even more if we relate safety to the deterioration of our physiological needs.

Routine is positive in this aspect, it gives us certainty; on board roles are well defined and activities are scheduled. As a counterpart seafarers have to be prepared for the unexpected.

Rules are also seen as positive for satisfying safety needs, if they are being respected, but the fact is that "rule breaking is quite widespread" (Gregory & Shanahan, 2010, p. 41).

As many others, seafarers will also search job security.

2.2.3 Love and belonging

Seafarers live their life in two different worlds that do not meet together.

The need for love is not to be fulfilled by someone's job and, as in most working environments, falling in love with a colleague should be avoided. If it happens it is an (even bigger) issue.

Leaving love aside; human beings are social beings so there are social needs to be fulfilled in one's life that cannot be ignored for months (unless you are a psychopath, in which case you can ignore them all your life). These are the feelings of belonging to a group or community.

Ship's crew is a small caged occupational society. Seafarers see the same faces every day for months, so better supporting each other.

The feeling of belonging comes when understanding and accepting the other members.

In this way effective communication with workmates and mates is essential, not forgetting that the ship is their place of life and work. Whether it is for convenience or because of real affinity seafarers will tend to develop personal relationships while on board.

In this aspect we have to be conscious about how ICT are changing our social practices and here the availability of internet connection on board has a key role.

As social beings, we humans need not only communication but company; the second cannot be satisfied through a screen.

As we will see in the next chapter the maritime community has distinctive characters one of them is a feeling of solidarity between its members. A good atmosphere on board can be developed with feelings of fellowship.

2.2.4 Esteem

We can distinguish two flows for a person's esteem; the one that comes from the individual (self-esteem) and the one the others provide us (approval).

Esteem is the way in which a person feels worth.

In our social lives the way in which we feel valued is by people showing us respect and recognition; to feel worth in what we are doing we need feedback from our colleagues and employers.

The need for extra attention (a minimum attention is required to show respect for someone) or even some sort of admiration is seen as "toxic", these may result from a low self-esteem.

We cannot live on approval, we have to build esteem. Collecting and reviewing feedback given by others is important, we should not reject honest compliments, but most of the work is personal.

Some aspects of a person's self-esteem can be related to work. For example the sense of achievement that comes when demonstrating competence in task performing, which is greater if the assignment is spiced with responsibility.

We have to respect ourselves and the others.

2.2.5 Self-actualization

Many of us have had this kind of "existentialist" periods in our lives in which we questioned our goals in life; this is the need for self-realization. Probably during this period we were not haunted by the above mentioned wants.

Self-actualization is fully dependent on the individual and there are infinite ways to accomplish it.

Plant a tree, write a book and have a child... or follow your calling.

Moreby (1975) analyses the reasons for occupational choice from a psychological perspective and concludes that one's expectations about work and believed skills play a major role.

Going deeper in this analysis this choice has to do with the perception of oneself and the person we want to become, so people at work will be willing to use the talents they believe they possess.

As mentioned before expectations of travel and adventure are almost impossible to realize, yet other could be fulfilled aboard. Some of them are: getting good at training, security, working in a community spirit, good living and working conditions, promotion, authority, status and good wages (Moreby, 1975, p. 32).

Studies (Rodríguez-Martos, 1996, p. 100) show that vocation is among the top reasons (if not the top one if also considering here occupational choice) for seafarers to choose a career at sea.

Many of us have heard the call of the sea.

Whether because of intrinsic features of the job itself, because we spend a great amount of our time working or because it allows us to be economically independent, the belief that work brings self-actualization is still present.

2.2.6 One step beyond

Higher in Maslow's hierarchy some place self-transcendence (Koltko-Rivera, 2006).

In a world where atheism is gaining territory to creed is hard to talk about transcendence as the easiest way of depicting this concept is by alluding to one's religious beliefs.

Religion has to do with culture and, again, ships are cross cultural.

Now leaving churches aside, people have spiritual worlds and, again, we have to respect each other.

My freedom ends when yours begins.

2.3 Meeting point

To achieve their full potential, whereas is personal or business related, seafarers and organizations have to reach a meeting point of interests.

2.3.1 Organizational culture

All this time we have been forgetting that seafarers are part of the organizations. We are not a small part or an expendable part.

Still, when thinking about shipping companies we think about head offices ashore and managers wearing suits, when the people moving the ships are mainly Philippine wearing dungarees.

Organizational culture refers to the values and behaviors that rule the atmosphere of a business. All parts of a company contribute to its climate and the transmission of its vision.

A company's reputation is related to its values and its integrity. These norms dominate the type of structure more than does the technology. (Moreby, 1975)

Many boards of directors that sit at the head offices write codes of ethics in which they declare many moral attitudes. These are usually made public, easily available online. Integrity implies matching values and behaviors.

As we will review later on, is much harder to find their crewing and welfare policies, as most of them are not public.

2.3.2 Safety culture

Safety culture refers to an organizational culture in which safety is a core value.

International standards have been issued with this aim. One of the most important is the ISM code; mandatory under SOLAS involves 164 states and 99.18% of world's tonnage (IMO, 2019.a). It states:

“The purpose of this Code is to provide an international standard for the safe management and operation of ships and for pollution prevention.” (Preamble)

However, knowing that every ship and company is different only general principles and objectives are given. One of them is the need for organizations to establish a Safety Management System (SMS) for the company and each ship:

“Safety management system means a structured and documented system enabling Company personnel to implement effectively the Company safety and environmental protection policy.” (art. 1)

Accidents keep happening, better said, they are caused, and almost all can be attributed to human element issues (Gregory & Shanahan, 2010).

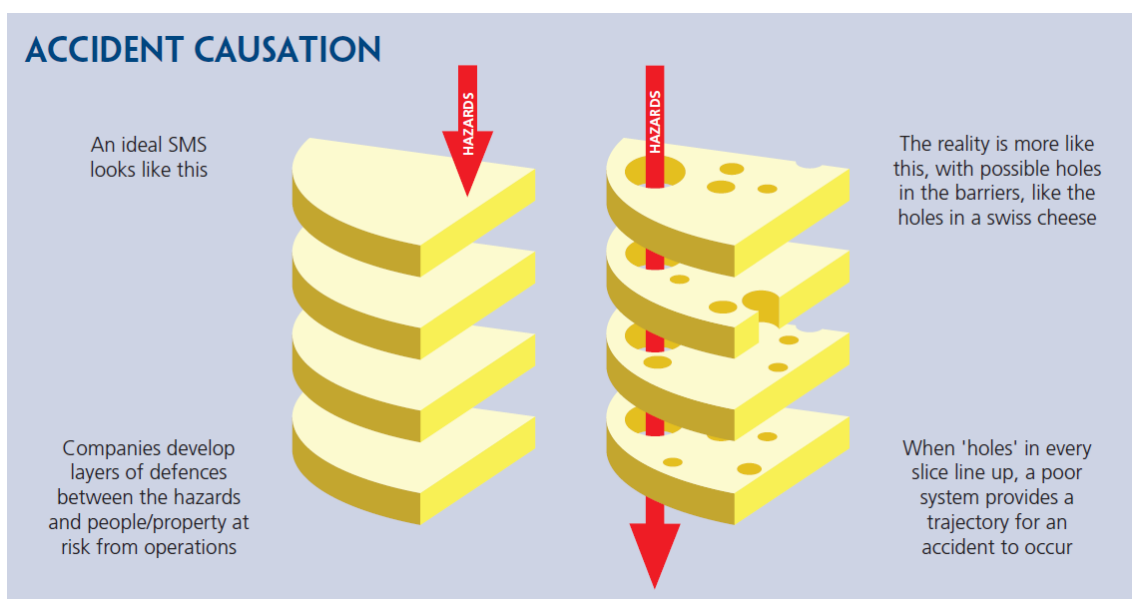


Fig. 2.2. Accident Causation. Source: ICS (2013).

With this metaphor we can illustrate the fact that accidents are caused by a series of unfortunate events and not by a single error.

Many unsafe acts are committed by seafarers that were well aware that they were not being as thorough as they should to ensure safety. "Most will have received training aimed at preventing them but, through a culture that is tolerant to the 'calculated risk'" IMO (2019.b).

Safety culture has evolved through different stages ICS (2013), the first one is a punishment culture (better addressed as 'Blame culture') in which usually the last person in the chain of unfortunate events was blamed for the accident and assumed all the responsibility.

The second stage is a compliance culture in which rules and procedures are enforced focusing in preventing accidents.

Next step came with the mandatory enforcement of the ISM code by flag states, which, affecting all ships was phased-in starting in 1998 (ICS, 2013), it is meant to be a self regulation culture.

We can consider that imposing self regulation is still in the previous stage.

Usually, we humans do not like rules being imposed and prefer to know what we are doing and why we are doing it in this way. This leads to the next stage for safety culture and this is just culture.



Fig. 2.3. *Play safe: Teamwork wins.* Benton, C.P. (1943)

2.3.3 Just culture

Justice is ambiguous and world is unfair.

We can agree that blaming just one person for all the causes of an accident is using a scapegoat. This does not mean that punishment for negligent acts is not necessary.

Workers should be accountable for their actions, starting from the lowest rating to the chief executive officer; for this to happen a couple of things regarding rules have to change, as Gregory & Shanahan (2010), explain:

“The increasing number of rules [in the compliance culture] not only becomes less and less effective, but also becomes counter-productive as people search for more efficient ways through the bureaucracy” (p. 52).

Rules have to be practical instead of bureaucratic and all personnel have to understand them.

Being part of organizational cultures, rules have to aim towards the goals of the company, who has to know that the way people make better sense of things is when they are engaged with each other in pursuing a common goal, i.e. cooperating (Gregory & Shanahan, 2010).

