

SUB-COMMITTEE ON HUMAN ELEMENT, TRAINING AND WATCHKEEPING 4th session Agenda item 7 HTW 4/INF.4 22 November 2016 ENGLISH ONLY

ROLE OF THE HUMAN ELEMENT

Quality of On-board Training (OBT)

Submitted by the International Association of Maritime Universities (IAMU)

SUMMARY

Executive summary: This document provides the Sub-Committee with information on the

International Association of Maritime Universities' research project entitled "Comprehensive study on quality of on-board training",

Part I: post-OBT questionnaire feedback data

Strategic direction: 5.4, 12.4, 12.5

High-level action: 5.4.1, 12.4.1

Output: No related provisions

Action to be taken: Paragraph 55

Related documents: STW 39/INF.2; MSC 85/23/6; STW 40/13/1; STW 41/7/11 and

HTW 2/INF. 2

Introduction

- 1 Over 90% of global trade is carried by the international shipping industry. Needless to say, shipping is the backbone of global trade and, without shipping, importing and exporting of goods on the scale necessary to sustain the modern world would simply not be possible.
- The world merchant fleet in 2015¹ was defined as 68,723 ships, trading internationally and manned by more than 1.6 million of seafarers. The largest category was general cargo ships, consisting of 31% of the total ships, followed by bulk carriers with 16% and offshore supply vessels with 10%.
- 3 The future sustainability of the shipping industry is overwhelmingly dependent on the availability of an adequate pool of capable and effective manpower. Taking this into consideration, it is imperative that the prospective officers (trainees) are trained comprehensively on board in order to acquire the necessary knowledge, understanding and

BIMCO/ISF MANPOWER REPORT "The worldwide demand for and supply of seafarers, 2015".



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proficiency to handle critical and emergency shipboard operations with courage and confidence.

- On-board Training (OBT) is a vital linking phase between shore based training and certification of competency. The quality of a prospective officer is predominantly dependent upon the quality of OBT they receive. OBT is an opportunity to strategically align the theoretical knowledge acquired in a maritime institution with practical day-to-day shipboard operations. When accomplished without any compromise on quality, on-board training has the potential to instil the underpinning skills and knowledge needed to transform trainees into effective manpower.
- The STCW Convention 1978, as amended, contains requirements and guidance regarding OBT. However, according to IAMU's understanding there are some sensitive OBT issues that are to be considered and shared in the maritime community in more meaningful ways, namely, Quality Management System (QMS) and quality of OBT. These issues necessitated the need for IAMU to research the OBT process, using feedback information from cadet trainees.
- This project is an IAMU community-based study committed to identifying and understanding the existing challenges and possible gaps in students' OBT organization, and also in managing, sustaining and monitoring its quality. The results of this study will be used to enhance the quality of MET through the collaboration of IAMU with IMO and industry stakeholders.
- 7 The OBT project is based on the IAMU Tasmanian Statement² (Objective 6: "Provision of quality sea time for cadets"). The project will achieve this goal by identifying factors that impact the quality of OBT and will put forward strategies for OBT improvement. The key principle for the project is to ensure the provision of a skilled maritime workforce.
- 8 The IAMU OBT project team, having processed the cadet trainees' responses, refrained from providing detailed comments to responses in order to give the reader some freedom and flexibility in interpreting the results of the research.

Background

- In accordance with the requirements of the STCW Convention and Code, the OBT timeframes for issuing the first Certificate of Competency (CoC) take up about 25% of all MET time and plays the utmost role in achieving qualification standards for future maritime professionals. IAMU has started the post-OBT anonymous feedback survey of trainees' views after their recent OBT in order to obtain first-hand information on the quality of training, provided for prospective officers by different shipping companies around the world.
- The first part of the project was arranged using a simple survey method to gather feedback data using the Post-OBT Questionnaire, intentionally developed by the IAMU project team. The information about the OBT was collected from student trainees and addressed their last or most recent on-board training. A total of 682 trainees responded to the 24-item questionnaire during 2015-2016. All the responses were processed as quantitative data. The qualitative information was presented in the form of trainees' written comments. It might be significant that 91.5 % of respondents were from the five top manpower supply countries (except China) as it was reported by companies for composing BIMCO\ISF Manpower Report in 2015. The other 8.5% of respondents were from all over the world.

