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Innovation in MET for New Career and Mobility Opportunities

Reza Ziarati

TUDEV Institute of Maritime Studies, Tuzla, Istanbul, Turkey
rziarati@tudevedu.com

Martin Ziarati

Centre for Factories of the Future, Coventry University Technology Park,
Coventry, UK
martin.ziarati@c4ff.co.uk

Ugurcan Acar

Centre for Factories of the Future, Coventry University Technology Park,
Coventry, UK
ugurcan.acar@c4ff.co.uk

Abstract

This paper reports on the recent development and changes to Maritime Education and Training (MET) identifying the deficiencies and best practices across Europe in order to create common STCW compliant MET programmes as well as provide seafarers with an online guidance tool to enable them to have professional careers support.

This paper reports on the EU Transversal UniMET project which intends to harmonise MET practices across Europe by identifying the best practices. The UniMET partnership, working in collaboration with major awarding, accrediting and licensing bodies intends to cross-reference and include the international and local/national requirements into the UniMET programme with the aim of embedding the programme.

The second part of the paper reports on the EU Leonardo SAIL AHEAD Project which concerns the development of an on-line guidance tool in order to provide a second career for deck officers/captains. Research has indicated that seafarers in general have a job with extraordinary features and that there is reluctance by many young people to join the seafaring profession even though the salaries in the sector are very attractive. Recent reports by prominent maritime organisations (such as BIMCO, ISF) have predicted severe officer shortages in the future. The research is expected to identify the transferable skills by comparing the curricula of different Maritime Education and Training (MET) institutions and by surveying the knowledge, skills and competences

deck officers/captains developed during their education and training as well as in their seafaring profession. The tool is a roadmap and provides a list of competences that captains acquired in their education and training and when working at sea and a list of what knowledge, skills and competences they need to successfully seek employment onshore.

Key words: *Maritime Education and Training harmonisation, Maritime Education and Training, e-learning, Online tool, career*

1. Introduction

The International Maritime Organisation (IMO) developed the first standard for Vocational Education and Training (VET) programmes for merchant navy officers (STCW) in 1978. A series of model courses for these programmes was introduced in 1991 and were amended to include specific requirements in 1995. The standard was reviewed in 2003 and several significant changes were introduced recently and these changes were announced in June this year in Manila. Despite these efforts there are no mechanisms for monitoring how these standards are being applied. The European Maritime Safety Agency (EMSA) has started to monitor STCW compliance, however many VET providers have been found not to follow many of the requirements.

UniMET is in line with and supports the priorities and objectives of the Lisbon treaty and Bologna accord regarding the harmonisation and standardisation of HE programmes in Europe (UniMET, 2010-12). Once accepted, UniMET will ensure VETs in the 5 METs are STCW compliant and meet the local and international requirements of the industry for all ranks and types of seafarer. A quality assurance and control practice based on a well respected system for the delivery of UniMET will also be established to guarantee VET providers continue to follow the requirements.

The UniMET programme will unify the MET of seafarers, including ratings, throughout Europe and worldwide. The integrated model will bring together all of the IMO's existing model courses and enable each model to be changed piece by piece in a reactive manner when updates to requirements are made. The integrated model will also allow for greater cohesion between international and local requirements in MET in member states providing a higher quality and more attractive long term VET programme.

The UniMET partnership, working in collaboration with major awarding, accrediting and licensing bodies such as Edexcel, IMarEST and MCA will cross reference and include the international and local/national requirements into the UniMET programme (SOS, 2005-2007; MarTEL (2007-09; EGMDSS, 2006-08; EGMDSS-VET, 2008-10; TRAIN 4Cs, 2007-09) with the aim of embedding the programme initially into 5 partner maritime education and training (MET) systems across Europe (Holland, Finland, Turkey, Spain and Lithuania).

2. Origin of the project

IMO model programmes are not applied consistently in many countries and implementation of international standards for training of seafarers has not been monitored. Apart from unification of programmes this project will initiate a quality management model to ensure consistent quality assurance and control for development and delivery of MET issues.