Involvement of all shareholders in the company’s mission is needed.

Guidelines⁵ on how to implement a just culture underline the special need of commitment from the management team and the design and promotion of a reporting system that investigates not only accidents but also minor incidents.

All accidents are preventable and, if their main cause is human error, the best way to improve the accident rate is by properly addressing the human element. To deal with this IMO recommends a publication issued by the Nautical Institute (NI) (2016).

Perfection does not exist and changes are constant so improvement is always possible. The base for culture is education, so best way to obtain positive changes is by proper and continuous training.

All parts of an organization have to be concerned about safety, seeing it not as a cost center but as a profit center and not as a stable goal but as a constant improvement process in which training is required.

⁵ See, for instance ICS (2013) or Gregory & Shanahan, (2010)

Chapter 3 Relation-ships

I had, alas! no divine knowledge. What I had received by the good instruction of my father was then worn out by an uninterrupted series, for eight years, of seafaring wickedness, and a constant conversation with none but such as were, like myself, wicked and profane to the last degree.

Daniel Defoe. Robinson Crusoe.

3.1 Subculture

The maritime community is peculiar in many aspects, inland people, when entering this community find a way of talking and habits that are strange to them (Rodríguez-Martos, 1996, p. 95).

Some elements that define a culture are the language, traditions and beliefs of the particular society.

3.1.1 Language

Seafarers have a different jargon than shore people, they use technical argot to refer to ship's features (floor is deck), and for maneuvers they even have already structured formal phrases⁶.

There is also a marine slang that has to do with the nationality of the seafarers, sometimes used to mess with amateur colleagues in a colloquial way.

Another verbal aspect that gives this sense of family to the community is the use of nicknames.

For outsiders most of these expressions are incomprehensible at first but it only takes time and interest to get to use them.

The frequent use of swearwords is a thing of the past, what does not mean that seafarers are politically correct when speaking; generally there is no hesitation when calling someone by their skin color or when talking about sex unabashedly.

⁶ Standard Marine Communication Phrases (SMCP) issued by IMO (2002)

3.1.2 Way of life

Seafarers have a different conception of time and space, they live and work together during their confinement in the ship, which can be considered as a total institution (Rodríguez-Martos, 1996).

The vessel is a small society that determines the way of life of those who live within it.

Due to ship's movement, seafarers tend to anchor objects to avoid them falling (this habit remains ashore); they will also walk different, with more open legs to lower their gravity center.

If permitted aboard, a close relation to vice is also general, mainly due to boredom and stress; smoking like chimneys, drinking expensive alcohols and taking way too many coffees.

On board, workers have to be available at all time, and during their careers they will probably work in many different changing environments, so they stand out for their versatility and adaptability.

Routine, lack of new stimuli and peak periods of workload aboard and the disposal of almost their full pay when they unship, lead to this shipshape way of life.

3.1.3 Myths & beliefs

Storytelling is not that usual as when mermaids made ships wreck and oceans were full of many other monsters, Vázquez (2016), with a lot of humor covers this subject.

While myths are now a past thing, many seafarers still hold traditional beliefs in the way of superstitions.

There is an affair with garlic, probably due to its many health benefits.

Not that easy is to find a rational explanation to seafarers' trouble with umbrellas, priests and women, especially with women.

Other traditions relate to initiation rites, among them shaving heads or 'baptizing' new crew members, immersing them when they cross the equator for the first time.

Superstitions are more acute in the sail environment; for example a coin should be placed head up under the vessel's masts to create a good atmosphere (see Fig. 3.1.).



Fig. 3.1. a) Coin after the removal of Saltillo's mast. b) Coin before the placement of Saltillo's mast.

Source: personal archive.

3.1.4 Dinnertime

Worldwide dinnertime is a gathering of people, it is used for many purposes and we consider it as such an important activity that it has its own title in this dissertation.

First to be served is the master and first purpose is nutrition, physiological need, but eating does not only provide us nutrients, it also gives us new stimuli, tasty stimuli, positive stimuli.

Having a good cook is almost as important as having a good master.

Next purpose of dinnertime is information exchange. *Atyla's* captain calls dinnertime 'leating', from the combination of lunch and meeting.

Information is great power and, as we know, power is tied to authority; this is a reason for having separated dining rooms for leadership and ratings.

At the table, especially after finishing up the plates, great part of socialization happens; disclosures and relevant data are brought to light.

3.2 Discrimination

At the workplace abuse is rather called mobbing and ashore people seem to be more concerned about it than maritime community is.

Discrimination is first step to abuse; it is built in fear.

Sadly it is still very present in the maritime world.

People will say that great advancements have been made at this respect in the last years, it is true, and the upper statement is also true.

Diversity is positive.

Discrimination is always negative.

We have to actively fight against discrimination.

3.2.1 Gender

As mentioned in previous section, some old-fashioned subjects still hold the belief that women bring misfortune to ships when, in fact, is the opposite.

Seafaring is a traditionally man's job, probably because at the beginning it was very physical and men's constitution is, in general terms, stronger; but mainly because we live in a patriarchal society.

First reason no longer holds up, as we saw in the first chapter manual work aboard is past history.

We can see two main types of bias here, people that reject women and people that overprotect us. Positive discrimination is also discrimination.

Feminine presence on board has a positive influence in many aspects; for example, personal hygiene increments and rough language is moderated.

I have not worked in a ship with a contract, yet I have been literally laughed at when calling for a job, and I can still listen to disrespectful comments at school.

3.2.2 Race

Some people seem to feel better about themselves when calling another person 'monkey', maybe they forget all humans are simians.

Humans differ from other animals mainly because of our opposable thumbs and our highly developed telencephalon, which before mentioned simians do not seem to be using rationally.

Companies usually hire the leadership for their fleet of the same nationality as the shipowners (sometimes because they are obliged to), and ratings from developing countries where minimum wages are lower.

If on international crews rank differentiations match with nationality's differentiations the discrimination gap increases (Rodríguez-Martos, 1996, p. 81).

We can see discrimination against 'darker' races on board and while better opportunities are given to seamen who have the same nationality as the companies' directors ashore.

3.2.3 Status

Status is rather subject to one's nationality, for us living in south Europe north Europe has got a higher status than Africa or Asia (excluding Japan here).

Inside a nation social status holds on income, and one's income depends on many conditions foreign to the subject's influence. Being wealthier does not mean being better.

Humbleness is a merit.

Ranks on board also mean social status. The higher the status the more moral involvement with the company is expected as the relation with the shore offices becomes closer.

3.3 Role-playing

During our lives we behave under various different roles depending on our circumstances, in seafaring occupational roles are much defined.

3.3.1 Role

Seafarers go on board under a contract that states how the rest of the crew are going to think about them before establishing a relationship; they will be the new motorman, new messman, new chief mate...

Duties and responsibilities are very clear under each role so all crew members aboard know what their particular job is.

In this way having an established role is positive, as long as the person can cope with the instructions given. If tasks exceed seafarers' capacities they will experience role overload.

When performing a role people that surround us are viewers, and all of them will have their expectations about our performance. On board seafarers can experience role ambiguity if they do not understand what is required of them.

Both of the hassles mentioned above are role conflicts; in these situations seafarers will feel tension and frustration (Moreby, 1975, p. 40).

3.3.2 Personality

A human being is also called a person, thus we have personality.

These are the qualities that make us 'us'.

The famous quote by Ortega y Gasset "I am I and my circumstance" can help us understand that the ship is a huge circumstance.

When on board seafarers see their role extended to their personal life, living at the workplace they may even be called by a nickname related to their charge.

People can feel more or less identified with their role, therefore more or less comfortable performing it.

What is not usually desired is to feel "submitted" 24/7, at this respect is the master's personality the one that plays the major role (Rodríguez-Martos, 1996, p. 33).

3.4 External agents

Seafarers also relate to people from outside the ship in relation with the organization.

Many of them are called agents, be they mainly cargo brokers or port agents. This people are different in each port, so you can imagine how many of them there are, this is in part the reason for the title of this section.

Other reason is the tendency of seafarers to adopt a defense position, or at least a very critical attitude, against external characters that move around the ship (Rodríguez-Martos, 1996, p. 75).

3.4.1 Employers

Seafarers are employed by shore people, directly through the company's human resources department or via outsourced crewing agencies.

It is always recommended to appear in person in the office where employers work, or at least make a call so they can hear your voice; this makes one different from other recruits when your name is not known.

Many times the recruitment process is closed only by means of telecommunications.

In many online portals it is possible to submit your *curriculum vitae* (CV).

Some webs have their own application forms, and in some other you need to create a specific profile as in social networks.

The truth is that to easily get the job, as with most careers, what is mainly required are certificates and contacts.

Without contacts the only possibility is to actively search for a job and wait.

This makes employers distant from recruits.

3.4.2 Head offices

A head office is even farther away in seafarers' minds, but the group of individuals that works there is usually the one who controls the whole production process (Moreby, 1975, p. 95).

From this distant fixed position various professionals send instructions and monitor the ship's performance.

The link between head offices and the ship is the master, who filters most of the relevant information that arrives to the ship.

This closer relation sustains the moral involvement affair of masters with boards of director's missions and visions.

Ratings will hardly ever meet these very important people. They may appear in the webpage of the enterprise, in the section "meet our team" (maybe together with the secretary). With their names under a picture, this well dressed people look very upstanding.

3.4.3 Friendly defenders

Moreby (1975) draws from his study: "If the seafarers perceive the shore managers as 'policemen' or as 'potential attackers', they will try to defend themselves" (p. 161).

