SHIPS' STOPOVER TIMES AND THEIR IMPACT ON CREWS. EXAMINATION OF REGULATION 4.4 OF THE MARITIME LABOUR CONVENTION VIA THE PORT OF BARCELONA

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Abstract

On the 20th of August 2013, the ILO's Maritime Labour Convention 186 entered into force in the first 30 countries to ratify it. A few months after this milestone, now is the time to assess the degree of implementation of the most important regulations and standards in this Convention, which has aroused such high expectations in the sector, leading it to be commonly referred to as the fourth pillar of international maritime law. For this reason, this article will analyse one of the regulations with the greatest impact on the physical and psychological wellbeing of sailors, namely Regulation 4.4 of Title 4 of the Convention on access to shore-based welfare facilities, and its corresponding code.

The analysis will be based on a statistical-descriptive study whose frame of reference will be the port of Barcelona, an example of an "appropriate" port – in the Convention's terminology – given that in Spain it has the rank of Port of General State Interest, a category given to the ports which, among other factors, perform international maritime activities. This paper concludes with the need for states to show a greater willingness to implement the non-binding part of the code.

Keywords

Human element, ships' turnaround times, seafarer welfare

1. INTRODUCTION

It is a fact that ships' ports of call times anywhere in the world are decreasing drastically in length due to an increase in the speed of loading and unloading operations.

Another fact is the rise in the physical size of ports, and in consequence an increase in the distance between the quays and the city centres.

Yet a third fact is that the drop in the number of crewmembers per ship caused by automation has increased the workload of the remaining crewmembers.

If we add together these three factors it results in a huge problem of less free time for crewmembers and a corresponding rise in their fatigue and physical and psychological exhaustion coming from the monotony of life at sea, which may well be the cause

behind workplace or maritime accidents. [1] Unfortunately, few studies analyse and quantify the impact of crewmembers' living conditions on the efficient management of a shipping company.

The purpose of this study, which is divided into three parts, is to underscore the importance for ports to achieve the highest possible degree of implementation of regulation 4.4 of the Maritime Labour Convention – henceforth the MLC – for the sake of greater maritime safety.

The first part of this paper surveys the evolution in ships' port of call times from the 1970s until today, with mention of the technical and operational advances that have spurred these changes.

After examining the evolution in the needs of seafarers as a result of these advances, the second part examines how international regulations have addressed the issue of sailor wellbeing in ports from the earliest days until the most recent legal framework which we shall take as a reference, namely regulation 4.4 of the MLC.

Finally, the third section will survey the consequences of so-called "lightning" stopovers on crewmembers' quality of life, enjoyment of their free time on land and personal and navigational safety, using the port of Barcelona as the framework of reference for the implementation of the Convention.

2. SHIPS' PORT OF CALL TIMES

Over the years, even though ship tonnage has been steadily rising, paradoxically port of call times have followed the opposite trend; that is, they have dropped drastically, perhaps contrary to expectations. And these times have particularly dropped since the 1970s, after a long period when there was no appreciable decrease in these times. [2]

The reason can be sought in the second half of the 20th century and in shipbuilders' increasing desire to lower the share of ports of call in the overall ship operating costs, as sometimes they accounted for 50% of all costs. At that time, engineering started focusing less on improving ships' efficiency at sea and more at adapting the maritime transport subsystem to the overall system of the production process.