http://iamu-edu.org/?page_id=3047

- To identify the gaps in OBT, a comprehensive study about the effectiveness of OBT became imperative, and thus this particular project was launched into action. The questions were framed so that they could recall the overall experience of the trainee with respect to meeting the minimum standards for OBT as mentioned in regulation II/1 and III/1 of the STCW Convention.
- About 66% of cadets had their OBT with multinational crews using different working languages and on board different vessel types. English as a working (or communication) language, was set at the first position by responses, however the variety of other communication languages on board ships where cadets had their OBT were impressive. The following languages were used: Bulgarian, Burmese, Chinese, Croatian, Dutch, English, Estonian, Finish, Filipino, French, Georgian, Hiligaynon, Hindi, Indonesian, Japanese, Korean, Malian, Norwegian, Persian, Polish, Russian, Spanish, Tamil, Turkish, Ukrainian and Vietnamese.
- The percentage of ships involved in OBT of prospective officers are as follows: general cargo ships 10.9%; bulk carriers 19.0%; gas carriers 4.0%; oil and chemical tankers 25.7%; reefers 3.1%; containers 19.3%; passenger ships 0.7%; training ships 3.7%; miscellaneous 13.7%.
- The distribution of cadets by groups on board the ships was identified as: 1 trainee 31.6%; 2 trainees 36.9%; 3 trainees 12.8%; 4 trainees 9.3%; 5 trainees 2.9%; 6 trainees 1.2%; groups of more than 8 cadets on board (usually training vessels) were 4.3%. It may be concluded from the research that the most common number of trainees on board commercial ships was from 1 to 3 persons.
- As per the responses of trainees, the minimum continuous duration of OBT as a percentage are as follows: 1 month 1.0%; 6 months 12.6%; and the maximum was 12 months or more at 46.0%.

Organization of OBT by ship personnel

The following is the guidance in the STCW Code, Part B regarding the certification of officers in charge of a navigational watch on ships of 500 gross tonnage or more³:

Every candidate for certification⁴ as officer in charge of a navigational watch should have completed a planned and structured programme of training designed to assist a prospective officer to achieve the standard of competence in accordance with table A-II/1.

The structure of the programme of training should be set out in a training plan which clearly expresses, for all parties involved, the objectives of each stage of training on board and ashore. It is important that the prospective officer, tutors, ships' staff and company personnel are clear about the competences which are to be achieved at the end of the programme and how they are to be achieved through a combination of education, training and practical experience on board and ashore.

The prospective officer should be provided with a training record book to enable a comprehensive record of practical training and experience at sea to be maintained. The training record book should be laid out in such a way that it can provide detailed

General provisions of this guidance relates not only to deck trainees, but also to engine trainees (IAMU unified interpretation).

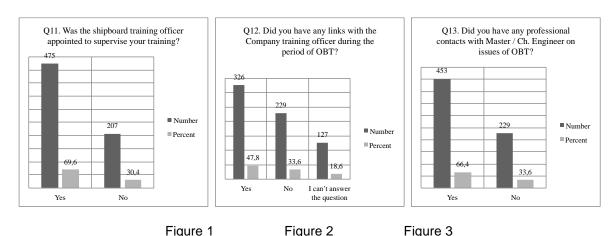
Guidance regarding the certification of officers in charge of a navigational watch on ships of 500 gross tonnage or more, STCW Code, Part B, Chapter II.

information about the tasks and duties which should be undertaken and the progress towards their completion. Duly completed, the record book will provide unique evidence that a structured programme of on-board training has been completed which can be taken into account in the process of evaluating competence for the issue of a certificate.

At all times, the prospective officer should be aware of two identifiable individuals who are immediately responsible for the management of the programme of on-board training. The first of these is a qualified seagoing officer, referred to as the "shipboard training officer", who, under the authority of the master, should organize and supervise the programme of training for the duration of each voyage. The second should be a person nominated by the company, referred to as the "company training officer", who should have an overall responsibility for the training programme and for coordination with colleges and training institutions.

These aforementioned guidance initiated questions Q11-Q13, the outcomes of which are illustrated in figures 1-3 below.

17 Respondents have indicated that in 30% of cases the training officer was not appointed on-board the ship (figure 1); only 48% of cadets had communicated with a company training officer during their OBT (figure 2).



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The question on professional contacts with Master/ Chief Engineer (Q13) also relates to Section A-I/6 "Training and assessment" (see figure 3).

Only 66% of respondents had professional contact with a Master/ Chief Engineer during their OBT time. However, it should be taken into consideration that as per STCW Code: **persons** conducting in-service training or assessment on board a ship shall only do so when such training or assessment will not adversely affect the normal operation of the ship and they can dedicate their time and attention to training or assessment.

The above text in bold could begin to excuse 33.6% of "no professional contacts with a Master or Chief Engineer," but in any case this statistic indicates an abnormal state of affairs for the trainees involved in OBT process, especially if the duration of OBT is more than a month.

The most salient comments that can be related to Q11-Q13 were separated in positive (PF) and negative feedbacks (NF), and submitted below:

PF:

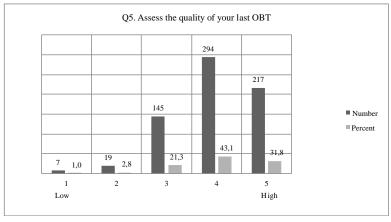
- .1 Ship personnel were highly helpful. As soon as the officers have found out that trainee has taken initiatives to learn, they were ready to offer guidance;
- .2 Officers are very interactive;
- .3 All officers assist and guide all the cadets; and
- .4 All officers trained us well.