It is logical if a threat is perceived a defense attitude is expected.

But we are not battling here, we all want cargo being safely moved from one place to another, it is many people's way of life and the system in which we are involved fully depends on it.

As seen in previous chapters, safety in an organizational culture is about learning and changing, so "in order to experiment with change willingly, each seafarer needs to feel that back at head-office is a 'friendly-defender'" (Moreby, 1975, p. 161).

Shore managers have to understand that we depend on each other, and the best way to make a profitable business is for all to support each other, seeing individual work as an important piece of the process.

Chapter 4 Competent crews

4.1 Competences

The IMO (2010) recognizes the importance of establishing, and timely amend, detailed mandatory standards of competence to ensure that all seafarers are properly skilled and competent to perform their duties in a manner which provides for safety (of life, property and security at sea and the protection of the marine environment).

Considering the fact that many marine incidents and accidents are caused by human error, IMO also appreciates that ensuring these standards is one effective means of reducing these causes (p. 1).

4.1.1 Standard

As mentioned in the first chapter, the STCW Convention and Code is the legislative pillar about training and certification standards; it gathers the technical competences needed for being a certified seafarer.

It groups the abilities specified in the standards of competence under seven functions:

1. Navigation
2. Cargo handling and stowage
3. Controlling the operation of the ship and care for persons on board
4. Marine engineering
5. Electrical, electronic and control engineering
6. Maintenance and repair
7. Radiocommunications

And in three levels of responsibility:

1. Management level (Master, chief mate, chief and second engineer officers)
2. Operational level (officer in charge of a navigational or engineering watch)
3. Support level (performing assigned tasks under the direction of an individual serving in one of the levels above)

Not forgetting that working with others is indispensable, it also mentions some non-technical skills (see Annex III).

4.1.2 Competence

So, what are we dissertating about?

Competence can be defined as the ability to do something well; successfully or efficiently.

Your ability to do something is the fact that you can do it, and do it well; so your abilities are the qualities or skills (physical or mental) that give you this power.

Less than able is being capable.

However we can use competence, skill, ability and capacity as synonyms.

The fact is, that to repeatedly load a ship with cargo, move it to another port and discharge it effectively (which is what we want and need) many competences are required.

Some of them are being trained and assessed and some others are not.

4.1.3 Non-Technical Skills

Technical competences are the specific abilities that are required to perform a technical task; usually examined quantitatively in school, i.e. by means of grades.

For non-technical skills there is no consensus.

Some people refer to them as soft skills, transversal competences or key competences. The term we decided to use for the title of this dissertation is key skills, but these are just personal linguistic preferences.

A psychological approach in this field can be done analyzing Howard Gardner's *theory of multiple intelligences* (2018).

We usually compare our brain with a computer; in this way we assess human intelligence with a battery of tests that puts us in a score, the ranking of Intelligence Quotient (IQ).

The metaphor Gardner (2018) uses to explain its principles is that we do not have a single computer in our heads; we have at least eight, one for each type of intelligence.

The intelligences that he describes are:

1. Verbal-linguistic
2. Logical-mathematical
3. Spatial-visual
4. Bodily-kinesthetic
5. Musical
6. Interpersonal
7. Intrapersonal
8. Naturalist

Considering the possibility that other as intelligences exist, these candidates to be named as intelligences are:

9. Existentialist
10. Pedagogic

IQ tests only measure the two first intelligences, so we can thus consider that in general terms, these are the most valued.

Interpersonal and intrapersonal intelligences are what we popularly recognize as emotional intelligence.

Emotional intelligence got well know after the publication of a book by that title which became a world best seller (Goleman, 1995).

A simple definition Goleman (2012) gives for emotional intelligence is “the ability to manage yourself and your relationships”.

Our point of view is that key skills are qualitative manifestations of these intelligences. Some of them are basic requirements for coexistence, others are essential to work on a ship and, depending on the leadership style, particular ones will be enhanced.

4.2. Teamwork

On board, crews have to learn how to work as a team to get the ship safely underway.

Lejarza and de la Serna⁷ also consider that teamwork is a factor that brings the crew closer together and that it has positive influence over atmosphere on board when people learn to cooperate.

It is a basic requirement for many other enterprises and so it has been studied by some researchers and theorists like Belbin (2014), who is well known for his team role inventory.



Fig. 4.1. *Teamwork wins*. Benton, 1943.

4.2.1 Team role inventory

The inventory Belbin brings forward is based on nine roles (see Annex IV) that are essential for good team performance.

Analyses of team role configuration (Twardochleb, 2017, p. 114) confirm that an occurrence of all roles in a team is a crucial factor for its performance, underlining that a shortage in any given role has highly negative impact.

This study draws as a conclusion that the occurrence of the appropriate set of soft skills ensures higher quality outcomes, i.e. higher efficiency, which is a key goal for industries that require high reliability. (Twardochleb, 2017, p. 115)

Belbin's roles are assessed with easy behavioral tests that give clues about people's personalities.

⁷ See sources: Interviews.

According to the results roles can be allocated to the team members, or the other way around; depending on an individual's affinity to certain roles, specific jobs are assigned to that person.

At work people prefer to behave under two or three of these roles, and not under others, but they can also manage to assume some of the remaining. Switching roles from time to time can be positive for team members to appreciate the weight of all parts.

Belbin's inventory is the best known team role inventory. The mere existence and use of these human element management tools draws attention to the interest in assessment of key skills when hiring personnel.

4.2.2 RED Key skills

Whatever crew members' hidden roles are, a basic set of skills is essential for coexistence and work, especially aboard. These may seem obvious, but as we know *common sense is the least common of the senses*.

We cannot forget that we are going to be dealing with people that decide to expend a great time of their lives at sea, in a high risk employment away from home, far from life as we know it.

Another thing managers have to take into account is that they cannot demand these skills from workers, if not first applied to them and the team leadership.

R: Respect

For kids that have not attended the "religion" subject at school, first lesson in "Educational Attention" (AE) is respect.

Dictionaries' definitions are not clear at this respect.

We have already been using this term in previous chapters because we all have a general idea of its implications.

What we are meaning by the "R word" is to avoid harming others, even if we do not have a good opinion of them. We have to acknowledge that everyone is different and yet we are all "born free and equal in dignity and rights" (United Nations, 1948, p.1).



Fig. 4.2. Respect. Source: RED vectors

E: Effective Communication

We can consider this skill as a composite ability.

To carry on an effective communication we need some base qualities that, depending on our style, can vary; we can notice this by looking at others in the eyes.

Essentially, a good communication needs **assertiveness** and a little **empathy**.

Empathy is the ability to understand and share the others' feelings and viewpoints, so we can know if they are getting what we are saying or if it is the right moment to tell them. Assertiveness implies a confident behavior which ensures that the message is conducted clearly.

There are also some environmental conditions for communication to be effective. We need a common language, which not necessarily needs to be verbal, and it has to be a two way communication, **feedback** is what guarantees the acknowledgement of the information.



Fig. 4.3. Effective communication. Source: RED vectors

D: Discipline

This word has negative connotations because it is tied to punishment and we do not like being punished.

However what we mean by discipline is not the punishment we mentioned related to the blame culture. Negligent actions have to be corrected.

People guilty of negligence habitually fail in performing the tasks they ought to, or do not take proper care over them. We have to take ownership for our duties and accept the consequences of our own actions, this is accountability.

Discipline is the ability of being able to work in a controlled way that involves obeying particular rules or standards; it requires training in responsibility and a learning culture.



Fig. 4.4. Discipline. Source: RED vectors

4.3 Leadership

Human race is gregarious and, in general terms, individuals either need a leader or are the leader.

Exceptions are individualists who prefer to work solo. This people can also be part of a team, considering essential for coordination effective communication, but not requiring company.

4.3.1 Authority

This is a polysemous word that is frequently used when referring to leaders.

First thought on authority is giving orders, making decisions (including task assignment) and enforcing rule compliance. This is what masters, officers and senior ratings do, the same as shore managers.

When thinking about “having the authority to do something” we can see that the power to do so is given. It is the right to act in a specified way.

Disobedience (rule breaking) is a symptom of lack of authority

This right given to leaders can be earned, especially because of their commanding manner or recognized knowledge, in this way they have the power to influence others.

A present issue is the detriment of the master’s authority. This is due to the increase in paperwork and decrease in power of decision, conditions established by shore offices, be they port authorities’ or companies’.

Another great worry for masters is their criminalization; this prevents officers from promotion and makes masters leap to shore jobs when offered. Sending captains to jail for certain mistakes is using them as whipping boys.

The detachment of masters is positive for their authority if it is built on confidence; leaders have to be visible to their followers and should not be ignored by their superiors.

Figure 4.5. shows what we do not want to happen. Worse situation is when the leader trips and for that goes to jail, far from a just culture.



Fig. 4.5. Leader vs. Boss. Source: ECA college (2017)

4.3.2 Style

“Leaders need to tailor leadership style to fit their individual personalities.”
(MCA, 2014, p. 9)

We already know that every person is different; as leaders also are, their manners will never be exactly the same and will be changing over time with experience, hopefully, in a positive way.

Masters’ figure has a great historical charisma; however their role has also been changing through history. Nowadays we could say “master under shore manager” rather than “next after God”.

Rørbeck (2013) exposes that a captain is a:

- Secretary
- Doctor
- Bookkeeper
- Payroll clerk
- Purchaser
- Priest
- Shrink
- Policeman
- School teacher
- Substitute Mother
- Fire marshal
- Travel Agent
- Bank
- Personnel Manager
- Number cruncher
- Hotel/restaurant Manager
- Election committee
- Computer expert
- Shipping agent
- Crew union man

And that just sometimes masters get to sail the vessel.