This led to the specialisation of both ships and terminals. [3]

Figure 1

Type of Cargo/Ship	1970 Average GT	1998 Average GT	Increase in % of GT from 1970-1998	1970 Average hours Spent (h/m)	1998 Average Hours spent (h/m)	Decrease in % of hours from 1970-1998
All ships	3444	14812	**430**	138h 30m	15h 49m	**892**
Dry Bulk	2306	12488	**541**	150h 37m	48h 36m	**310**
Cars	7983	31076	**389**	207h	13h 19m	**1569**
Liquid Bulk	2517	4752	**88**	58h 22m	17h 07m	**341**
Petroleum Products	5852	4206	**-28**	35h 04m	20h 48m	**58**
Forest Products	2441	16885	**691**	263	28h 38m	**944**

As an illustration, see the table above (Figure 1), which shows how port of call times evolved from 1970 until 1998 in Kahveci's study of an unknown British port whose identity he concealed with the name of Sandhaven. [4]

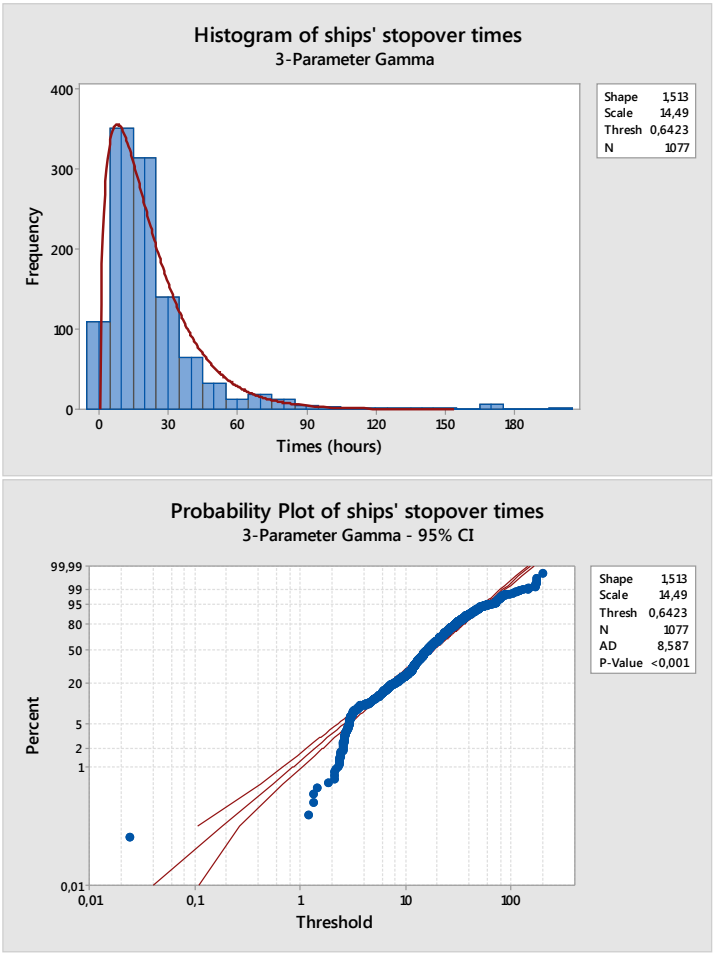
Worth highlighting is the column showing the percentage increase in GT and the percentage decrease in hours spent at ports of call. This numerically proves what we claimed above: that while GT rose considerably, the number of hours spent at ports of call dropped even more dramatically.

Therefore, the author stresses that in 1998, 27% of ships had ports of call lasting up to 12 hours, compared to 11% which had ports of call lasting up to 24 hours in 1970. Today, as we shall see below, times have stabilised.

To ascertain in advance the status of ships' port of call times today in order to study the repercussions of these times below, we drew a sample of 1077 stopovers corresponding to 453 different merchant ships which moored in the ports of Barcelona and Valencia over the course of 2014. Once we eliminated an entire set of traffic that is not very representative because of the small size of the sample (refrigerator ships, sea tugs, cable ships and other ships for special operations), we noted that, bearing in mind that the frequency of ports of call varies considerably depending on the traffic for which the ship is used (53.4% of the vessels in the sample were container ships, 16.4% general cargo ships, 17% Ro-Ro/Ro-Pax, 4% tankers, 6.4% car carriers, 1.5% bulk carriers and 0.6%