NF:

- .1 Nobody on board is interested in your training programme except yourself;
- .2 Student trainees were not attracted to professional activities as officers were incapable to educate and train them;
- .3 Nobody supports and helps;
- .4 There were no officers assigned on board to provide support and training for cadets;
- .5 Nobody was interested in training cadets and spending their own time to teach them;
- .6 Nothing for free of charge;
- .7 Nobody wanted to spend time to explain something;
- .8 Officers refused to help the cadets and did not give attention to the cadets;
- .9 Officers were too busy;
- .10 Officers did not know how to carry out the majority of training programme items;
- .11 My first seven months on board, we were day workers. Our master didn't focus on cadets to study on the bridge;
- .12 Officers should monitor the planned training programme for cadets;
- .13 More monitoring required;
- .14 There was no coordination between office and ship;
- .15 A lot of things depends on trainees since officers do not support; and
- .16 Officers on board do not know how to train cadets.

Quality of on-board training

Prospective officers were asked to assess the quality of their last or most recent OBT. It was a general question and may be interpreted through their general impression of the situation on board, including working and living conditions. Several questions were worded in various ways in the questionnaire, intended directly or indirectly to assess the OBT quality through the officer trainees feedback responses.



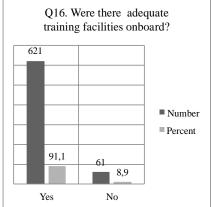
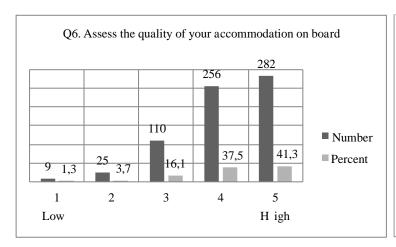


Figure 4

Figure 5

The outputs from the answers were as follows: 75% of cadets evaluated the quality of their last OBT, giving marks "4" and "5," which is interpreted as "good" and "high" on a 5-point Likert scale. The neutral position "3" response, composing 21% of all respondents, indicates a substantial amount of uncertainty of opinions (see figure 4). According to the information from trainees, 91% of ships had adequate facilities for training (see figure 5).

- Question 6 below is in line with the 2010 Manila Conference Resolution 13 "Accomodation for trainees", which urges ship owners, ship managers and shipping companies to provide suitable accommodation for trainees on board their ships both existing and new.
- Roughly 79% of trainees assessed the quality of their accommodation on board ships as "4" or "5," which is interpreted as "good" and "high." In any case, it can be considered as a positive factor, but it strongly depends on the location where the cadet lives ashore. The more critical views came from Northern Europe cadets and the less pretentious opinions were from African countries. 16% of trainees gave "uncertainty" (neutral mark "3") responses (see figure 6).



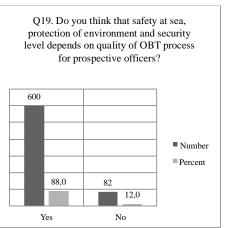


Figure 6

Figure 7

22 Understandably, Q19 (see figure 7) had 12% of negative responses and initiated student comments.

Cadet feedback regarding Q19 can be read below:

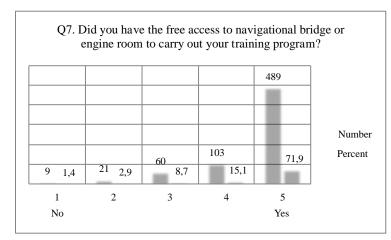
- Uneducated and inexperienced cadet on board is a threat to ship's safety;
- The cadet follows the officers' example on their attitude towards safety, security and the protection of environment;
- Quality of cadet OBT determines future safety at sea, security and protection of the environment;
- There is no substitute for the values and ethics that are imparted from one generation of seafarers to the next during OBT. These values cannot be taught in a classroom environment to an extent that will hardwire it into the trainees' core:
- Everything depends on OBT. The outcome of proper training is competent officers;
- Improper training increases chances of accidents and mistakes, while small mistakes/negligence can quickly escalate into serious problems;
- Frequent drills have to be carried out;

- OBT creates a good officer and text knowledge;
- Eco friendly officers are vital;
- We had a good safety culture; and
- The higher the quality for OBT the higher the safety level is achieved.
- Some other outcomes also relate to the quality of OBT: 82% of respondents confirmed that access to educational resources was realized (see figure 9), and 87% of responses indicated that the opportunity to access to bridge/engine room for training purposes was "free" (15% "4"; 72% -"5", see figure 8) and only 80% of cadets (see figure 10) have agreed that their professional expectations from OBT were confirmed (53% "5") or practically confirmed (27% "4").
- In principle, 4% of negative and 9% of neutral responses to Q7 below appear to be outlying cases, especially taking into account rather long OBT duration.