Interviewed captains, all with their diverse styles, expressed as their most important duties the **control of a safe navigation** and the **care of the crew**.

For a team to perform a good job having a good leader is pivotal, not forgetting that the leader’s is also a team player.

There are studies (e.g. Mendoza and Ortiz, 2006) about which leadership style is better, but leader’s is also a role, and as we have seen with Belbin, role affinity depends on personality and so does style.

There are many ways of doing; the key is to do things properly and use mistakes as an opportunity to learn and improve.

4.3.3 Trendy skills

Masters' figure is fundamental for good crew performance and so are their attitudes for a good atmosphere on board.

Leaders' behavior will rebound on ship's climate, it depending on their personality and on the feedback received.

Skills are interrelated as are intelligences, getting better at something usually implies the improvement of more than one of our capacities; butterfly effect.

Some management skills that tend to work, specially oriented to ship's environment, but considering them also for shore managers, are captured in the following paragraphs.

Leaders in special have to be **confident**; first of all is self-confidence, but also, as they rely on their team, they will have to build confidence in their crews. It is necessary for **honesty** (admitting mistakes) and to remain **calm** in critical situations.

Awareness of the situation, which entails organizational awareness and **fatigue monitoring**, is very important for good **decision making** and **conflict resolution**; these are easier to develop if spiced with **critical thinking**.

Resource management, being resources: time, energy and human power, is a leader's duty. The MCA (2014, p.12) indicates that there is little dedicated formal training in people management in our industry; however Bridge Resource Management (BRM) and Engine Resource Management (ERM) courses are available for leaders in both sections.

Particularly captains, who suffer a more acute solitude and maybe more stress due to their heavier workloads, need **self management**. A convenient attitude, highly recommended by Basurko⁹ and to him by Robin Knox-Johnston, is laughing at oneself, never losing the good sense of humor.

Commitment is expected from leaders, it depends on companies' values; this will be examined in next chapter. Involvement and care for the crew can be shown by directly helping ratings, giving example and positive reinforcement, which means backing the team.

Last but not least, **motivation** that rises up morale, which is elementary to support a **Positive Mental Attitude (PMA)**, key for a good atmosphere.

⁸ See sources: Interviews.

Chapter 5 Manning policies

5.1 Core values

5.1.1 Where?

We have already mentioned codes of ethics; the term is in practice interchangeable with code of conduct/business/practices/behaviors. They became popular with the evolution of multinational corporations in the nineties.

These are perfectly written formal documents that manifest organizations' moral, their behavioral expectations for the company and the people who work there; indeed what they want to look like

However there is no need for a document to be issued to see what enterprises' values are, they are implicit in their conducts.

5.1.2 Why?

Ethics-based cultures are enforced by some national laws and by non-governmental organizations like the IMO (see 2.3.3). But again, being told to do so is not a major reason for doing anything.

Thinking in profit making, one crucial reason for commercial organizations to write down their values and behave according to them is that customers, in general, prefer to buy from transparent, socially and environmentally sensitive enterprises that adhere to their moral standards.

Another great reason, drawn by Moreby (1975), is that values dominate the structure of the organization; if these are clear and understood, performance can improve.

"Good conduct is good business" (IFAC, 2017, p.2).

5.1.3 How?

There are guidelines available on how to develop and implement codes of conduct, such as those issued by B Corporation (2007), or by IFAC (2007), which include a greater detail.

One thing is clear: they should be useful for resolving ethical dilemmas.

5.2 Nailing down

One size never fits all. Given that every company is unique, each one needs to develop its own exclusive code of conduct, based on the core values of the firm.

5.2.1 What is done?

Statements that refer to the manning of the vessels are gathered in different policies, depending on the company that operates them.

As explained in the introduction, a search was made among different international shipping companies' websites seeking for the public information about their conducts and policies related to their staff.



Fig. 5.1. Safety staff. Source: Maersk supply service website

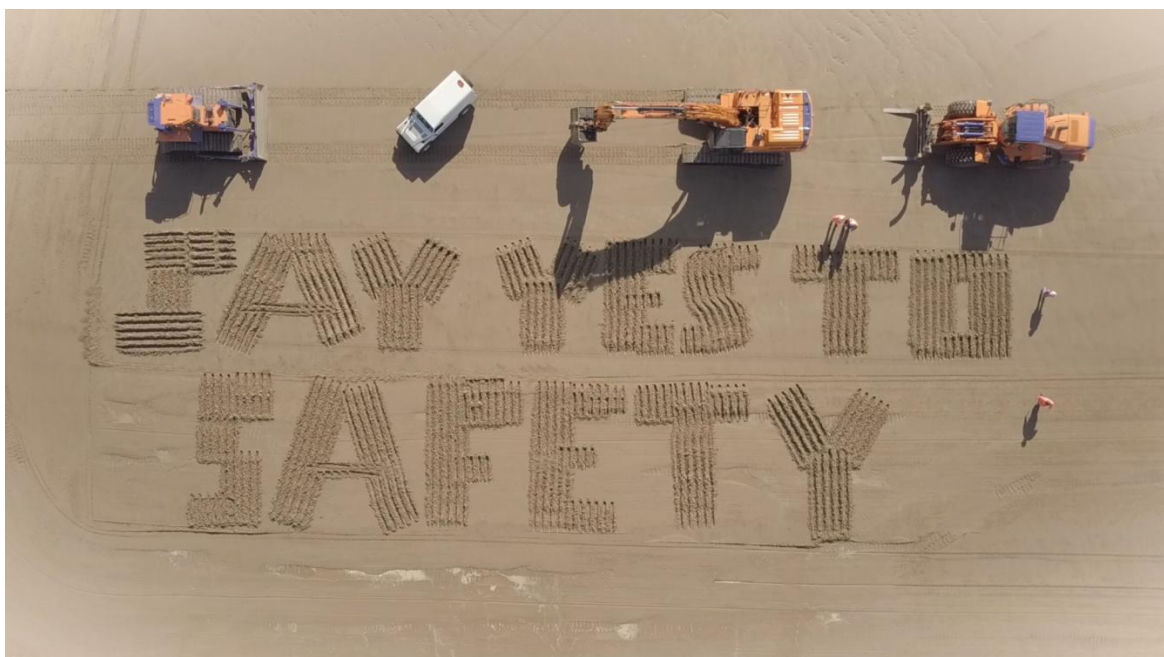


Fig. 5.2. "Say YES to safety" Source: Van Oord website

Generally speaking, at first sight, it is evident whether companies are focused on the value of their staff and its wellbeing. Pictures like the ones shown on figures 5.1. and 5.2., or slogans like “say YES to safety” (Van Oord) reflect these attitudes.

In table 5.1. we can see under which general titles some organizations announce in their websites some of their attitudes towards sea personnel.

HSQE is the general acronym for Health, Safety, Quality and Environment.

Some companies use the full acronym; many usually refer to Health and Safety on one side and include their Quality and Environmental policies in separated sections. It is also frequent to find an individual division for each value, but not them all present.

Taking into account that every company works in a different way and since the letters can be arranged in different orders, the acronyms can be personalized to prioritize their interests, e.g. QSHE, QHSE or HSQ.

The table 5.1. refers to Values when attitudes towards staff are declared by the companies within the morals covered in their codes of ethics.

If we are able to find organizations’ recruitment policies or specific documents about how they treat their staff, the label is Personnel.

		Values	Personnel	H	S	Q	E
Emarat Maritime	Dry bulk			•	•	•	•
Fred Olsen	Passengers	•	•				
Ibaizabal	Tankers			•	•	•	
Ibernor	Crewing agency					•	
Interunity	Chemicals			•	•	•	•
Maersk	Supply	•		•	•	•	•
MSC	Containers	•	•				•
Terra Marine	Logistics	•	•	•	•	•	•
Van Oord	Projects	•		•			

Table 5.1. Policies review. Source: Author

Logically, crewing agencies have to adjust to the management styles of the companies that demand their services.

In our search we found that the biggest shipping companies are the ones that provide more information about their recruitment processes. As a

matter of example, we will now review some of them focusing on statements referring to non-technical skills.

Maersk, in particular, asks candidates to send an application form via their website and, if chosen, the process goes on with two interviews.

In the first one they say to focus on personal skills and capabilities, using online or hard copy assessment tools to try to form an objective picture of the potential future employees' logical capabilities and personal characteristics.

The second interview is normally conducted by the hiring manager, who will make the final hiring decision, focusing on the specific skills and qualities required for the position.

The entire recruitment process usually takes 4 to 6 weeks, depending on location.

MSC Crewing Services state that the selection of its floating staff is based solely on the criteria of merit, ability and availability, reaffirming its opposition to unfair discrimination.

Van Oord does not accept open applications; they publish all vacancies on their website. If no one matches candidates' experience and ambitions they can sign up for a job alert.

This company holds a technical traineeship program, whose selection procedure consists of a video application, two interviews and an online assessment.

To enter this program they say to value flexibility, strong analytical skills, stress management, teamwork and communication skills, especially English language.

Luckily vacancies were open for a skipper and a first mate, for which they look for an independent colleague with a positive and flexible attitude.

There was also a vacancy for a Recruitment & Development Officer Fleet (R&D Officer) that provided us the best information.

The R&D Officer, working together with R&D team, will focus their attention on the professional development of the fleet workforce, equipping staff with the knowledge, practical skills and motivation to carry out their work activities effectively.

Their responsibilities are to identify fleet specific training and development needs through an annual appraisal, talent reviews. They will design internship and traineeships programs in consultation with their team and formalize the existing process of fleet specific talent reviews.

