Capt. Dmytro Zhukov, PhD, Asst. Prof
Odessa Maritime Training Center
00 380 482 23 52 20
16 Pastera str., 65026 Odessa, Ukraine
ds@omtc.com.ua
www.omtc.com.ua

Development Of Port State Control Officers Training Using Marine Simulators And Real Vessels

ABSTRACT

This course provides training for officers to be authorized by their Government to execute Port State Control in accordance with:

- STCW — 78-95, Code STCW —95
- SOLAS 1974 as amended, chapter I, regulation 19;
- Load Lines 1966, article 21;
- MARPOL 73/78, article 5 and regulations 1/4 and 11/10;
- ILO Convention 147, articles 2 and 4 and appendix.
- IMO Resolutions 740(18), 741(18), 787(19)

One of the most important points, that is highlighted during the course is implementation and influence of the ISM Code by PSC Officers as a tool of communication between shore and ship s Safety Management Systems, vital for efficient work and pollution prevention.

The analysis of the delivery approaches of the PSCO training program discovered the following basic aspects of the given approaches:

1. Normative basis studies
2. Practical skills development onboard the ships, entering the port, where the there training is going
3. Skills development with the help of the appropriate simulators
4. Skills development onboard the ship located at the port area waters, given to the disposal for training needs.

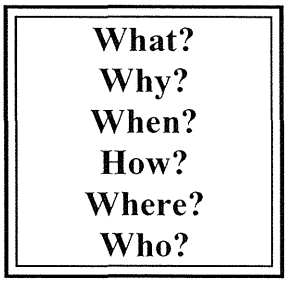
Aspects 1 & 2 are mandatory. The easiest way of the course delivery is the first variant, which includes normative basis studies and practical skills development onboard any vessel, located at the port at the time of course running. In order to carry out the training program successfully, Aspect #4 (ship permanently located at port area waters, given to the disposal for training needs) or # 3 (appropriate simulators), which are variants # 2 and 3 accordingly, may be used effectively.

The ideal variant to our opinion is the combination of all Aspects, listed above, which will form the Variant #4. The basis for our PSC Course is the IMO Model Course No 3.09 and European Port State Control Officers Training Program (EPSCOT). The Course was designed with the help of the Secretary of the Black Sea Memorandum of Understanding.

1. INTRODUCTION

As you know, starting from July 1 2002, ISM Code is mandatory for all types of vessels. The ISM Code was adopted by the International Maritime Organization (IMO) by resolution A.741(18). The objectives of the ISM Code are to ensure safety at sea, prevention of human injury or loss of life, and avoidance of damage to the environment, in particular, to the marine environment, and to property. The Code requires companies to establish safety objectives as described in section 1.2 of the ISM Code. In addition companies must develop, implement and maintain a Safety Management System (SMS) which includes functional requirements as listed in section 1.4 of the ISM Code.

That is why the given report is organized in a way, that the Safety Management System (SMS) is structured.
In order to provide proper and sufficient work of the SMS, it should contain answers on the following questions, available for all personnel, involved in the system:



2. Port State Control Officers Training

2.1 What?

PSC Officers training is carried out in OMTC from March 2001. Course development consisted of the following phases:

- § Planning, development and preparation phase. Here IMO Model Course 3.09 (Port State Control) was thoroughly analyzed together with the feedback and previous experience from our colleagues and our training institutions. Necessary human and technical resources were finalized.
- § Operational phase, that includes 60 hours course
- § Result phase, that includes the analysis of the pilot course, held in OMTC .

After the test course was done and when it was reported to the 2nd Committee Meeting of the BSMOU, our Center was accredited for carrying out PSC training in this region.

2.2 Why?

So, why such training is necessary?