The cadets comments to Q7 and Q8 are as follows:

PF:

- .1 Thanks to the crew all the educational resources were available and in good order. There was free access to the navigating bridge and engine room;
- .2 I had access to complete educational resources on board. Time permitting I used to go through the books, publications and cleared doubts with the 2nd officer and Chief officer;



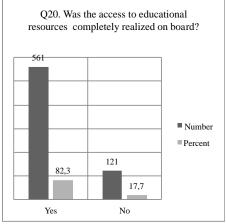


Figure 8

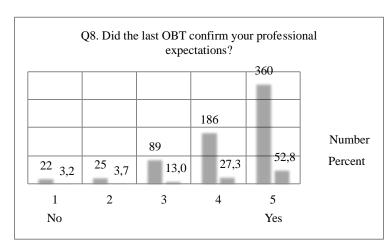
Figure 9

- .3 I had access to CBT facilities as well as VOD:
- .4 All study material were regularly updated and cadet funding was provided monthly to buy study materials;
- .5 We had Seagull training on board; and
- .6 Yes and no. Although the ship's library is often stocked with everything a trainee needs, it is often a little overwhelming for a fresher to comprehend. If simpler versions or guides were to be provided it would make both the training officer and the trainee officer's life much easier.

NF:

.1 There were no educational resources on board at all and officers had no willingness to transfer the experience;

- .2 Very poor Internet connectivity and all the literature resources were in English -It was very difficult!
- .3 Apart from classroom simulators being used on board, there was real equipment to further training. None was used.
- The professional expectations regarding feedback received from prospective officers during OBT are important for the shipping industry. The feedback reflects, first of all, their understanding and attitude regarding overall conditions on board, the level of ship personnel competences and also their future plans to work at sea. This indicator should be taken into consideration when confronting today's challenging tasks for attracting talented youth into the industry.
- Commenting on the challenges facing the maritime industry in relation to Generation 'Y,' Philip Wake, Chief Executive of The Nautical Institute said⁵: "It is absolutely vital that those of us with more extensive maritime experience make a genuine effort to engage with today's younger generation of seafarers. There is much we can learn from one another, particularly in the area of technology and navigation. We also need to understand their expectations and aspirations in terms of a maritime career, which in fact, are little different to each of the previous generations although we may forget how challenging our elders found our aspirations in the past. The onus is on us to create a welcoming environment that nurtures and hones their undoubted skills and talents whilst also providing genuine opportunities for career advancement."



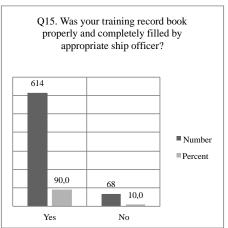


Figure 10

Figure 11

About 80% of respondents have put marks "4" and "5", indicating that this group of 682 cadets in average was satisfied by their OBT.

Completing the OBT programme

Completing OBT programmes is a rather sensitive issue. In principle it is quite possible that cadets could give inflated marks to the completeness of their programme; if self-evaluation by points 1 to 3 can be considered negative and points 4 to 5 as positive evaluation, 72% can be taken as an optimistic result of OBT.

http://www.nautinst.org/en/about-the-institute/press/index.cfm/Generation-Y-Seminar

- Only 28% of cadets had an opportunity to complete a programme entirely within the OBT term (see figure 12), however, in 90% of cases the Training Record Books (TRB) were duly filled by an appropriate officer (see figure 11). A comment should be made on filling the TRB by ship's officers: from the observation of universities, it was noted that Training Record Books were filled extremely formally on board many ships. The organization of procedure of assessment in many cases leaves much to be desired.
- One of the reasons for this "paper quality" is that there is a bottle neck in the current system, which creates severe stagnation of trainees waiting to find training berths on board. As the duration of the waiting period increases, the motivation to perform well during OBT wanes and trainees try to adopt quick fix methods to complete their training record book without even knowing the tasks they are supposed to.
- The other reasons for those gaps were worded by IAMU as follows:⁶
 - .1 The guidance in section B-I/8 for companies relating to OBT are not mandatory;
 - .2 An OBT officer was not designated on some vessels;
 - .3 Training officers were not designated in some companies;
 - .4 Training was not well organized (shortage of time to train and assess students);
 - .5 Students were not allowed to enter the bridge or engine room;
 - .6 Work on deck instead of training in engine room, and vice versa;
 - .7 Absence of appropriate guidance from crewmembers to encourage cadets to be trained;
 - .8 Lack of communication between University and Company (no relation between education and training); and
 - .9 Officers on board may not be qualified enough to train students.