Also, they will amend and revise programs as necessary, in order to adapt to changes, based on the needs of the organization and the individuals, in order to further enhance the performance of ship management.

The job of the R&D Officer requires interpersonal skills to work with people at all levels within the organization, motivate others and change people's attitudes when necessary.

Moreover, they will need communication skills to inform and advise others clearly, presentation skills, initiative, creativity, strong teamwork skills and a collaborative approach to learning.

All this is necessary to work in a challenging position within an international organization, with opportunities for personal development, becoming part of a dynamic environment where innovation, automation, quality, flexibility and creativity are key issues to meet the company's goals.

Nevertheless, we cannot know much about which non-technical skills are, if valued, needed for ratings.

In spite of this, it has to be mentioned that in the shipping industry, as in any other business, it is still possible to find shameless firms that do not take care of their crews, and even true rogues that abuse them.

Unfortunately, in the 21th century, policies against Modern Slavery and Human Trafficking need to be issued (e.g. see Annex V).

Substandard ships where crew members living in subhuman conditions, maybe even without food or drinkable water do exist⁹.

Global organizations as ILO and Walk Free Foundation (2017) remind us that slavery is not merely a historical relic; it refers to situations of exploitation that a person cannot refuse or leave because of threats, violence, coercion, deception, and/or abuse of power (p. 9).

Port State Control (PSC)¹⁰ and other inspections keep bringing to light deficiencies like the one shown in figure 5.3. and even worse ones, and these 'ships of shame' continue to get underway.

⁹ See archive documents: Deutsche Flagge.



Fig. 5. 3. Testing integrity of the steel by chipping. Source: Deutsche Flagge.

This has to end.

Humankind cannot say to be evolving if somewhere else, not so far, we are suffering this regression.

5.2.2 What can be done?

We know we will hardly find adventure in our jobs and that maritime labor is getting lesser and lesser stimulating, but there is always something to learn.

It is foolish to expect commitment of the workforce if their living and working environment does not treat them well, more if they feel forgotten and not taken into account.

Most of these conditions depend upon the upstanding people wearing suits at the head offices, so for them to square up particular factors are drawn in the following paragraphs.

People are more comfortable on board between the second week and third month of stay, from the third month on maladaptation starts to rise (Rodríguez-Martos, 1996, p.190), watch out for the length of the contracts.

¹⁰ Inspection regime for foreign-registered ships agreed after the Paris Memorandum of Understanding (MOU, 1978)

Humans need leisure time and physical activity as well as they need to socialize and the company of others, providing common spaces for such activities is killing two birds with one stone. It would be positive for these spaces to be common for all ranks.

Having a stable labor is essential for building an organizational culture. To form a composite crew, do try to let people meet in more than one campaign and in the same vessel, so they get to know its technical features.

Leaders have to show care for their subordinates and values have to be transmitted from top down, showing commitment at all stages. One way to involve all sea staff is by including as a duty of superiors to mentor their ratings.

Safety is indispensable, teamwork is positive for building up relationships and drills are compulsory, making them be complied regularly, jumbling all personnel, is positive for all.

If you want your workers taking initiative, establish your morals and act consequently.

You get what you give.

5.3 Best exemplary practices

In this section some exemplary practices are presented. They suggest a benchmark that the shipping companies could aspire to meet, adjusting the concept to their own reality, and adapting their crewing policies accordingly.

5.3.1 Simply mind-bending

When Basurko¹¹ led the sailing expedition to the Antarctic no fights or conflicts were experienced on board, just amazing.

How could this be possible?

The crew was even more reduced than on a merchant vessel, living in a more confined space, with no room for privacy and exposed to the inclement weather; so they could have met attrition.

¹¹ Unai Basurko was one of our oral sources. The interview was recorded and, in this section, some of his answers are quoted. We have also taken extracts of his conference and documentary.

What saved people from struggling was a thorough selection and previous training.

It was not easy to pitch upon people, waving away candidates was done face-to-face and selection criteria were practical and focused on coexistence rather than on technical competences.

The values that ruled the *Pakea* experience were written down by the participants in some of the previous training sessions. The ones that lied on the heat of the expedition were:

- Love
- Responsibility
- Feeling
- Effort

And the slogan was:

“To the conquest of the great South,
to the conquest of our essence.”

All of these beautiful words were easily captured on a poster placed on a bulkhead of the sail. The important thing was not to forget them and work on them; morals mean nothing if not exercised.

Not to leave behind what was written, the next exercise was to particularize these values in specific actions where these attitudes were seen. An example:

Question (Q): What is fellowship?

Basurko’s Answer (A): During the watch you go to the galley to make a hot chocolate, asking your mates if they also want a cup and making a couple instead of just one; that is fellowship.

These types of activities were done in coaching sessions at the headquarters of the *Pakea* project, after the selection process. Most of them were group dynamics to establish trust bonds between people that did not know each other.

These links where one of nubs that led the *Pakea* to success, many are still close and alive (Ortega, 2016).

Many human errors in our profession are due to miscommunications, in the previous chapter we have covered effective communication as a key skill; in any case the background has also a role to play.

Basurko highlights the importance of creating the proper spot for quality communication to take place; this has to do with details and discipline.

Adding up good gestures of solidarity, like the hot chocolate example or maybe covering with a blanket a comrade that is getting cold, works up a trust climate where crew members feel comfortable and confident to express themselves.

For technical communications, as it is the watch takeover, having a standard protocol for passing on information is also relevant; here we have to consider the amount of time people take from waking up to being fully aware.

This expedition came out so well thanks to the commitment of all crew members; cooperating means working together for a common goal.

The main requisite to join the Pakea project was the engagement with its mission and identification with its vision. Participants need to believe and will to learn, grow and add, but positive things, to the group.

5.3.2 This is our job

All of this sounds too romantic when thinking that seafarers, when at sea, live on a gigantic steel cage, powered by monstrous machines driving goods in exchange for money.

Seafaring is a business and still things can be done to improve its quality, here are ten bearings for a fair doing:

- Know your business

As competent enterprises, companies have to meet their mission, which is their reason for existence.

If the deal is to carry cargo, orient the business to a better doing by improving your equipment and your performance.

- Establish your vision

Adopt a distinctive position towards your trade based on ethical values.

Use your different point of view to create a memorable corporation image, contradistinguish to your competitors'.

- Be honest

Declare the morals that rule the working environment and comply with their integrity.

Impostors are never welcome, if you are caught misleading customers or employees your reputation will be damaged.

- Be practical

An excess of procedures is counterproductive, rules have to be oriented towards safe and effective behaviors.

For rules to be accepted and complied, first they have to be understood, by making them simple they will be easier to follow.

- Care for your crew

Do think about the wellbeing of labor force and select it with care, it is the great majority of organizations' personnel.

Happy and well rested workers will engage with company's mission more easily and will achieve higher performance.

- Value leadership

Be aware that leader's figure is essential for the working environment, so empower them consequently.

Especially when the vessel is at sea masters are the representative of the flag state and the organization, do not treat them as secretaries.

- Focus on quality

Aim towards a zero incidents goal, provide a good service to customers and avoid getting your team injured.

Higher quality will make you distinct and more competent, the smallest issue can reveal greater ones, is a sign that further improvement is needed.

- Learn everyday

Acknowledge that we are not perfect and we can never be; knowledge is one of the biggest human virtues, make it greater each day.

Admit mistakes, do not try to hide them, correct them with training and use them to improve, “walk the talk” and be flexible.

- Punish neglect

Do not accept misbehavior, conscious rule-breaking damages reputation as can damage people.

Write down norms, follow them, make them be followed and be just.

- Report and monitor

Implement tools to raise concern in every stage of the production process, not forgetting the small pieces, and continuously review your morals.

Establish a periodical and confidential reporting system, communicate internally; listen also to ratings testimonies on global performance.

Conclusions

This work is oriented to a thought that we share with professionals as Rodríguez-Martos (1996), who considers that the selection of future (present) seafarers should be based on psychosocial aspects, rather than on technical competences (p. 198).

Of course we need previous knowledge and training on the operation of the machines we are going to sail, but we cannot forget that the ship is a caged society driven by people.

Face-to-face communication can never be replaced by papers and screens. It is indispensable for human activity.

Maritime transport and coexistence are fundamental for the type of society we have created.

But we cannot be centered in money making forgetting that money is something we have made up, with a practical purpose, which is to make things easier for people.

Self-interest is a general tendency; it seems legit to be concerned about our personal welfare and that of the ones we surround ourselves with. What does not seem as legit to us is doing it at expenses of the wellbeing of unseen others.

It is a fact that the human factor has all to do with effectiveness, so if not centering our business in people, giving the proper attention to workers is essential for good teamwork performance, which eventually will result in bigger profits for the company.

Big shipping industries with a solid reputation say to value some non-technical skills, however more attention needs to be drawn to the impact these have on performance and coexistence.

As a gregarious species we tend to form groups and need a leader (or be the leader), so a proper empowerment of ships' leadership will have a positive impact on the ambience aboard.

All individual are unique and have their own world inside their minds.

We need to change the tick-in-the-box mentality.

