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STCW CONVENTION AND THE CHALLENGES OF THE FUTURE

ABSTRACT

This article aims at contributing to the discussion by expressing author's opinions on the present and future place and role of the International Convention STCW-78/95.

The author is seeking further solutions and more effective and flexible forms and methods of training and improving the skills and knowledge of ship's personnel to meet modern and future needs of the shipping industry. The argument is based on considerations concerning seafarers' competence. The essential role of man in the safety of navigation is emphasised as well as his aspirations and need for intellectual development, set in comprehensive knowledge useful both at sea and on land.

INTRODUCTION

The adoption in July 1995 of the significantly revised International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW-78/95) aims to adjust the training of seamen to the modern shipping.

The dynamic development of shipbuilding technology results in larger and faster sea-going craft, highly automated onboard systems, powerful and diversified ship propulsion systems and narrow specialisation of ships. Such progress calls for highly qualified personnel for the operation of up-to-date vessels.

A substantial increase in the number of ships of numerous fleets, in turn, has intensified traffic on main sailing routes worldwide. Analyses of accident statistics prove that the man is to blame for the present state. One may agree without a shadow of a doubt that the safety of navigation and protection of the marine environment heavily depend upon people who are directly involved in ship operations.

It has been realised that ship conduct has taken new dimensions and forms imposed by currently different navigational situations, technical and operating conditions. In the light of these changes present standards of seafarers' qualifications do not satisfy contemporary requirements [Walczak, 1995].

The question that has to be answered is whether the adoption of the revised convention will improve the status quo, whether the new measures match global changes and whether they are far-fetched enough. These and other problems remain to be solved.

STCW-78/95 CONVENTION - present plans and the future

It goes without saying that maritime companies do not reject the need for knowledge, especially professional knowledge. Everybody understands, shipowners in particular, that navigational safety and safe ship management depends on the qualifications and skills of personnel onboard. Most seafarers seem to realise that standards of training ought to be sufficiently high to satisfy international standards of professional competence. What, therefore, should these standards be like to ensure the safety of global shipping? The STCW Convention does not specify the educational level, as it actually does not:

- require that ship's officers hold a higher education diploma,
- enhance the role of broad foundations of general knowledge.

On the contrary, the Convention:

- grants priorities to practical skills,
- stipulates standards of competence with:
 - a) rather low minimum standards for onboard functions,
 - b) strict but formal supervision by administration [Morrison, 1995].

Therefore, one can hardly claim that the STCW Convention guidelines are convergent with opinions widely recognised by the pedagogy of developed countries. There is a widespread belief that the role of general knowledge should be restored as it is this kind of knowledge that helps in understanding and proper interpretation of complex, changing and sometimes unpredictable situations and conditions characterised by a multitude of sometimes contradictory information or its complete lack.

Except for strictly occupational matters, the STCW Convention does not raise a question of acquiring necessary general and technical knowledge, indispensable portion of economic and legal problems. To a small extent the Convention is concerned with the issues of management, psychology and sociology which are needed in proper vessel operation and creation of good interpersonal relations onboard.

One advantage of the Convention is, undoubtedly, attention drawn to occupational training, practical skills, elimination of insufficient qualifications or proficiency of seafarers.

Although the document puts emphasis on professional training of seafarers, it fails to look at education from a wider perspective – an educational process should include formation of proper attitudes and acquisition of general knowledge, so important in the development of an individual.

In general terms, one may agree with Stan MORRISON who says that the principal aim in revising the STCW-78 Convention is to:

- provide specific technical requirements in the appended Code;
- clarify questions concerning practical skills and professional competence;
- demand that administrations supervise and approve qualifications of seafarers employed to serve onboard vessels;
- cause IMO member states to be reliable and mutually responsible and to effectively implement conventions with active participation of IMO, to keep updating the seafarers' training quality and to confirm seafarers' qualifications in a just and reliable manner [Walczak, 1996].

This is unquestionable progress as compared to the 1978 STCW Convention. Is this, however, a good direction for finding future solutions to problems of safety at sea when global shipping reaches further stages of development?

One may understand the attitude of shipowners' who are interested in having well-trained personnel competent enough in the field of ship operation. Shipowners do not pay much attention to the ways of education, except for a situation when loss is incurred due to incompetent crew.

However, such problems cannot be avoided by people responsible for the training of seafarers, for their professional competence duly certificated by maritime administration. The world is witnessing global influence of such carriers of progress as information technology, widespread international trade and continuous scientific and technological advancement. Those who take advantage of them are in a more favourable position than others.

In the age of computer society the demand for education and improvement is constantly on the rise. One cannot ignore the pursuit of people to acquire comprehensive knowledge going far beyond the professional requirements. This has ceased to be a privilege of chosen social groups, it is a contemporary requirement in the computer society.

Moreover, the use of knowledge an individual has gained over the years apart from his formal occupational training, although making up an integral part of his competence, should be a criterion for assessing how suitable the person is for execution of increasingly new tasks and challenges.

TYPES OF COMPETENCE

Competence should not be identified with a learnt proficiency, an ability to carry out certain activities that might be acquired at school or elsewhere. Competence has a much wider meaning as it is considered to be a harmonious composition of knowledge, proficiency, understanding and conscious seeking of optimal solutions to a problem.