The SOS project (2005-7) was very successful in developing a harmonised programme for the training of merchant navy seafarers and was implemented in Turkey in the TRAIN 4Cs I-II project (2007-09). Since then, the programme has been strengthened with the addition of materials and maritime English standards from the MarTEL (2007-9), EGMDSS (2006-8) and EGMDSS-VET (2008- 10) projects.

There have been a few projects that have attempted to harmonise MET in Europe such as MASSTER, METNET and METHAR. These projects have led to good practice and development of some innovative outcomes. As well as a final report, a summary of these three projects is provided in METNET (2003). UniMET has learnt from these projects and has the advantage of recent successes in acceptance of contents and outcomes of the UniMET constituents' projects. In order to be successful UniMET will tackle the harmonisation of MET in stages and will base this important undertaking on common denominators such as STCW. The advent of EMSA inspecting national administrations including MET institutions has led to enthusiasm for UniMET. Several elements have been made STCW compliant through the SOS project and this proposal seeks to incorporate the new requirements and elements into the five partners MET institutions through cross-referencing and promote UniMET in EU.

UniMET will support lifelong learning in vocational education and training for all seafarers in the maritime sector across Europe. In addition UniMET will meet STCW requirements thereby allowing seafarers to be employed in any European country thus promoting the Citizenship programme. UniMET will also incorporate the local and national requirements of each country therefore promoting action 3 of the EU Youth programme involving co-operation between neighbouring and international countries (EACEA, 2007-13).

3. Project aim and objectives

The UniMET project will use existing networks with extensive knowledge and experience of maritime education and training (MET) institutions whose participants have a vast number of years experience in leading and participating in EU projects. The first aim is to embed the UniMET programme within the partner countries through cross-referencing international and local/national requirements. This will ensure that all seafarers are compliant with the international requirements and will therefore increase their employability within the international labour market as well as enabling the needs of local and national maritime industries to be met.

The unified model to be employed in the delivery of UniMET will mean that each aspect of the model can be changed one by one in a relative manner should changes to local, national or international requirements be made which will cause minimum disruption to the UniMET in countries applying it. The second aim is to inform local, national and international licensing and professional bodies about the programme, including the Chambers of shipping. By exploiting the programme to key decision makers within maritime and government bodies it is hoped that they will accept and support the programme therefore enabling changes to policies regarding MET to be made. The third aim is to establish a quality assurance and control system for the delivery of UniMET and other vocational programmes based on an existing BTEC/Edexcel system. Having considerable ties and relationship with BTEC/Edexcel system will provide valuable contacts and assistance in enhancing the system for the use in the delivery of maritime vocational programmes. No such system currently exists within the maritime sector. The fourth aim is to spread UniMET further across Europe both during and after the project's completion, raising awareness and transferring good practices with the ultimate aim of improving the level of safety at sea worldwide.

4. Transfer of innovation

The UniMET programme will be primarily based on STCW and the IMO model courses will therefore transfer innovation from the IMO (IMO, 2011). The new requirements revealed in the 2010 IMO meeting in Manila (IMO, 2010) will also be incorporated into the programme so that they are completely up-to-date with the international requirements.

The partnership's major MET institutions are keen to streamline their programmes by using cross-referencing techniques to fill gaps where there are deficiencies and to identify good practice

which includes aspects relating to delivery of MET programmes. Partners want to ensure greater mobility particularly of the cadets between institutions which can only be effectively realised by having a unified programme for VET of seafarers.

The strategy to include key MET institutions to apply the UniMET programmes in their institutions as well as the regions around them should be considered innovative. The partnership's intention of involving major awarding, accrediting and licensing bodies as well as the main stake holders such as social partners including chambers of shipping, ship operating companies, employer associations and so forth together with involvement of cadets and officers in UniMET implementation is considered to be a novel approach in ensuring the project success in short, medium and long terms. UniMET will also establish at least one transfer of innovation from BTEC/Edexcel through adapting and developing their evaluation and quality control systems for the delivery and quality assurance and control of UniMET.