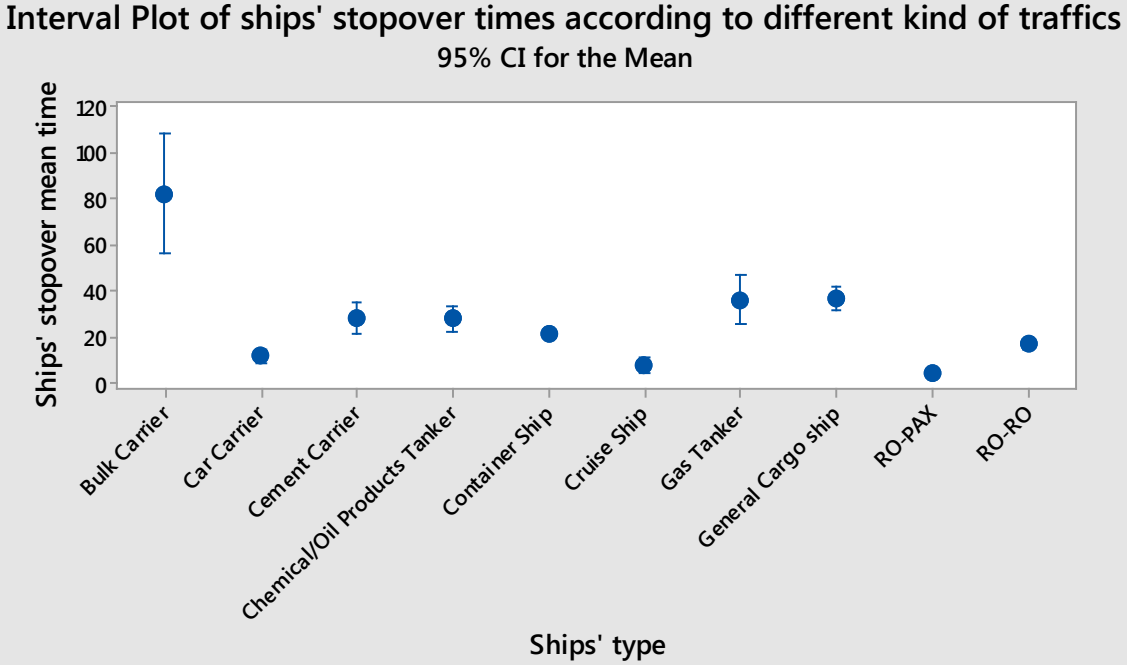
cruise ships), the overall port of call times showed good fit with a 3-parameter gamma distribution for a Trust Index of 95% (Figure 2), resulting in 33% of the ports of call lasting under 12 hours and 64% of them under 24 hours, figures that are quite similar to the latest data from Kahveci's study.

Figure 2



If we stop to study the times according to the different kinds of traffic for which the ships were operating, we can see (Figure 3) that bulk carriers are the ships that remain the longest time in port, with a 95% interval for a mean of between 56.1 and 108.2 hours. They are followed by multipurpose or general cargo ships, with an interval of between 31.2 and 41.8 hours, gas tankers with an estimated mean of between 25.6 and 46.5 hours, cement carriers (21.6 – 34.6 hours), petrochemical ships (22.3 – 33.1 hours) and finally container ships, cruise ships and Roll on-Roll off ships, all with quite precise estimations (21.3 hours for container ships, 7.8 hours for cruise ships and 16.6, 11.6 and 4.1 hours for Ro-Ro, car carriers and Ro-Pax, respectively.

Figure 3



3. ACCESS TO SHORE-BASED WELFARE FACILITES IN THE MARITIME LEGISLATION

BACKGROUND

Aware of the special psychosocial requirements aboard ships, the International Labour Organisation (ILO) has been addressing the issue of marine welfare for years. Thus, in 1936 it adopted the Seamen's Welfare in Port Recommendation [5] in an attempt to provide places to facilitate sports and recreational activities. The next recommendation was adopted in 1970, namely the Seamen's Welfare at Sea and in Port [6], which was much more far-ranging in terms of the inclusion of provisions to set up a fund for welfare, services, recreational and cultural activities and training. Despite the fact that they were not legally binding in the member states, these two recommendations were extraordinarily successful in terms of acceptance of increased awareness of the welfare of seamen.