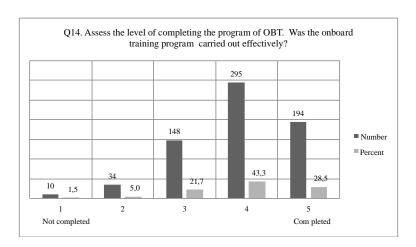


Figure 12

- 31 Student comments on Q14 explaining why OBT programme was not completed (NF):
 - .1 Nobody supports and helps;
 - .2 There was no officer assigned on board to provide support and training for cadets. Nobody was interested in training cadets and spend own time to teach them:
 - .3 Doing painting and cleaning, no time for professional tasks;

IAMU understanding of some Human Element issues, HTW 2/INF.2, 30 October 2014

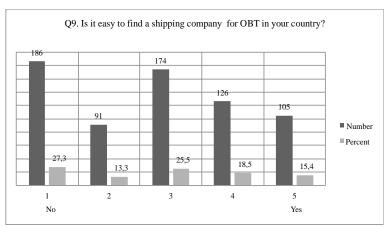
- .4 I could have done the OBT programme better, but spent too much time on unimportant things:
- .5 Lack of confidence from crew side;
- .6 Officer trainee is not a steward;
- .7 A lot of painting works no time for training;
- .8 Very old ship:
- .9 Not enough time to be on the bridge;
- .10 8 hours on deck as OS and only the rest time on the bridge. Training without assistance;
- .11 From my personal experience, most shipping companies hire cadets for the purpose of manning their ship to carry out their operations and not for training them (less wages);
- .12 Nowadays cadets are being treated only as AB. If cadets have to complete OBT its only out of their personal interest;
- .13 Due to continuous and frequent port of call training officer was always busy with his job;
- .14 Too much of deck work. Level of training for cadet should be raised;
- .15 Bad shaped companies and poor management by the companies;
- .16 I have completed training on board two ships. One ship belonged to company "I" and the other to company "M". On board "I" ship I got only 3 months training but officers gave me a lot of information, but on board ship of company "M" I didn't get much knowledge;
- .17 Lack of time due to hectic schedules;
- .18 Seagull OBT was used effectively for the entire topic associated with work, but not in detail:
- .19 Not all training programmes were carried out because of other job orders coming from officers;
- .20 The programme was only partially carried out because of cost cutting. I was treated like an OS and that is why I was rarely given the time for navigational watch:
- .21 No, ship operations took all the time -very busy:
- .22 Maintenance of vessel was paramount;
- .23 Although training record books were used, the training officers were often unsure of the depth of knowledge to give trainee;
- .24 OBT was possible only at free time, but I had not enough of it;
- .25 There are language barriers; and
- .26 There is lack of knowledge about dry-docking.

Positive student comments on Q14 (PF):

- 1 Yes, it was effective because I can use it as a guide and apply it in my jobs;
- .2 The training days were good. Got a lot of practical knowledge, which will help me in future:
- .3 The training programme given to us guided OBT. It made me aware of maintenance of machineries;
- .4 The programme was carried out completely due to the assistance of qualified engineers;
- .5 OBT was carried out effectively;
- .6 Yes, engineers helped me and supervised about machineries;
- .7 Yes, it was effectively carried out with the help of my senior officer;
- .8 Yes, carried effectively by the help of crew and officers on board;
- .9 The OBT was good and interesting. A lot of knowledge and skills well developed; and
- .10 OBT was at high level and all bridge equipment was functioning.

Berths for trainees

- Only 41% of all trainees confirmed that it was no problem to find a shipping company as OBT provider, while 27.3% gave a mark of "1" and 13.3% "2" (see figures 13 and 14). In principle, the results have confirmed the concerns, expressed in documents MSC 85/23/6 and STW 40/13/1.
- Responsible shipowners, operators and industry associations accept the need for OBT for prospective officers, and it is IAMU's stance that there are still companies that are not providing sufficient OBT berths and opportunities. Prospective officers currently face considerable difficulties in obtaining sea time and the associated OBT necessary to obtain a certificate of competency. In short, there is a bottleneck in the current system⁷.
- IAMU believes that the first and most significant task in the education and training of officer trainees is to focus on genuinely achieving the competencies contained within the STCW Convention and Code. The primary goal must be to ensure that prospective officers can competently carry out their designated duties on board ships in a safe, secure, efficient and environmentally responsible manner. To achieve this requires not only education and training in a reputable MET institution but quality, relevant OBT at sea.
- The STCW Convention and Code makes numerous references to training both ashore and on board but nowhere is there a requirement for companies to actually carry prospective officers so that they can achieve the sea service, OBT, and experience necessary to achieve a certificate of competency. (See for example Regulation 1/14 Responsibilities of companies).



