## Introduction

The development paper this month introduces the six paper abstracts submitted to IMEC 25 (International Maritime English Conference) and IMLA 21 (International Maritime Lecturer Association). The IMEC 25 will take place in September 2013 (http://imec25.pirireis.edu.tr/imec_25.html) at Piri Reis University premises in Istanbul, Turkey. IMLA 21 is set to take place in October 2013 in Canada (http://www.imla2013.com/). Full papers are expected to be accepted and published in the conference proceedings as well as in the Papers Section of the MariFuture Platform.

## IMEC 25 Paper Abstracts

### Paper 1

**Developing a Maritime English Programme for MarTEL and MarTEL Plus – Project SeaTALK**

M Ziarati, R Ziarati, A Sihmantepe, S Sernikli and U Acar,

SeaTALK project concerns the development a global online English language course for seafarers. The course will be in line with IMO and the European Qualification Framework. The project is expected to support the Maritime English standards developed as part of EU funded MarTEL and MarTEL Plus projects (www.martel.pro). The course will be incorporated in the EU funded UniMET Project when concluded in 2015 (www.unimet.pro). MarTEL and MarTEL Plus developed a set of standards (tests) for English language competency for seafarers and UniMET is a set of complete programmes of all types and ranks of ship officers. The SeaTAlk will form the English Language competency development material and tools for UniMET.

Vocational training qualification and certification related to Maritime English, although partially regulated by IMO, does not enjoy a common European credit framework and this situation does not allow National Certification Authorities to establish a level for Maritime English training undertaken abroad, nor for qualifications acquired through non-formal and informal training. SeaTALK aims to develop Maritime English Training Course for mutual recognition and transparency of learning outcomes and competences in the Maritime English in Europe. The Course will be in line with IMO requirement so it is expected to have a global impact.

This paper reports on the development of SeaTALK and the challenges it faces. This includes compliance with IMO 3.17 course and its alignment with the European Qualification Framework as well as the Common European Credit Framework. The main challenge is the development of the course to underpin the MarTEL standards.

### Paper 2

**JOINT WORKSHOP: VALIDATING MARITIME ENGLISH LEARNING OUTCOMES AND COMPETENCES**

(Piri Reis University and Nicola Vaptsarov Naval Academy)

AYDIN ŞIHMANTEPE, SERHAN SERNİKLİ, SONYA TONCHEVA, DANIELA ZLATEVA

**Abstract:**

SeaTALK Project aims to establish a harmonized comprehensive framework for Maritime English Education and Training where a standard approach to teaching, learning, assessment and transparency of qualifications throughout Europe is established for each type and rank of seafarers. It will seek to establish Maritime English ECVET model for mutual recognition and transparency of learning outcomes and competences.

The framework will take IMO and EU requirements into consideration as well as incorporating the achieved outcomes of recent EU funded Maritime English projects. The SeaTALK Project is also expected to support Maritime English standards developed as part of Eu funded MarTEL and MarTEL plus projects.

An initial research in form of a survey has been conducted to collate information regarding competences and learning outcomes pertaining to Maritime English from European Maritime Education and Training Institutions throughout Europe. The survey tried to identify the existing learning outcomes and competences which vary considerably in number and content, with the view of producing acceptable common learning outcomes.

The workshop intends to focus on the Maritime English competence and the learning outcomes and validating the learning outcomes produced. The workshop will seek to gather definitions and perceptions of the participants on the two concepts. Participants will also be requested to match a set of given statements which are devised from IMO STCW, Model course 3.17 and CEFR to assess the required competence versus language skills and learning outcomes.

The workshop, by participants' input will seek to bring a new sight to :

1. Definition of language competence (for the seafarers)

2. Definition of learning outcomes (related to seafarers' language training)

3. How the two concepts can be interrelated to meet the need for a common recognition of (Maritime English) qualifications within the EU.

4. Validate the learning outcomes produced so that a harmonized framework that will enable seafarers to undergo common Maritime English Training is created.

***Keywords:*** *Maritime English, SeaTALK, Competence, Learning outcome, validation, Seafarer language skills,*

**IMLA 21 Paper Abstracts**

**Paper 3**

## Removing Barriers to Mobility of Seafarers

Dr. Martin Ziarati, Prof. Dr. Reza Ziarati, Officer Ugurcan Acar

**Abstract**

Every seafarer would like to have the freedom to work on board as many foreign flag vessels as possible using her/his qualifications acquired in her/his own country. The certificates issued by a

national administration are expected to satisfy the minimum requirements set by International Maritime Organisation (IMO), which should ideally satisfy the national requirements of member states of IMO and hence acceptable to all IMO member states. However, in reality this is not a case and the certificates issued by one country are not universally accepted or transferable to other flags. This situation restricts the mobility of seafarers; thus causing nationally qualified professionals often to be excluded from working on/commanding identical vessels other than those registered by the seafarer's own national flag. Considering that there are imbalances of surpluses and shortages of officers and ratings in most countries, current situation does not help to address the shortages by taking advantage of the surpluses elsewhere.

This paper reports on an experiment, an EU funded project known as TRECVET, introducing a means of transferring and recognising prior learning and achievement through the European Credit system in Vocational Education and Training (ECVET); a system which aims to remedy the non-recognition of similar qualifications/certificates gained in one country by other countries.