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Vázquez, M. J. (2016). *De personas y barcos... El Elemento Humano en la Marina Mercante*. Itsas Memoria. Revista de Estudios Marítimos del País Vasco, 8, Untzi Museoa-Museo Naval, Donostia-San Sebastián, 2016, pp. 245-282. Available at:

https://untzimuseoa.eus/images/itsas_memoria_08/09_im8_manuvzquez.pdf Accessed: 07/02/2019

Self-actualization

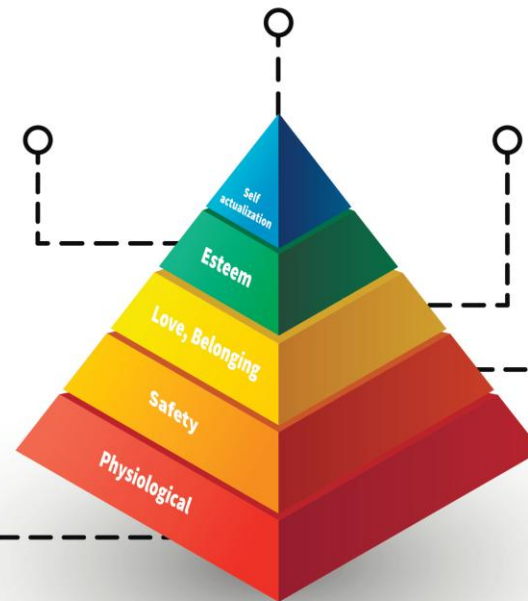
This level of need refers to what a person's full potential is and the realization of that potential. Maslow describes this level as the desire to accomplish everything that one can, to become the most that one can be. Individuals may perceive or focus on this need very specifically. For example, one individual may have the strong desire to become an ideal parent. In another, the desire may be expressed athletically. For others, it may be expressed in paintings, pictures, or inventions.

Esteem

All humans have a need to feel respected; this includes the need to have self-esteem and self-respect. Esteem presents the typical human desire to be accepted and valued by others. People often engage in a profession or hobby to gain recognition. These activities give the person a sense of contribution or value. Low self-esteem or an inferiority complex may result from imbalances during this level in the hierarchy.

Love and belonging

After physiological and safety needs are fulfilled, the third level of human needs is interpersonal and involves feelings of belongingness. This need is especially strong in childhood and can override the need for safety as witnessed in children who cling to abusive parents.



Physiological needs

Physiological needs are the physical requirements for human survival. If these requirements are not met, the human body cannot function properly and will ultimately fail. Physiological needs are thought to be the most important; they should be met first.

Safety needs

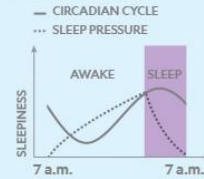
With their physical needs relatively satisfied, the individual's safety needs take precedence and dominate behavior. In the absence of physical safety – due to war, natural disaster, family violence, childhood abuse, etc. – people may (re-)experience post-traumatic stress disorder or transgenerational trauma. This level is more likely to be found in children because they generally have a greater need to feel safe.

MASTER CLOCK

HOW LIGHT AFFECTS US

How perky we're feeling at any moment depends on the interaction of two processes: "Sleep pressure," which is thought to be created by sleep-promoting substances that accumulate in the brain during waking hours, and our circadian rhythm, the internal clock that keeps brain and body in sync with the sun. The clock can be set backward or forward by light. We're particularly sensitive to blue (short-wavelength) light, the kind that brightens midday sunlight and our computer screens, but can disrupt our cycle—especially at night, when we need the dark to cue us to sleep.

SLEEP DRIVERS



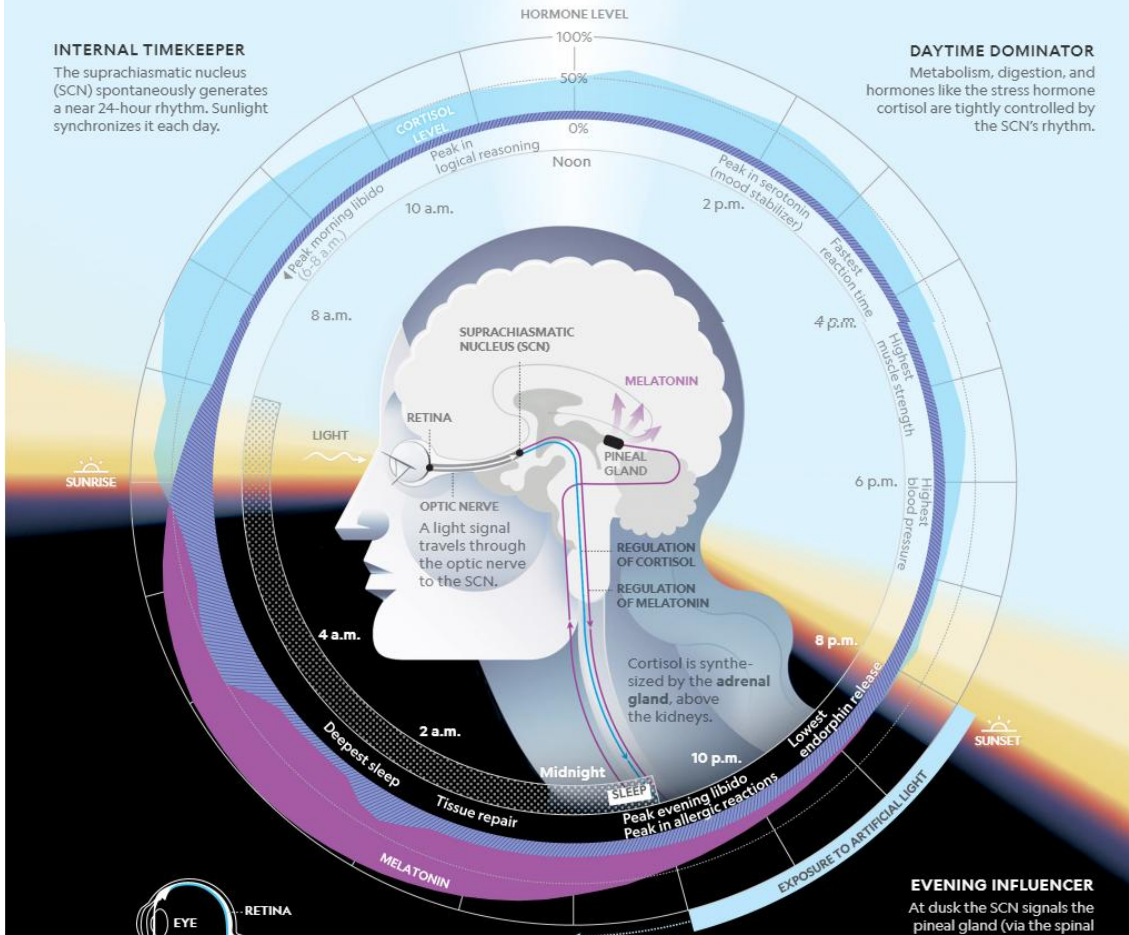
The pressure to sleep builds throughout the day.

INTERNAL TIMEKEEPER

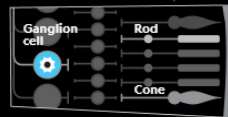
The suprachiasmatic nucleus (SCN) spontaneously generates a near 24-hour rhythm. Sunlight synchronizes it each day.

DAYTIME DOMINATOR

Metabolism, digestion, and hormones like the stress hormone cortisol are tightly controlled by the SCN's rhythm.



RETINA CROSS SECTION



LIGHT SETS OUR INTERNAL CLOCK ...

Some ganglion cells have blue-light-sensitive receptors that tell our brain to set our circadian clock to night or day. They also gather subtle light information from rods and cones.

Some blind people who have no light information reaching their brains use melatonin products every 24 hours as cues to try to stay in sync.

EVENING INFLUENCER

At dusk the SCN signals the pineal gland (via the spinal cord) to release melatonin, a hormone that tells the body darkness has arrived.

PHASE SHIFT (Sleep delay at night)

Tablet	Smartphone	E-reader*	Incandescent	Candle
96 min	67 min	58 min	55 min	0 minutes



... AND ARTIFICIAL LIGHT DISRUPTS IT

The bluer and brighter the light, the more likely it is to suppress melatonin release and shift our sleep cycle—especially when we're exposed to it at night and up close on electronic screens.

*WITH BACKLIT DISPLAY
MÓNICA SERRANO, NGM STAFF; MESA SCHUMACHER, SOURCES: STEVEN LOCKLEY, BRIGHAM AND WOMEN'S HOSPITAL; RUSSELL FOSTER, UNIVERSITY OF OXFORD; DAVID SLINNEY, JOHNS HOPKINS UNIVERSITY SCHOOL OF PUBLIC HEALTH; MICHAEL PERLIS; FLUXOMETER PROJECT

STCW EXCERPTS

Annex III

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
<p>Maintain a safe navigational watch (continued)</p>	<p>Bridge resource management</p> <p>Knowledge of bridge resource management principles, including:</p> <p>.1 allocation, assignment, and prioritization of resources</p> <p>.2 effective communication</p> <p>.3 assertiveness and leadership</p> <p>.4 obtaining and maintaining situational awareness</p> <p>.5 consideration of team experience</p>	<p>Assessment of evidence obtained from one or more of the following:</p> <p>.1 approved training</p> <p>.2 approved in-service experience</p> <p>.3 approved simulator training</p>	<p>Resources are allocated and assigned as needed in correct priority to perform necessary tasks</p> <p>Communication is clearly and unambiguously given and received</p> <p>Questionable decisions and/or actions result in appropriate challenge and response</p> <p>Effective leadership behaviours are identified</p> <p>Team member(s) share accurate understanding of current and predicted vessel state, navigation path, and external environment</p>
<p>Use of radar and ARPA to maintain safety of navigation</p> <p><i>Note:</i> Training and assessment in the use of ARPA is not required for those who serve exclusively on ships not fitted with ARPA. This limitation shall be reflected in the endorsement issued to the seafarer concerned</p>	<p><i>Radar navigation</i></p> <p>Knowledge of the fundamentals of radar and automatic radar plotting aids (ARPA)</p> <p>Ability to operate and to interpret and analyse information obtained from radar, including the following:</p> <p>Performance, including:</p> <p>.1 factors affecting performance and accuracy</p> <p>.2 setting up and maintaining displays</p> <p>.3 detection of misrepresentation of information, false echoes, sea return, etc., racons and SARTs</p>	<p>Assessment of evidence obtained from approved radar simulator and ARPA simulator plus in-service experience</p>	<p>Information obtained from radar and ARPA is correctly interpreted and analysed, taking into account the limitations of the equipment and prevailing circumstances and conditions</p>