Therefore, the fact that a man is capable of executing a task means that he has a relevant proficiency. If he is fully aware of being able to do the task in specific conditions (time, quantity, speed, place), then he may be said to have competence [Czerepaniak, 1997].

The principal measure of professional competence of a seaman is his constant preparedness to respond to a situational change. One characteristic feature of the seafarer's job is a necessity to act in unique, dynamic and constantly changing conditions and circumstances which require critical thinking, right assessment and responsible decisions. This refers to various situations – from changes in weather or climatic conditions to emergencies to mental and physical state of the crew, finally to political events in the area of ship's operation.

The key measure of seaman's professional competence, of the officer or master in particular, is flexibility to changes. Such competence is reflected in (the subject's) their knowledge and proficiency at a given level of responsibility and in an ability to assess and behave adequately in a new manner [Walczak, 1984].

In the light of the above considerations on the notion and importance of competence in regard to professionalism, a general structure of competence may be assumed to include:

- ability to behave properly according to existing standards;
- awareness of a need for and effects of one's behaviour;
- taking responsibility for decisions and their effects.

The integrity of the foregoing elements has to be emphasised.

So far attempts to classify seafarer's competence have included his self-critical assessment of his own role in performing a function onboard ship. Besides **basic competence** obtained after finishing primary and secondary schools, there is **mature competence**, significant in fulfilling current complex professional tasks. This competence ensures a kind of professional self-confidence at a specific level of position-related responsibility. It might be compared to craftsman's ability of acting according to patterns and algorithms set by others. This ability, however, is not sufficient. This insufficiency in seaman's job results from dynamically changing conditions of work and task performance in unpredictable conditions.

The two kinds of competence call for additional qualities belonging to a higher category, i.e. **competence to change**. What distinguishes these qualities is openness to what is new and uncertain, overcoming stress due to external situations and flexibility in human conflicts, ability to solve them. Finally, the highest category of competence distinguished in relation to an individual's role in performing occupational duties is the one that may be called **essential** or **creative competence**. This kind of competence is and will be significant in the future. This highest form of competence is characterised by openness and readiness to introduce and continue changes, critical assessment of the actual situation, designing and implementation of innovations. This competence by itself does not determine personal professionalism; it is strictly connected with previously mentioned categories of competence which make up an integral structure. This structure may be a subject of analysis to explain the essence of professionalism.

The above considerations make way for the assessment, or at least partly explain the structure and content of the tables specifying minimum standards of competence for the various functions and levels of responsibility included in Part a of the STCW Code.

They refer to both standards and theoretical knowledge of each competence standard as well as the importance of understanding and competence to perform specific tasks and activities. They present methods of demonstrating competence and various ways of evaluating seafarer's knowledge and practical skills displayed in different exam situations such as a ship, simulator or laboratory.

Moreover, the Convention sets forth principles and rules for the assessment of qualifications of the person examined; such principles ensure uniform requirements of practical skills that seafarers have to show while executing their tasks.

In the light the presented competence categories as compared with the revised STCW-95 Convention competence standards it may be concluded that the provisions of this document do not reach the highest categories of competence. The standards of the Convention constitute a compromise between the capabilities of developed countries, which can meet the highest requirements, and the situation in those countries where resources are insufficient to satisfy them [Walczak, 1984].

Although the application of the minimum competence standards in global shipping constitutes a step forward in favour of sea-going personnel qualifications throughout the world, one should expect neither substantial improvement of the safety of navigation nor individual ambitions of personal development to be fulfilled without external support through institutions of further education.

The STCW Convention, then, provides a temporary preventive remedy for the disastrous state of navigational safety rather than responds to challenges of the near future.

The acquisition and recognition of higher levels of competence, including areas beyond certificate requirements and vocational training, is a separate issue to be discussed elsewhere.

CONCLUSIONS

Technological progress is of ambivalent nature. On the one hand dynamic development of science knowledge, its applications in new methods of production and services make living easier. On the other hand, despite its beneficial effects, scientific and technological progress enhances the feelings of anxiety and social unrest resulting from redundancies caused by improved technologies. Global shipping has already been affected by visible reductions in minimum number of ship's personnel [Walczak, 1995].

The dynamic scientific and technological development forces a well educated and qualified man to constant upgrading of his abilities throughout his professionally active life. This well-known fact imposes certain tasks upon maritime educational institutions:

- more comprehensive education;
- combining technical knowledge of related specialisation and alternative training [Higher Education, 1998];
- development of permanent training: upgrading and specialist;
- continuous updating of plans and curricula at all levels and forms of education.

Moreover, increased youth's and adults' needs for education and improvement should be satisfied by creating a choice of the form of education:

- in an institution offering education at an adequate level, guaranteeing formal qualifications and official certification;
- flexible system based on thematic blocks, open to all those who want to study;
- self-instruction based on formal legal arrangements for the evaluation of competence carried out by educational institutions [Walczak, 1999; The White Paper, 1995].

In this respect Polish maritime education, offering a wide scope of educational forms, such as:

- higher education,
- secondary education,
- ship personnel training courses should continually modernise its plans and curricula as well as adjust forms and methods of education to new social conditions and technological changes.

Another problem that has to be discussed separately is a need for changes in competence evaluation criteria, for better arrangements ensuring personal development, supporting mobility that broadens individual's mind and stimulates intellectual activities and enhances general culture. Like all others, the seaman must have opportunities to achieve these goals.

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