Fist of all, as Mr. O Neil, IMO General Secretary told at the time of ISM Code Adoption, the joint responsibility for safety at sea and pollution prevention should lie between IMO, Flag State And Port State as follows:

- IMO mainly bears the responsibility for developing international standards in the form of conventions, codes, recommendations and guidelines
- Flag state — is responsible for issuing certificates and guarantees that the vessel fully complies with the requirements of IMO Conventions
- Port state- responsible for continuous vessels inspection for their compliance with IMO requirements and provide deficiencies elimination.

At that, as you might have noticed, Port States bear the responsibility of **continuous** vessels inspections, as far as they enter ports of the states, who signed the Convention.

Then, in April 2002, Ukrainian Government has ratified the BSMOU and, as a result, this should lead to the improvement of such training.

That is why the importance and necessity of carrying out PSC courses in our area cannot be denied.

2.3 When?

When and in what case should such training take place?

Such training is mandatory for PSC Officers prior to work start and should be refreshed periodically not less than once in two years. Safety Management and Pollution Prevention standards are changing worldwide quite often- that is why the two years term is minimum sufficient for refreshing.

2.4 How?

How the training should be delivered?

As it was mentioned before, the basis for the Course is the IMO Model Course 3.09. Following the 2nd BSMOU Committee Meeting and with the active help of BSMOU Secretary Mr. H seyin Y ce, we have got the full set of EPSCOT (European Port State Control Officers Training) Program with all support materials (i.e. manuals, CD s, overheads, etc.), which were included into OMTC PSCO Course s syllabus.

The course duration is 2 weeks, the theoretical material is fixed by means of simulation training followed by practical skills development by participating in real inspections onboard either the training ship (a sub- contracted vessel, which might be used for training needs) or a real vessel entering the port.

The analysis of the delivery approaches of the PSCO training program discovered the following basic aspects of the given approaches:

1. Normative basis studies
2. Practical skills development onboard the ships, entering the port, where the there training is going
3. Skills development with the help of the appropriate simulators
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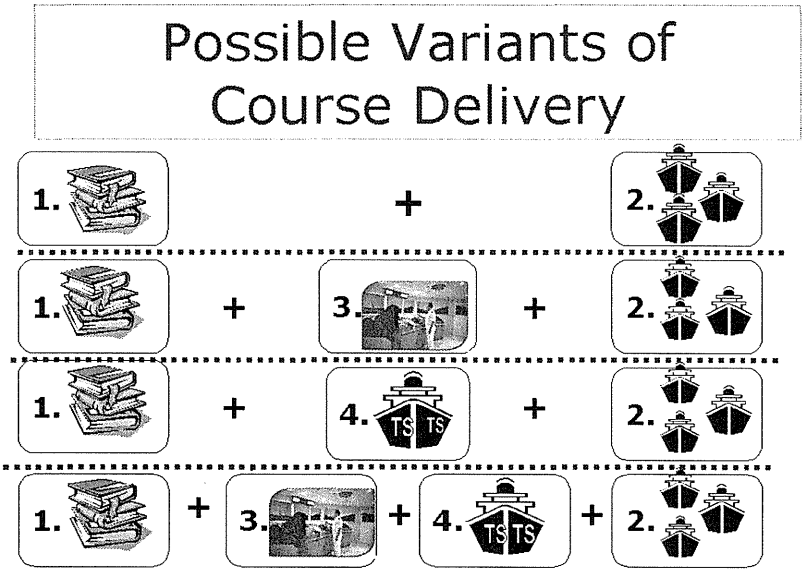
From all listed above, it is possible to derive 4 different variants of the aspects interaction, determining the approach of achievement the PSCO training program.



As it can be seen from the scheme, Aspects 1 & 2 are mandatory. The easiest way of the course delivery is the first variant, which includes normative basis studies and practical skills development onboard any vessel, located at the port at the time of course running. But as you understand, this variant possesses considerable deficiencies due to the accidental and chance character of the 2nd Aspect, which interferes with distinctness/determinacy of the course delivery.

Thus, in order to carry out the training program successfully, Aspect #4 (ship permanently located at port area waters, given to the disposal for training needs) or # 3 (appropriate simulators), which are variants # 2 and 3 accordingly, may be used effectively.