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
<p>Use of leadership and managerial skill</p>	<p>Knowledge of shipboard personnel management and training</p> <p>A knowledge of related international maritime conventions and recommendations, and national legislation</p> <p>Ability to apply task and workload management, including:</p> <p>.1 planning and co-ordination</p> <p>.2 personnel assignment</p> <p>.3 time and resource constraints</p> <p>.4 prioritization</p> <p>Knowledge and ability to apply effective resource management:</p> <p>.1 allocation, assignment, and prioritization of resources</p> <p>.2 effective communication on board and ashore</p> <p>.3 decisions reflect consideration of team experiences</p> <p>.4 assertiveness and leadership, including motivation</p> <p>.5 obtaining and maintaining situation awareness</p> <p>Knowledge and ability to apply decision-making techniques:</p> <p>.1 situation and risk assessment</p> <p>.2 identify and generate options</p> <p>.3 selecting course of action</p>	<p>Assessment of evidence obtained from one or more of the following:</p> <p>.1 approved training</p> <p>.2 approved in-service experience</p> <p>.3 approved simulator training</p>	<p>The crew are allocated duties and informed of expected standards of work and behaviour in a manner appropriate to the individuals concerned</p> <p>Training objectives and activities are based on assessment of current competence and capabilities and operational requirements</p> <p>Operations are demonstrated to be in accordance with applicable rules</p> <p>Operations are planned and resources are allocated as needed in correct priority to perform necessary tasks</p> <p>Communication is clearly and unambiguously given and received</p> <p>Effective leadership behaviours are demonstrated</p> <p>Necessary team member(s) share accurate understanding of current and predicted vessel state and</p>

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to a safe navigational watch	<p>Ability to understand orders and to communicate with the officer of the watch on matters relevant to watchkeeping duties</p> <p>Procedures for the relief, maintenance and handover of a watch</p> <p>Information required to maintain a safe watch</p>	Assessment of evidence obtained from in-service experience or practical test	<p>Communications are clear and concise</p> <p>Maintenance, handover and relief of the watch is in conformity with acceptable practices and procedures</p>
Contribute to berthing, anchoring and other mooring operations	<p>Working knowledge of the mooring system and related procedures, including:</p> <p>.1 the function of mooring and tug lines and how each line functions as part of an overall system</p> <p>.2 the capacities, safe working loads, and breaking strengths of mooring equipment, including mooring wires, synthetic and fibre lines, winches, anchor windlasses, capstans, bits, chocks and bollards</p> <p>.3 the procedures and order of events for making fast and letting go mooring and tug lines and wires, including towing lines</p> <p>.4 the procedures and order of events for the use of anchors in various operations</p> <p>Working knowledge of the procedures and order of events associated with mooring to a buoy or buoys</p>	<p>Assessment of evidence obtained from one or more of the following:</p> <p>.1 approved in-service experience</p> <p>.2 practical training</p> <p>.3 examination</p> <p>.4 approved training ship experience</p> <p>.5 approved simulator training, where appropriate</p>	Operations are carried out in accordance with established safety practices and equipment operating instructions

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Ensure compliance with pollution-prevention requirements	<p><i>Prevention of pollution of the marine environment</i></p> <p>Knowledge of the precautions to be taken to prevent pollution of the marine environment</p> <p>Anti-pollution procedures and all associated equipment</p> <p>Importance of proactive measures to protect the marine environment</p>	<p>Examination and assessment of evidence obtained from one or more of the following:</p> <p>.1 approved in-service experience</p> <p>.2 approved training ship experience</p> <p>.3 approved training</p>	<p>Procedures for monitoring shipboard operations and ensuring compliance with pollution-prevention requirements are fully observed</p> <p>Actions to ensure that a positive environmental reputation is maintained</p>
Prevent, control and fight fire on board	<p><i>Fire prevention and fire-fighting appliances</i></p> <p>Ability to organize fire drills</p> <p>Knowledge of classes and chemistry of fire</p> <p>Knowledge of fire-fighting systems</p> <p>Action to be taken in the event of fire, including fires involving oil systems</p>	<p>Assessment of evidence obtained from approved fire-fighting training and experience as set out in section A-VI/3, paragraphs 1 to 3</p>	<p>The type and scale of the problem is promptly identified and initial actions conform with the emergency procedure and contingency plans for the ship</p> <p>Evacuation, emergency shutdown and isolation procedures are appropriate to the nature of the emergency and are implemented promptly</p> <p>The order of priority, and the levels and time-scales of making reports and informing personnel on board, are relevant to the nature of the emergency and reflect the urgency of the problem</p>

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Observe safe working practices	<p>Importance of adhering to safe working practices at all times</p> <p>Safety and protective devices available to protect against potential hazards aboard ship</p> <p>Precautions to be taken prior to entering enclosed spaces</p> <p>Familiarization with international measures concerning accident prevention and occupational health *</p>	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times
Contribute to effective communications on board ship	<p>Understand the principles of, and barriers to, effective communication between individuals and teams within the ship</p> <p>Ability to establish and maintain effective communications</p>	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Communications are clear and effective at all times
Contribute to effective human relationships on board ship	<p>Importance of maintaining good human and working relationships aboard ship</p> <p>Basic teamworking principles and practice, including conflict resolution</p> <p>Social responsibilities; employment conditions; individual rights and obligations; dangers of drug and alcohol abuse</p>	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Expected standards of work and behaviour are observed at all times

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Understand and take necessary actions to control fatigue	<p>Importance of obtaining the necessary rest</p> <p>Effects of sleep, schedules, and the circadian rhythm on fatigue</p> <p>Effects of physical stressors on seafarers</p> <p>Effects of environmental stressors in and outside the ship and their impact on seafarers</p> <p>Effects of schedule changes on seafarer fatigue</p>	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Fatigue management practices are observed and appropriate actions are used at all times

Belbin® Team Role Summary Descriptions



Resource Investigator

Contribution: Outgoing, enthusiastic. Explores opportunities and develops contacts.

Allowable Weaknesses: Might be over-optimistic, and can lose interest once the initial enthusiasm has passed.



Teamworker

Contribution: Co-operative, perceptive and diplomatic. Listens and averts friction.

Allowable Weaknesses: Can be indecisive in crunch situations and tends to avoid confrontation.



Co-ordinator

Contribution: Mature, confident, identifies talent. Clarifies goals. Delegates effectively.

Allowable Weaknesses: Can be seen as manipulative and might offload their own share of the work.



Plant

Contribution: Creative, imaginative, free-thinking. Generates ideas and solves difficult problems.

Allowable Weaknesses: Might ignore incidentals, and may be too pre-occupied to communicate effectively.



Monitor Evaluator

Contribution: Sober, strategic and discerning. Sees all options and judges accurately.

Allowable Weaknesses: Sometimes lacks the drive and ability to inspire others and can be overly critical.



Specialist

Contribution: Single-minded, self-starting and dedicated. They provide specialist knowledge and skills.

Allowable Weaknesses: Can only contribute on a narrow front and tends to dwell on the technicalities.



Shaper

Contribution: Challenging, dynamic, thrives on pressure. Has the drive and courage to overcome obstacles.

Allowable Weaknesses: Can be prone to provocation, and may sometimes offend people's feelings.



Implementer

Contribution: Practical, reliable, efficient. Turns ideas into actions and organises work that needs to be done.

Allowable Weaknesses: Can be a bit inflexible and slow to respond to new possibilities.



Completer Finisher

Contribution: Painstaking, conscientious, anxious. Searches out errors. Polishes and perfects.

Allowable Weaknesses: Can be inclined to worry unduly, and reluctant to delegate.

MODERN SLAVERY STATEMENT

FINANCIAL YEAR 2017

In line with the Section 54 of the UK Modern Slavery Act 2015, this statement describes current practices and processes that MSC Mediterranean Shipping Company SA (“MSC” thereafter) takes to mitigate risks of modern slavery and human trafficking in its business activities and its supply chain.

Headquartered in Geneva, Switzerland, MSC is a world leader in the international shipping sector with activities in 155 countries. MSC’s long-term vision focuses on enhancing connectivity between populations and countries, offering a global and holistic integrated network of sustainable logistics and transportation solutions by road, rail and sea.

Member of the United Nations Global Compact since 2016, MSC is strongly committed to promote fair business practices as well as the respect of internationally recognized human rights, labour and environmental standards.

For more information about MSC’s initiatives and progress with regards to the respect and promotion of human rights and social welfare please refer to MSC Sustainability Report on [msc.com/sustainability](https://www.msc.com/sustainability).

INTRODUCTION

Article 4 of the United Nations Universal Declaration of Human Rights clearly states that “no one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms”.

Pursuant to UK Modern Slavery Act 2015, modern slavery: (i) is a crime resulting in an abhorrent abuse of human rights; (ii) is constituted in the UK Modern Slavery Act 2015 by the offences of slavery, servitude and forced or compulsory labour and human trafficking.

Although slavery and slave-related practices are universally recognized as a crime against humanity¹, according to the [Global Slavery Index](#), in 2016 “around 40.3 million men, women and children from every part of the globe were victims of modern slavery.” These estimates cover different forms of slavery, including trafficking of human beings, forced marriage, child labour and forced labour.