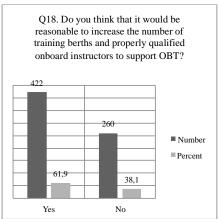


Figure 13

Figure 14

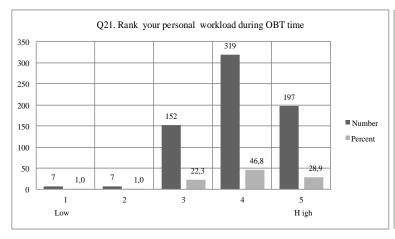
- 37 It can be noted that there is a lapse in the administration efforts to give full and complete effect to the STCW Code essentially with respect to OBT, which results in a shortage of training berths on board and shortcomings in expected quality standards. This bottleneck in the current system creates severe stagnation of trainees waiting to find their berths on board.
- 38 Trainees comments to Q9 and Q18:
 - .1 The sharing of expertise during OBT is mandatory;
 - .2 The more instructors, the better for students;
 - .3 Increasing training berths would lead to a flooding in an already slow market, the annual intake needs to be regulated. Also, a dedicated training officer might

On-board training. Draft paper submitted to AGA 15 by Australian Maritime College.

- not be as in tune with the day to day practical operations of a vessel as a full time deck officer thereby reducing the quality of the training process;
- .4 One qualified training instructor must be on board if more than two trainees are on board;
- .5 Training berths need not be increased but an instructor is required;
- .6 There should be a trained trainer:
- .7 Government should take initiative for posting their own cadets on board to avoid frauds and should eliminate regional politics with placements;
- .8 Designated trainers must be made aware on how to train cadets;
- .9 OBT is more efficient with Instructor:
- .10 There is a need to help students in finding the company OBT provider;
- .11 Struggled a lot to get a berth;
- .12 Institutions and Governments should give to all their non-trained cadets the opportunity to get sea training, including their ex-cadets;
- .13 Fake operators are to be arrested;
- .14 Opportunities to find a berth are limited; and
- .15 Help cadets to get a ship for OBT!

Personal workload during OBT

- The majority of trainees assessed their personal workload being above average to high (see figures 15 and 16), and 76% of respondents expressed that the workload on board ships, where they assessed their OBT to be "high". A substantial number of respondents have given) marks "4" and "5", commenting the state of affairs as follows:
 - .1 I was involved in all the types of jobs on board and all working day; Training programme during rest hours;
 - .2 Training and work time were excellently coordinated: 50% on deck and 50% on the bridge:
 - .3 I carried out duties of 4th engineer:
 - .4 Paper work together with 3rd officer:



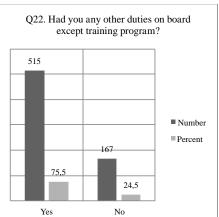


Figure 15

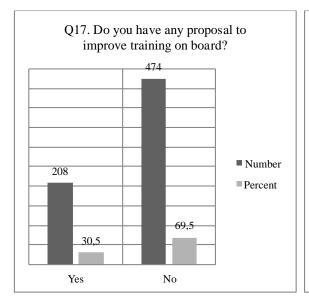
Figure 16

- .1 The workload was balanced to give me enough time to study on a regular basis as well as provide me with a solid practical foundation;
- .2 Personal workload was not maximal. But being on board we have to bear some stress;
- .3 Cargo operations in accordance with training programme;
- .4 Duties of motorman and OS;

- .5 Cleaning, cleaning and cleaning;
- .6 6 hours on deck and 6 hours on the bridge;
- .7 Workload was high during coasting. Chief officer gave me free time on Sundays (at sea) for on-board training;
- .8 Workload was normal. But was out of my own interest I overloaded myself to find time to learn something:
- .9 No rest hours, work overload;
- .10 Violation of work- rest hours always will be there, but still we cannot avoid those jobs which cadet can only do;
- .11 Due to absence of 3rd officer I worked as in this position on the bridge;
- .12 8 hours of watch, 2hours of deck work or LSA, FFA checks;
- .13 No space for free time;
- .14 It was difficult to manage work and training;
- .15 On-board trainer should be fully involved in training of trainee
- .16 Workload varies with frequency of ports and operations but ample time is available on board to carry out training;
- .17 Workload was there but it was taken positively and was a part of training;
- .18 As a cadet or in other words as a first time seafarer, I preferred working hard;
- .19 Rest hours are properly complied;
- .20 The workload was quite high due to excess hours of watch keeping;
- .21 More higher workload than expected;
- .22 Too much paperwork; and
- .23 Workload was OK and I had time for private studies.
- It should be taken into consideration that 75% of trainees had their extra duties on board except duties required by training programme. Student trainees comments on Q22:
 - .1 Routine maintenance of ship, managing stores, in charge of shipboard recreational club:
 - .2 The training programme incorporated most of the jobs I was required to undertake:
 - .3 Normal ship operation duties;
 - .4 Do you seriously think training period on board ship is only for doing his/her OBT book? We have to do all things from cleaning to chipping and what else, God himself does not know;
 - .5 From deck maintenance to bridge watches including cleaning, chipping, painting etc.;
 - .6 Assisting boatswain in deck works, assisting 3rd/O in safety related works;
 - .7 Normal watch, keeping cargo operation under the supervision of Ch/O;
 - .8 Trainee was called any time to do any work;
 - .9 All the work related to next promotion and all critical jobs necessary for future;
 - .10 Being a part of every operation;
 - .11 Watch keeping and maintenance:
 - .12 Bilge sounding and tank inspections;
 - .13 Oil analysis;
 - .14 Purifier and pump maintenance; and
 - .15 Reefer monitoring.