In 1987, the ILO adopted two new instruments in this vein: the notable Convention 163 and Recommendation 173. This Convention was not very successful in terms of the number of ratifications it received, as only 18 states ratified it, Spain being the second in the world and the first EU member state to do so in 1989.

To implement it, the International Committee on Seafarers' Welfare (ICSW) was created. Worldwide, the ICSW is an umbrella for numerous organisations aimed at improving seafarers' quality of life and their relationship with their families, the rest of the crew and the community at large.

In 2006, the new MLC reworked all the maritime labour Conventions to date and turned 163 and its recommendation into the new regulation 4.4 of the MLC, without adding anything substantial to the original. The major difference in terms of shore-based welfare facilities, however, came intrinsically linked to the extraordinarily high number of ratifications – 57 to date, accounting for more than 80% of the GT in the world fleet – turning this Convention into a promising framework in which implementation by countries might be significantly higher than that of its predecessors.

In accordance with its past actions, Spain was once again the first EU country to ratify this convention in 2010, which conferred on its ports – and the one we are concerned with in this paper, the port of Barcelona – into a good framework of reference for studying the implementation of some of its regulations.

REGULATION 4.4 ON ACCESS TO SHORE-BASED WELFARE FACILITIES

The Maritime Labour Convention contains three main parts: first the articles, which set forth the general principles and obligations; followed by the more detailed provisions of the regulations; and finally the code, which is, in turn, divided into mandatory standards (part A) and non-mandatory guidelines (part B).

Both the regulations and the code are integrated and organised into topics of general interest broken down into five titles. Regulation 4.4 is part of Title 4 on "Health protection, medical care, welfare and social security protection".

This regulation, according to the purpose of the norm, says that states "*have to ensure that seafarers working on board a ship have access to shore-based facilities and services to secure their health and well-being"*. However, later in the articles it becomes clear that having these facilities is not a strict legal obligation, since it is conditioned upon these facilities existing, in which case states must ensure that they are easily accessible.

Standard A4.4.1 requires that *each Member shall require, where welfare facilities exist on its territory, that they are available for the use of all seafarers, irrespective of nationality, race, colour, sex, religion, political opinion or social origin and irrespective of the flag State of the ship on which they are employed or engaged or work.* To achieve this, it specifies that *each Member shall encourage the establishment of welfare boards which shall regularly review welfare facilities and services to ensure that they are appropriate.*

So far this is the binding part, a part that is excessively lax, so the success of the implementation of this regulation will necessarily have to be based on its guidelines.

These guidelines, which are broken down into six points, are the target of the study in the next section, with the port of Barcelona as the framework of reference.

4. THE IMPORTANCE OF THE CREWMEMEBERS' SHORE BASED FREE TIME

The use of increasingly large ships has come hand in hand with a change in the location of ports.

In the past, ports were built very close to the zones they served; however, today, environmental and logistical concerns which arise from the increase in the size of vessels has led ports to be built in remote locations, usually far from the centres of the traditional coastal cities and towns. [7]. The distance and quick rotation times in modern ports even further hinder – or render totally impossible – permits to go ashore for crewmembers, who are further limited by the cost of transport between the quay and the urbanisation, since they are too high for the seafarers to afford access to any kind of