MSC’s efforts to tackle modern slavery are fully supported and endorsed by MSC’s top management. The MSC Code of Business Conduct includes dedicated sections in this regard.

The responsibility to respect human rights and international labour standards includes concrete actions to ensure not being complicit in human rights abuses and to prevent them whenever possible. This responsibility exists independently of States’ abilities and/or willingness to fulfil their own human rights obligations and does not diminish those obligations. MSC’s ethical business conduct is built on these considerations and strive to promote the above-mentioned highest standards.

¹ <https://www.ohchr.org/Documents/Publications/slaveryen.pdf>

MSC CARGO DIVISION

ORGANISATIONAL STRUCTURE

The MSC Group has a Cargo Division which includes: MSC Mediterranean Shipping Company SA (MSC), Terminal Investment Limited (TiL) and MEDLOG SA.

MSC is a pure service provider transporting physical commodities from one point to another of the world. To do so, MSC operates a fleet of 510 vessels calling 500 ports. Headquartered in Geneva, Switzerland, MSC has 480 offices (hereinafter “Agencies”) worldwide in 155 countries and employs 47’000 people for its shipboard and shoreside activities.

The technical management of MSC’s vessels and crew management are handled by MSC Shipmanagement technical offices, respectively located in Limassol, Cyprus and Sorrento, Italy.

Terminal Investment Limited (TiL) manages and invests in 54 terminals in 29 countries across 5 continents.

MEDLOG SA offers global inland transport solutions to customers in over 53 countries around the world. services include transportation by road, rail and barge, as well as off-dock storage, container maintenance & repairs, warehousing & distribution, project cargo (breakbulk & out-of-gauge) as well as reefer containers services.

IMPLEMENTATION OF THE MSC CODE OF BUSINESS CONDUCT

The MSC Code of Business Conduct sets forth the fundamental principles and standards that should lead MSC’s conduct and its managers and employees’ behaviour in all their business activities.

Throughout 2017, MSC has continued developing a culture of integrity within its organization in line with its Code of Business Conduct as well as the ten principles of the United Nations Global Compact in the areas of Human Rights, Labour, Environment and Anti-Corruption.

In this respect, MSC provides mandatory training courses having as their object the MSC Code of Business Conduct to all its employees around the globe. At MSC’s headquarters, special introductory sessions are organized for newcomers in the context of their onboarding program.

MSC expects its network of agencies (“MSC Agencies” thereafter) to meet the principles and standards contained in its Code of Business Conduct. MSC has also enhanced its compliance system effectiveness, designating a local “Code Implementer” in each MSC Agency worldwide. In 2017, customized trainings have been performed by the Code Implementers around the world both via on-line webinars and live sessions. Considering the cultural diversity of its employees, MSC ensured the translations of the MSC Code of Business Conduct in 20 different languages, all published on MSC’s worldwide intranet.

In 2017, MSC has inserted anti-slavery clauses into its contracts with some of its subcontractors such as with terminal operators and connecting carriers. MSC strives to impose to the identified business partners to comply with all applicable anti-slavery and human trafficking laws including but not limited to the UK Modern Slavery Act 2015. Furthermore, MSC expects them not to have been convicted of any offence involving slavery and human trafficking. MSC also encourages such subcontractors to share similar standards to those set out in MSC Code of Business Conduct and operate under common ethos.

PROMOTING HIGH LABOUR STANDARDS

As stated in the MSC Code of Business Conduct, MSC prohibits forced labour or compulsory work as well as any form of exploitation or slavery as defined by the ILO C029 - Forced Labour Convention.

To this end, any employment relationship with MSC is based on the principles of equal opportunity, fair treatment and non-discrimination. Such principles are applied to any aspect of the employment relationship, such as

recruitment and hiring, working conditions and terms of employment, access to training, job assignment, termination of employment or retirement.

MSC's commitment is to seek to ensure that children and young persons in our supply chain are not victims of economic and social exploitation. In this respect, through its Code of Business Conduct, MSC also requires that no young seafarers, as defined by ILO's R153 - Protection of Young Seafarers Recommendation, are assigned to inappropriate duties, taking into consideration their age and skills.

CHILD LABOUR

Child labour is defined by international standards as children below 12 years working in any economic activities, those aged 12 - 14 engaged in more than light work, and all children engaged in the worst forms of child labour (ILO Minimum Age Convention C138 and ILO Worst Forms of Child Labour Convention C182).

Children can be particularly vulnerable to exploitation but child labour will not always constitute modern slavery. It will still be necessary to determine whether the children in question are being exploited in such a way as to constitute slavery, servitude and forced or compulsory labour or human trafficking. For example, it is possible for children to undertake some 'light work' which would not necessarily constitute modern slavery. 'Light work' is defined by article 7 of ILO Convention C138.

With reference to the above, MSC's Code of Business Conduct strongly opposes the use of child labour as defined by the ILO Conventions: C058 - Minimum Age (Sea) Convention and C138 - Minimum Age Convention. MSC adheres to minimum age provisions of national labour laws and regulations, however, whenever appropriate, MSC considers the applicable international standards set out under ILO Convention C182.

MONITORING COMPLIANCE MECHANISMS

MSC promotes a collaborative approach throughout the organisation to ensure that internal departments in charge of the supply chain communicate with suppliers on our expectations. To achieve this objective, in 2017, the collaboration between the Compliance Team and the Corporate Audit Department has been further strengthened. Their joint ongoing efforts aim to monitor and ensure effective implementation of all ethical standards, policies, practices and processes throughout the organisation, including MSC's Agencies.

The Corporate Audit Department carries out regular on-site visits in Agencies and therefore verifies compliance with MSC's policies. Audit findings are regularly reported to MSC's Top management. Corrective actions are taken in case of infringement to the MSC Code of Business Conduct and related policies, practices and processes.

MSC has also established a reporting channel to strengthen transparency and build a culture of trust within its organisation. Employees are free to speak up without fear of retaliation and report any alleged infringements of communicated policies, practices and processes. In 2017, the reporting channel has been enhanced to better promote dialogue with our internal stakeholders. The Compliance and the Corporate Audit Departments are in charge to establish and implement a centralized management workflow of reported cases and allegations.

This statement was approved on July 9, 2018

Signed

Diego Aponte
President & CEO
MSC Mediterranean Shipping Company SA

Interviews

Rodrigo de la Serna (1989): Captain of *Atyla*

General information

- What are the requisites to sail aboard *Atyla*?
- Are there any excluding requisites?
- How do you choose your crew?
- What are specific the rules on board?
- Where are they available? How do crewmembers become aware of them?
- Do trainees have an established role?
- How is the training structured?
- What do you consider the essential soft skills for coexistence on board? And for work?
- What other soft skills do trainees develop on board?

Atmosphere

- Have you experienced any conflicts on board?
- Main causes of conflict?
- How do you face these issues?
- What are trips you recall as the ones with the best atmosphere?
- Why do you think this is?

Coach

- What are its duties?
- You work on emotional intelligence, what are the tasks they require more of it?

Watch leaders

- What are the requisites to work as a leader in *Atyla*?
- What other skills do you value in a leader?
- Are there any excluding requisites?
- What are their duties?
- What is their main role?
- Do they have specific rules?
- Where are they available? How do they become aware of them?
- Do they develop new soft skills while on board? Which ones?

You as a captain

- What are your studies?
- What are your duties?
- Do you stand a watch?
- What is your main role?
- How would you define soft skill?
- And emotional intelligence?

Mikel Lejarza (1969, Spain): Captain of *Saltillo*

General information

- What are the requisites to sail aboard *Saltillo*?
- Are there any excluding requisites?
- How do you choose the crew for summer trips?
- Do you look for any other attitudes or skills?
- What are specific the rules on board?
- Where are they available? How do crewmembers become aware of them?
- How do you structure their training structured?
- What do you consider the essential soft skills for coexistence on board? And for work?
- What other soft skills do trainees develop on board?

Atmosphere

- Have you experienced any conflicts on board?
- Main causes of conflict?
- How do you face these issues?
- What are trips you recall as the ones with the best atmosphere?
- Why do you think this is?
- What activities promote cohesion?

Watch heads

- What are the requisites to work as a watch head in *Saltillo*?
- What other skills do you value in a watch head?
- Are there any excluding requisites?
- What are their duties?
- What is their main role?
- Do they have specific rules?
- Where are they available? How do they become aware of them?
- Do they develop new soft skills while on board? Which ones?

You as a captain

- What are your studies?
- What are your duties?
- Do you stand a watch?
- What is your main role?

- How would you define soft skill?
- And emotional intelligence?

Unai Basurko (1973): Sailor and director of Pakea Bizkaia

Crewing

- What were the requisites to sail to Antartica?
- Which were the excluding requisites?
- Which was the selection process?
- Did you look for any other attitudes or skills?
- How were the watches arranged?
- What are specific the rules on board?
- Where are they available?
- How do crewmembers become aware of them?
- Without "roles" how did crewmembers which were their duties?
- What do you consider the essential soft skills for coexistence on board?
- And for work?
- What other soft skills did crew members develop on board?

Atmosphere

- Have you experienced any conflicts on board?
- Main causes of conflict?
- How did you face these issues?
- When there is a good atmosphere on board, why do you think this is?
- What activities promote cohesion?

Leadership

- What are your studies?
- As the captain which were your duties?
- Did you stand a watch?
- Which was your main role?

Solo sailing

- For solo sailing what specific skills do you require?
- How do you face isolation?
- What is what you miss the most?

- How would you define soft skill?
- And emotional intelligence?