Trainees' proposals to improve OBT

- Invitation of the trainees to submit their proposals to improve OBT had the purpose of encouraging the activity of prospective officers regarding OBT for the next generation of trainees (see figure 17). The majority of responses (69.5%) were negative that indicated passive attitude of trainees to OBT improvements.
- Some trainees have expressed their satisfaction on their last OBT by the following comments:
 - .1 Training programme provided by company is satisfactory, leave it as it is;
 - .2 Training on board was good;
 - .3 For me it was effective already, no need for some improvements;
 - .4 Training on board was okay, officers and crew taught the cadets; and
 - .5 For me the training was effective to guide us to some useful knowledge.
- 43 Prospective officers submitted also other proposals:
 - .1 There is an urgent need in assistance to hire oneself as a trainee;
 - .2 TRB is to be regularly updated;
 - .3 Organization of OBT needs the commitment from the top company managers;
 - .4 Cadet has to be aware of details of OBT agreement of university with company;
 - .5 Not all the companies are ready to intake cadets for OBT;
 - .6 During OBT it is necessary to set the position of OOW trainee for prospective deck officers;



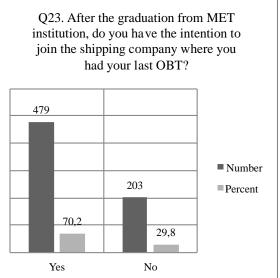


Figure 17

Figure 18

- .1 Cargo operations should be added to the trainee programme;
- .2 It would be helpful for fresh cadets to get a picture of what is happening from the cadets/officers who are on board right now, and also use the internet and social media to form groups and discuss current affairs in the shipping field;

- .3 The waiting period prior to joining for the first time needs to be reduced. A prolonged break between leaving the training institute and joining the first vessel as a cadet leads to the trainee getting rusty which leads to an overall drop in the quality of training, as it becomes more of a repetitive chore than a progressive learning curve;
- .4 "Better training on board" study material should be provided;
- .5 It should be allocated more time for doing his/her OBT;
- .6 Motivation of officers on board was lacking;
- .7 More time for training to be allotted than for the routine jobs;
- .8 Companies and ships not meeting requirements should be penalized and arrested;
- .9 Cadets should be given more time to focus on training and should be given proper guidance;
- .10 I have had opportunities to work only on container ships, I lack experience on tankers and bulk carriers. Now I am a pure container hand;
- .11 Provide the qualified officer for training of cadets;
- .12 More computer-based training can be implemented;
- .13 Cadets should be given time for their studies alone;
- .14 Cadets must have specified rest time according to MLC 2006 regulations;
- .15 Trainee should be self-initiative and curious;
- .16 Good attitude from the crew side is needed;
- .17 Please, give the cadet an opportunity to finish 1 year on board;
- .18 Officers should let cadets get training and stand watch on the bridge, not only to work on deck;
- .19 To have an opportunity to always ask for assistance from the training officer;
- .20 Training should be divided into bridge and deck work and assigned on specific periods with all officers in the trainee's department;
- .21 Officers must teach the cadets how to use the navigational equipment on board ship;
- .22 The cadets should have or be given more time to spend on the bridge to enhance their navigational skills;
- .23 Cadets should spend half of their contract as day workers and half on the bridge:
- .24 Continuous supervision of daily training is needed;
- .25 There is a need to improve the attitude of cadets on OBT;
- .26 Proper training schedules should be imposed;
- .27 It is nesessary to improve safety training on board;
- .28 During OBT time cadets must work together with OOW;
- .29 I overhauled the machinery alone, but guided with the manual proper OBT manuals are needed!
- .30 I think it would be beneficial to the cadet if he/she is given ample time for studying;
- .31 Proper implementation of company rules on board and strict monitoring of cadets;
- .32 Conduct more CBT trainings on board:
- .33 Setting time frame for each activity in the training record book;
- .34 A more structured training programme on board;
- .35 Closer monitoring/ supervision/mentoring is mandatory;
- .36 By my understanding, as a deck cadet, officers should ensure that cadets have the knowledge of both navigational and deck work;
- .37 Training officers should focus on every cadet to ensure their training and the improvement of their skills;
- .38 Trainees should participate in watch keeping together with a senior officer; and
- .39 We must have a time frame for our projects, studies, and other work related to OBT.

To join, or not to join that is the question

- The goal of Question 23 was to sum up more than 15,000 responses and obtain two main concluding results: to join, or not to join, an OBT-providing company where trainees had their last or recent on-board training when the Certificate of Competency already is at hand. The results can be observed in figure 18.
- It is hard to be optimistic about the fact that research indicates that 30% of cadets have no willingness join the company where they had their last OBT after graduating from a MET institution. A student comment on the topic is quoted below:

"I didn't have the intention to join the shipping company were I had my training, but at present I am forced to join it since I have no options."