Through developing a quality assurance and control system for the delivery of VET programmes such as UniMET, it will be possible to monitor the success of different systems and requirements. It will enable more efficient and effective transfer of good practices between member states and worldwide as well as ensuring high quality programmes. The combination of five successful Leonardo programmes regarding MET will enable transfer of innovation to take place to ensure UniMET is of a high standard.

The UniMET programme will cross reference materials to provide a higher quality system that is suited to each individual member state. It will also enable MET programmes to be kept up to date with changes to requirements locally and internationally with minimum disruption to other core areas of the programme. The quality assurance system will enable the good practices to be seen and transferred to other member states as well as maintaining a high quality of education, training and assessment.

As well as embedding UniMET into the partner countries, the consortium will inform key policy and decision makers within local, national, European and international maritime and government authorities. IMarEST supported the SOS project and it is hoped they will continue to provide support with UniMET. An existing BTEC/Edexcel quality assurance and control system, which a UniMET project manager helped to develop, will be adopted for assuring and controlling the quality of the delivery of UniMET.

The partnership has been selected to ensure that a large area of Europe is covered. Partners will not only mainstream the UniMET programmes within their own institutions but also promote, support and encourage their neighbouring countries to adopt the programmes within their MET institutions through their existing extensive MET networks. In the long term, partners will invite stake holders and government bodies to attend international conferences where the UniMET results will be showcased.

The UniMET programme is available to all merchant navy seafarers regardless of their sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation. Anyone who is eligible for vocational education and training within the maritime sector will be able to follow the UniMET programme. Nobody will be discriminated against. UniMET also promotes the sharing of good practices between member states and across Europe.

All materials will be available in the languages of the member states as well as in English. All member states' local and national requirements will be incorporated into the UniMET programme. The programme will be altered and enhanced accordingly to meet the needs of the specific member state where it is to be implemented, therefore supporting linguistic and cultural diversity across Europe in pursuit of one common goal to improve safety at sea through vocational learning.

UniMET supports the Lisbon Treaty through encouraging and promoting solidarity within the maritime sector across Europe. UniMET will also make the European shipping industry more competitive internationally as well as enabling European seafarers increased employability within

the labour market. However UniMET is still respectful of the particular interests of the European member states using a cross referencing technique to ensure these interests are maintained.

5. European dimension

The IMO established and revised the most important international treaty dealing with crew standards – the International Convention of Standards of Training, Certification and Watch-keeping for Seafarers (STCW). But the IMO, according to Ziarati (2003, updated in 2005 and 2008), needs governments and related industries to demonstrate the same determination to implement these standards. An investigation approved by the IMO (sub-committee minutes, 12th session, 2004) particularly focused on the causes of accidents revealed that the standards of maritime education and training programmes are not being applied correctly and in some cases vital elements of MET were being omitted. UniMET will ensure that this is no longer the case. As well as being STCW compliant the programmes will be cross-referenced with local and national requirements to ensure all areas of MET are covered to a high standard. Key policy makers will also be targeted in the dissemination plan to influence changes in MET policy to be made.

The technique used in previous projects such as making presentations to various IMO sub-committees and involvement of major awarding and accreditation organizations and licensing bodies to help to promote the development and unification of the maritime programmes will be adopted in the dissemination and exploitation of UniMET. Each partner is a major MET player in Europe and their extensive MET networks will support the expansion of the UniMET programme across Europe.

The IMO does not take any part in the inspection, evaluation or delivery of MET programmes (Ziarati, *ibid*). A good account of how these programmes are assessed is given by Videotel in one of their productions, *The Importance of on Board Training and Assessments under STCW*, (2001). UniMET intends to change this by introducing an international quality assurance and control system based on the existing quality management systems in place at partner institutions and the quality systems established by awarding bodies such as Edexcel.