Figure 4

Quay			Distance to town by foot	Time to town by foot	Dist. to bus stop	Time to bus stop	Taxi fare (€)
Container ships	M. Prat	Begining	8600 m	1h 43 min	2100 m	25 min	14-18
		End	10000 m	2h 00 min	800 m	10 min	16-20
	M. Sur -Norte	Begining	2800 m	34 min	500 m	6 min	9-10
		End	3150 m	38 min	850 m	10 min	9-11
	M. Sur -Este	Begining	3150 m	38 min	850 m	10 min	9-11
		End	4000 m	48 min	1700 m	20 min	10-12
Car Carriers	Dársena interior A		6150 m	1h 14 min	450 m	6 min	12-15
	Dársena interior B		6300 m	1h 16min	450 m	6 min	12-15
	Dársena sur A		5400 m	1h 5 min	450 m	6 min	11-14
	Dársena sur C		6100 m	1h 13 min	450 m	6 min	12-15
Liquid bulk	M. de la Energía	Begining	7200 m	1h 27 min	450 m	6 min	13-16
		End	8500	1h 43 min	1800 m	22 min	14-18
	M. Nuevo Contradique (centro)		8900	1h 47 min	2300 m	28 min	15-19
Solid bulk	M. Contradique		2100 m	25 min	500 m	6 min	8-9
	M. Alvarez de la Campa	Begining	4600 m	50 min	350 m	4 min	10-12
		End	5200 m	55 min	950 m	12 min	11-13
General cargo	M. Adosado 0		3500 m	41 min	350 m	4 min	9-11

facility located some distance from the ship. For example, after seeing the time that ships spend in ports like Barcelona and getting an objective figure on the supposed time that crewmembers of these ships would have to reach land by foot, the following figure (Figure 4) shows the distances from the location occupied by the ships on their respective quays to a specific point in the city of Barcelona. This specific point is the Columbus Monument, the site closest to the port from which one has immediate access to two sites that can be considered welfare centres in the port of Barcelona (Casa del Mar and Stella Maris), as well as to different facilities such as supermarkets, shops, bars, restaurants, etc. These places closest to the commercial port are basically located in the Old City, specifically on Las Ramblas and Maremágnum.

The time by car to reach this point in the port of Barcelona ranges from 10 to 30 minutes depending on the quay and assuming an ideal situation of no traffic congestion. In any event, it should be borne in mind that in the intermodal choice (car + walking or bus + walking), the walking distances can be up to 500 metres, especially in the

container ship terminals, where for security reasons the crewmembers have to walk around the entire premises to reach the exit, or the 2,300 metres from the centre of the Nuevo Contradique quay to the closest bus stop. Therefore, to ensure the premise of easy access as stipulated by the regulation, it is essential for ports to have good urban transport frequencies (guideline B 4.4.5), and each crewmember should have an informative map of how to get there (guideline B 4.4.1). Otherwise, due to the short stopover times, accessing the welfare centre or city in question would be unfeasible for most crewmembers.

In a survey conducted with 181 crewmembers in Barcelona [8], 71.4% said that they had no information about the port. Of those who did have information, 59.2% said that they received it at Stella Maris, 38.8% said their shipping agent gave it to them, and 2% said they got it from the pilots. A full 97.7% of the respondents considered this information useful.

Regarding the question on how the port could improve (Figure 5), of the 160 responses, 56% suggestions revolved around improving the public transport (the bus runs Monday through Friday from 6 am to 8:45pm with an average frequency of 25 min and a ticket price of € 2,15) and 50% were related to the lack of information about the port and the welfare services available to sailors. Finally, it was noteworthy that 24.3% mentioned telephone and Internet communications. On this last point, even though ports like Barcelona have telephone booths at distances of around 500 metres from the majority of quays, today the crewmembers' needs are not so much to have telephone booths nearby as to access places where micro-cards for mobile phones are sold.

Figure 5

What should the port offer to seamen?	
Public transport	90
Information guide on the port	80
Telephone and Internet	39
General signage	8
Better public services	7
Free-time venues	6
Visits to Stella Maris	5
Greater port protection	5
Sports facilities	2
Bank branches	2

These difficulties are compounded by the recent changes in security, which have not significantly lowered seafarers' freedom in Spain but have restricted access to land in many countries around the world based on the measures implemented as a result of the 9/11 attacks.