Student trainees concluding comments

- The final trainees' comments on the subject can be seen below:
 - .1 A competent training officer is to be designated on board the ship;
 - .2 Mentoring is very important;
 - .3 There is a need to help students in finding the company OBT provider;
 - .4 The watch schedule "12 on/ 12 off" is not for student trainees;
 - .5 There should be more confidence in students from the crew side in their professional activities;
 - .6 The intake of new students into shipping should be reduced since the opportunity to have OBT is very low for the beginners; and
 - .7 Help cadets to get a ship for OBT.

Conclusion

- Over 67% of the feedback received from all 682 respondents on their OBT were positive to the fact that their on-board training was in principle well-monitored despite their personal workload being above average to high. This correlated with 69% of respondents, who have an intention to join the company where they had their last OBT.
- On board most ships they had free access to the bridge and engine room for the purpose of getting trained and the OBT did conform to their professional expectations. Although the respondents confirmed that there was a shipboard training officer (STO) to supervise their OBT, the professional assistance from the Master and Chief Engineer with respect to OBT does not seem to be encouraging. The communication with company training officers on training issues also leaves much to be desired. Maybe this is the reason that a large number of trainees had no opportunity to complete their training programme entirely. The respondents could realize that safety at sea, protection of the environment, and security levels depend on the quality of the OBT process for prospective officers.
- From the standpoint of the trainees the routine shipboard operations were being observed as work done or time spent not related to OBT. This attitude needs a correction and they have to be guided to absorb the routine and critical and emergency shipboard operations as part of their OBT routine.
- Most of the trainees from deck as well as engine department had done their OBT in tankers only and it happens to be the only type of vessel in which they had their entire OBT, which raises concerns about the preparedness of such trainees to handle other types of vessels as a competent officer. The survey reveals that this limitation was due to the fact that

the trainees had to put up with a great deal of difficulty to get berths on board to complete their OBT. They were apprehensive about splitting their OBT in two different types of vessel as it may render them without a second chance due to shortage of berths. So, most of them were forced to complete their entire OBT in one go on one type of vessel only.

- Furthermore, the survey brings to the fore that the trainees were able to adapt to a multi-cultural environment, as most of them had experience serving on board with multinational crews. Although the official working language was English, for the purpose of convenience, understanding, comfort and a sense of belonging, the trainees spoke their national and regional languages whenever they found a fellow seafarer from the same nation or region.
- Due to the conducive working environment with quality accommodation, most of the trainees wished to return to the same shipping company where they had their last OBT. They also related the reason for such intention to be a gesture of loyalty and a sense of security, which will put them in good stead in the long run.
- The gaps in the OBT exposed by this survey are:
 - .1 The involvement of CTO, STO, Master and Chief engineer in the training process is not as involved as it is done in the training academy;
 - .2 Training of the prospective officer takes a back seat because of the pressing commercial, technical and regulatory demands to run the vessel;
 - .3 Possessing the self-initiative to get trained and to acquire knowledge and skills during OBT is a responsibility vested with the trainee. Unfortunately, this responsibility gets eroded with the passage of time during OBT. Eventually, the trainee manages to develop only a focused skills set that is just enough to meet the immediate technical requirements of the job but fails to reflect the broader aspects needed to meet the full expectations of competent performance as a ship's officer;
 - .4 There is a lapse in the administration efforts to give full and complete effect to the STCW code essentially with respect to OBT, which results in a shortage of on-board training berths and shortcomings in expected quality standards;
 - .5 Furthermore, there is bottleneck in the current system, which creates severe stagnation of trainees waiting to find their berths on board. As the duration of the waiting period increases, the motivation to perform well during OBT wanes and trainees try to adopt quick fix methods to complete their training record book without even knowing the tasks they are supposed to do; and
 - .6 Often the inability to retain and retrieve acquired knowledge is caused by the lack in quality of training. This shortcoming could be overcome by giving full and complete effect to the guidance given in section B-II/1 of the STCW Code regarding on-board training.
- The first part of this comprehensive study on the quality of OBT based on anonymous post OBT questionnaires reveals that stakeholders in the shipping industry have an integrated role to play in giving the STCW Code its full and complete effect. The Administration, METs, and shipping companies should understand that they are not a single entity but individual components of the global marine environment; every stakeholder has an interdependent responsibility to make the necessary corrections to overcome the shortcomings that currently undermine the quality of OBT. The industry must continue to place utmost importance on

training, recruitment and the quality of seafarers employed on board ships, keeping in mind that the sustainability of future shipping is in the hands of effective and competent maritime professionals.

Action requested of the Sub-Committee

The Sub-Committee is invited to note the information provided.