The TRECVET project is developing software methods to make syllabi comparisons more transparent. The approach relies on breaking down any course syllabi, in any given country, into its most fundamental elements such that meaningful information on commonalities, differences and country specific requirements that can be identified. By this technique, the qualifications and learning outcomes are expected to become more transparent and comparable. This approach is expected to lead to the transferability, recognition and mobility of seafarers in the project partner countries and later throughout Europe and worldwide. The tool is being designed to be scalable and able to accept syllabi from any Vocational Education and Training (VET) programme.

**Keywords**: TRECVET, Small Commercial Vessels, Qualifications

## Paper 4

## What Is Wrong? A Review of National, European and International Efforts in Improving the Standard and Quality of Maritime Education and Training

Prof. Dr. Reza Ziarati

### Abstract

It is continually reported that 80% of accidents at sea are due to human factors, and yet no progress has been made towards reducing this percentage despite many changes and amendments to the IMO STCW Code. The question remains, why? This paper reports on the role of the national, European and international bodies, such as the national administration, EMSA and IMO in recent years, and their efforts towards improving the standards and quality of maritime education and training (MET).
The paper reviews the recent changes to the IMO STCW in 2010 and identifies several deficiencies which still need the attention of the maritime community. There are special references to the grass root efforts, including the work of the networks such as MariFuture to support the wider efforts by national administrations, EMSA and the IMO.

This paper consists of two parts. Part one refers to some of the serious deficiencies identified in a recent paper published as the MariFuture Development Paper in February 2013 and part two concerns the development of a new system, called UniMET, attempting to harmonise the Maritime Education and Training applying holistic approaches.

**Paper 5**

## Looking into the Future – LeanShip
## LeanShip: Development of an Integrated Ship Management System Ensuring Efficient Propulsion and Minimum Emissions of Pollutants

Prof. Dr. Reza Ziarati Professor, Dr. Martin Ziarati, Mr. Lakhvir Singh

**Abstract**

The paper reports on the outcome of research that investigates the key design and operating factors affecting the safety of ship operations, and develops methodologies to optimise navigation and engine control systems for safe operations and efficient performance, in view of the introduction of the new International Maritime Organisation (IMO) standards related to energy efficiency, in particular the EEDI (Energy Efficiency Design Index). Furthermore, the paper includes the necessary safety requirements of the vessels currently not covered by the EEDI, in anticipation of future energy efficiency requirements for these categories of vessels. There are references to the development of high fidelity tools and processes for the accurate and efficient analysis of safety and performance-sensitive hydrodynamic problems.

The paper also concerns the adaptation of multi-objective optimisation and integrated design environments for holistic operational performance and minimum powering requirement predictions, which enable the safe application of the design rules guaranteeing, at the same time, the right balance between safety, economic efficiency and environmental performance.

The main focus is on the design of a system to monitor sea conditions and hydrodynamic parameters for minimum resistance to ship motion, with the intention of regulating the navigational equipment and engine performance parameters for minimum fuel consumption and exhaust emissions, also ensuring no intentional risk of power reduction to satisfy EEDI requirements.

**Keyword:** Efficient Ship Propulsion, Ship Engine Management; EDDI, Lean Ships

**Paper 6**

## Establishment of a Common Platform for the Maritime Education and Training

*Ass. Prof. Ergun Demirel, Prof. Dr. Reza Ziarati*

**Abstract**

MET acronym stands for Maritime Education and Training and is primarily concerned with the Seafarers' education and training aspects in particular seafaring officers.

The maritime industry is a vital sector in the world economy, which covers more than forty professional areas and it is inherent that most of them have close relations with the seafaring profession. The recent SAIL AHEAD project studies demonstrated that seafaring officers may easily be adapted to most jobs in the maritime industry with some additional education and training efforts. Many of the jobs ashore are carried out by experienced seafarers.

The maritime business is an international practice that is conducted worldwide and needs standard applications to ensure all involved apply the same norms and fulfil the requirements as agreed.

The ship is the main element of the maritime industry and is supported by ports/terminals, shipping companies, ship building and maintenance facilities. There is a close relation between the seafaring profession and the jobs ashore. A great deal of study is conducted regarding the seafarers' training in the world and common standards are achieved in this field. Therefore, seafarers' education and training may be a good base to start standardisation for the profession in the maritime industry ashore.

UniMET, which is a funded European Union MET project, has intended to form a common platform for these studies and this platform will additionally be supported by an online tool. The MariFuture project on the other hand, has initiated a comprehensive study on maritime education and training to meet the future needs of the maritime industry.

The paper argues that it is a good idea to establish a common platform for the purpose of conducting studies to meet the educational needs of the maritime industry, by benefiting from the outcomes of these two above stated projects. Thus, there will be an opportunity to establish standards and facilitate operations in the maritime business worldwide. A study that we shall call "Establishment of a Common Platform for Maritime Education and Training in the maritime sector (COMPLEMET)" so as to meet the overall requirements of maritime industry is considered to be immensely beneficial.

**KEY WORDS**: Maritime Education and Training, Maritime Industry,