Since the International Ship and Port Security Code (ISPS) was implemented, seafarers have been subjected to strict security regulations in ports. Seafarers' movements around the ports – even to search for telephone booths and welfare centres – have been severely restricted under the ISPS, and in many countries foreign sailors without a valid visa have been denied shore leave. Article 6 of the ILO's Convention 185 on Seafarers' Identity Documents aimed to solve this issue. This Convention entered into force on the 9th of February 2005 with ratification by a mere 25 countries.

> *"Article 6*
> 6.4. " *Each Member for which this Convention is in force shall, in the shortest possible time, and unless clear grounds exist for doubting the authenticity of the seafarers' identity document, permit the entry into its territory of a seafarer holding a valid seafarer's identity document, when entry is requested for temporary shore leave while the ship is in port."*
> *6.6. "For the purpose of shore leave seafarers shall not be required to hold a visa""*

In fact, we can find reports published in *Lloyd's List* and *The Sea* on the arbitrariness of the port authorities in Japan when banning shore leave for sailors coming from ships which have been involved in cases of stowaways on previous trips to Japan.

Likewise, the British union for maritime professionals (NUMAST) recently stressed its concern over the "alarming" number of incidents in which foreign crews are denied shore leave in the United States.

As we can see, this factor, coupled with the new concepts of security, affect seafarers' access to port welfare services, further contributing to their isolation and thus damaging their physical and emotional security.

> *"…Some of the crew on my ship hadn't been ashore in months. 'I've been to New York, Hong Kong and Tokyo,' a chief engineer said, 'and they all look like my engine room.'*
>
> *Plenty of seafarers I meet tell me their job is like being 'at prison with a salary'. Wrong, wrote the Maritime Charities Funding Commission, which found that 'the provision of leisure, recreation, religious service and communication facilities is better in UK prisons than on many ships'…" / Tommy Molloy (Liverpool ITF Inspector)* [9]

Shore leave gives seafarers the chance to change their routines at sea and perform activities that are not possible while sailing.

In ports, sailors can socialise with their colleagues in a relatively normal atmosphere. What is more, those with particular problems on board, such as a sense of isolation, can seek the help of a local social assistance service through the figure of an impartial social worker.

According to the ILO's Recommendation 173, contained today in guideline B4.4.6.5, shore leave should be guaranteed as soon as possible after the ship reaches port, and an appropriate means of transport between the quay and these areas should be assured.

Obviously, the lack of shore leaves granted has an impact on the physical and mental wellbeing of sailors because [10-11], firstly, the fast pace of life on board limits the chances for social contact beyond the ship's community, and secondly, a reduction in crew size has raised the workload and lowered the quality of social interaction among the crewmembers on board. The fact is that shore leave is not a luxury; it is essential for sailors, who spend many weeks enclosed in their workplaces with their colleagues and superiors. And since cargo ships are not built primarily to accommodate their crew, many daily activities (such as working, sleeping and socialising) take place in a limited environment where the ship's vibrations, noise and movement mean that the lack of shore leave is vital to many sailors who are *trapped* in this setting.

Those who work at sea need to set foot on land so that they can get in touch with their families either by telephone or Internet [12]; seek a moment of wellbeing; access social, medical or psychological support, if needed; and especially get away from the atmosphere on board, which is usually made up of highly disparate people who may not have known each other previously.

The testimonial below stresses the effects of little contact with society on land on sailors' health and wellbeing.

> *An Australian ex seafarer:*
>
> *"It's a major problem, there's no social life when you go to sea, it's total isolation. You might say that the cabin crew of an aero plane do something similar, but a seafarer might go from - for example I've done runs from say Singapore to Philippines to New Zealand and back to western Australia, so for maybe fifteen weeks you get no mail, you do not go ashore, and by the end of it there's a certain madness that attacks some crew. Very small things become very big things. Things like insomnia - many of the crew will be pacing the alleyways at 3 0'clock in the morning, alcoholism can rise a great deal if alcohol's available. Many seafarers are on different types of medication, valium and that kind of thing and anti depressants - much higher than the regular population."*>> [13]

It is clear that in order to offer the means needed for crews to satisfy their basic human and social needs, it is necessary to seek the right information which enables one to act in consequence by offering the services required by people who are crucial to port operations and their associated activity.