Deficiencies in MET are an international issue. The approval and mainstreaming of UniMET will have a tremendous impact on the VET systems in Europe. UniMET will increase mobility in the international labour market and the level of safety for all seafarers across Europe. UniMET will also promote transfer of good practices between institutions across Europe therefore addressing deficiencies at source and enabling the supply and demand of seafarers (OECD, 2003) to finally be met.

6. SAIL AHEAD Project

The UniMET has been built on the structure of the successful Safety On Sea – SOS (2005-07) project which developed a set of harmonised MET programmes based on IMO model and STCW courses as well as developing a comprehensive sea training practice based on the Merchant Navy Training Board's occupation standards. The sea training practice advocated by SOS project was implemented through two Leonardo Mobility project called TRAIN 4Cs I and II. The SOS programmes for Deck and Engineering cadets led to internationally recognised qualifications which were side the requirements for becoming ship officers. In parallel with UniMET, a new project funded also by the EU known as SAIL AHEAD was initiated (SAIL AHEAD, 2010-12). SAIL AHEAD concerns the development of an on-line guidance tool in order to provide a second career for deck officers/captains. Research has indicated that seafarers in general have a job with extraordinary features and that there is reluctance by many young people to join the seafaring profession even though the salaries in the sector are very attractive (IMO, 2008). Recent reports by prominent maritime organisations (such as BIMCO, ISF) have predicted severe officer

shortages in the future (BIMCO and ISF, 2010). The research intended to be conducted as part of SAIL AHEAD is expected to identify the transferable skills by comparing the curricula of different Maritime Education and Training (MET) institutions and by surveying the knowledge, skills and competences deck officers/captains developed during their education and training as well as in their seafaring profession. The tool is a roadmap and provides a list of competences that captains acquired in their education and training and when working at sea and a list of what knowledge, skills and competences they need to successfully seek employment onshore.

The SAIL AHEAD project will learn from the knowledge, skills developed throughout the deck officers/captains' professional life and these will be investigated and cross-referenced with job profiles onshore so that many deck officers and captains will be able to develop their profile and acquire knowledge and skills for these jobs while still working at sea. This would enable them to find jobs ashore after a period of service at sea. Furthermore, as part of UniMET, an opportunity has been created to incorporate the knowledge and skills identified in the job profiles ashore into the existing MET programmes and develop the UniMET programmes into internationally recognised programmes leading to certificates accepted by major maritime organisations recruiting people for jobs ashore.

7. Conclusion

It has been made clear that safety at sea is a crucial topic that needs a lot of consideration to maintain and improve. It has been noted on a large number of occasions human errors have been to main reason for many accidents at sea and this is mainly due to lack of education and training of merchant navy officers.

The UniMET is a major initiative for the harmonisation of maritime education and training across Europe. Its implementation will help provide safer lives, ships and seas by harmonising MET thus enabling young people to have unified model in education and training of seafarers. The programme will be up to date in order to meet local, national and international requirements. Its introduction will help to develop an environment at sea where navigational/engineer officer will have a complete understanding and awareness to the international conventions. The course will initially include the Officer of Watch (IMO 7.03 Model course) and Engineer of watch (IMO 7.04 model course) programme.

The consortium to undertake the development and establishment of this programme have many years of experience in maritime education, training and assessment. The e-learning platforms EGMDSS (www.egmdss.com) and e-assessment platforms for MarTEL (www.martel.pro) are novel systems and will be included in the UniMET programme. The materials of SOS (www.maredu.co.uk) and TRAIN 4Cs I, II and III will be included in the UniMET programmes (SOS, 2005-2007; MarTEL (2007-09; EGMDSS, 2006-08; EGMDSS-VET, 2008-10; TRAIN 4Cs I-II, 2007-09)

It is fairly apparent that a unified Maritime Education and Training (MET) approach identifying the deficiencies and best practices across Europe in order to create a common STCW compliant MET programmes as well as provide seafarers with an online guidance tool to enable them to have professional careers support will simplify the MET system and empower and support maritime personnel with their career and continuous professional development.

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