The ideal variant to our opinion is the combination of all Aspects, listed above, which will form the Variant #4. The given variant is used in particular in OMTC during PSC Officers Training . 6 additional hours for English Language review were added to the program, which open the training.

Bearing in mind, that EPSCOT structure has modular form, it could be easily adopted into our local course.

As an example, let s have a brief look on several sections of the PSC officers course program.

English Language Review is taken from the part of English Language Studies, and includes brief grammar overview, necessary terms and definitions review, summing up, followed by Marlins computer-based test.

Safety & Quality Management System — is a simulator, that contains Company s SMS documents circulation database of different types of the vessel in electronic format and contains drafts and samples of mandatory documentation stored onboard various types of the ships.

Load Control System is a simulator, which allows understanding and clarifying main principles of safe loading and correct cargo stowage; it as well contains samples of various ships typical stability calculations and all appropriate documentation.

Tankers Simulator reflects peculiarities and specific features of cargo handling onboard tankers, gas and chemical carriers and all appropriate documentation.

GMDSS Simulator — simulator imitating communication GMDSS equipment in real time frames, all needed equipment checks and controls in accordance with SOLAS Convention, appropriate documentation keeping.

FMSS — Full Mission Ship s Simulator allows to perform an equipment and documentation of a modern navigation bridge and peculiar features of its operation and
Control as well as charts usage, proof and control.

Turbo Diesel, AMOS, Engine Team Simulator, which help to show main operation principles and technical maintenance of various equipment and documentation onboard.

Besides the theoretical part, combined with standard means of training, such as blackboard, PC Light Pro projector, Audio and Video equipment, standard set of handouts (in accordance with EPSCOT materials), PC- based simulators are widely used during the Course.

The importance of EPSCOT Program — that it is one of the examples of Maritime Training globalization world wide.

Unfortunately, continuous changes of the managing personnel in the Maritime Administration of Ukraine put obstacles in the way of proper course delivery.

2.5 Where?

The course is carried out in OMTC in close cooperation with OSMA and Odessa Port. Odessa Maritime Training Center (OMTC) was established in 1998 in order to conduct training and further training of seafarers and shore-based personnel.

In 1999 OMTC QMS was certified in accordance DNV Rules for Maritime Training Centers. At that, 37 courses were approved, both conventional and non-conventional, which are carried out in accordance with DNV requirements.

Please note, that the certification was carried out no in accordance with ISO 9000 Standards, but with the rules, especially developed for training institutions.

In year 2000 various Maritime Administrations all around the world have approved OMTC QMS.

2.6 Who?

This question might be subdivided into two areas:

a) who is a trainer
b) who is a trainee

The training is carried out by lecturers and instructors from Odessa State Maritime Academy and Maritime Administration. Thus, among the lecturing staff on the given course there are 2 professors, 3 assistant professors, 2 Maritime Administration representatives and Odessa Sea Port Harbor Master.

The training is delivered for shore personnel, mainly assigned by Harbor Masters so they will be able to carry out vessels inspections in the ports of Ukraine.

3. Conclusion

The vessel s inspection is its assessment as a part of the Company s Safety Management System. At that, not only the technical condition of the vessel, its documents and crews certificates should be checked, but also its compliance to the ISM Code requirements. That is, the crew s competency and training level are subject to the PSC check. At this point, the crewmembers assessment in its own way reflects the quality level of the maritime training institution, where the seafarer was trained. Thus, only a proper trained and competent PSC officer is able to verify and inspect not only the ship itself or the crew as it is, but their unity as an integral part of the System, the formation of which is fundamentally new approach in shipping culture.

References

(1) International Safety Management Code, IMO Resolution 741 (18)
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(4) Black Sea Memorandum of Understanding 2nd Committee Meeting Materials, Varna, Bulgaria 2001
(5) Rules for Classification of Maritime Training Centers, Det Norske Veritas, January 1996