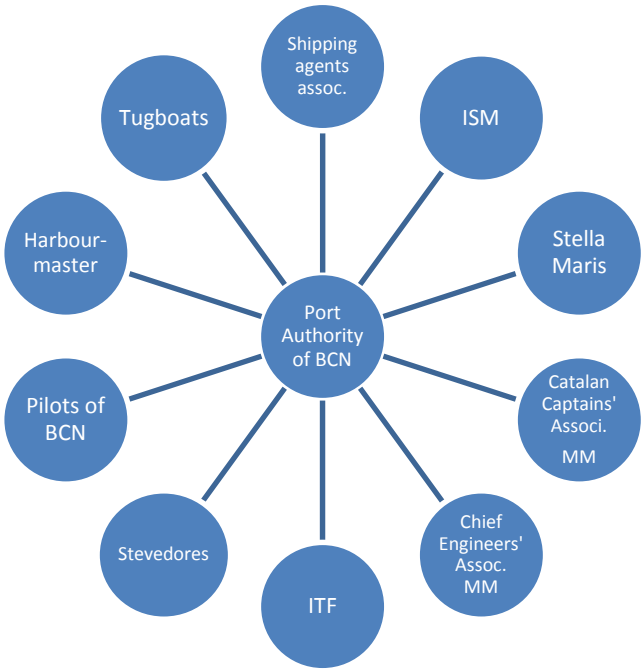
Port authorities have thorough knowledge of each container and each tonne of goods moved through their ports. They earmark vast sums of human and material resources to track the cargo and deal with the agents who operate with it. However, there are considerable gaps in their knowledge and attention to the elementary needs of the crewmembers.

To remedy this, standard A4.4.3, which is broken down in guideline B4.4.3, refers to welfare boards and reads as follows: *"Each Member shall encourage the establishment of welfare boards which shall regularly review welfare facilities and services to ensure that they are appropriate in the light of changes in the needs of seafarers resulting from technical, operational and other developments in the shipping industry"*.

Welfare boards "*should include among their members representatives of shipowners' and seafarers' organizations, the competent authorities and, where appropriate, voluntary organizations and social bodies.*"

In the case of Barcelona (Figure 6), the welfare board is presided over by the Port Authority, and its members include the public administration (Harbourmaster and Social Marina Institute), representatives of the shipbuilders (Association of Shipping Agents), representatives of the main sailors' groups (Association of Captains and Chief Engineers), unions mostly grouped into the ITF, the Apostleship of the Sea, and finally companies operating in the port which have the greatest contact with crews, such as pilots, tugboats and stevedores. The board meets periodically, usually at the request of Stella Maris.

Figure 6



5. CONCLUSIONS

In short, seafarers work long hours in a difficult, dangerous profession. They are human beings who are the breadwinners for their families and often have to overcome obstacles to access services that are taken for granted on land, such as phoning their loved ones, leaving their workplace to go shopping or having contact with people who are not part of the crew with whom they live and work.

In some cases, shipping companies have agreements with their maritime agents to supply their ships with newspapers from the crewmembers' countries, along with books and videos, and to help them reach the city centre. In the majority, since this obligation is not imposed by their flag states, there are seafarer assistance centres – most of which are operated by the Catholic Church and other Christian denominations – which perform that role. Today, the importance that they receive financing (guideline B4.4.4)

and that the port community gets involved by creating welfare boards is essential to defend sailors' human rights.

The member states' degree of implementation of the non-binding part of this regulation depends on this.

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