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SURPASS

INSIDE:

Project Progress Report 2012

Course Development and Accreditation

This newsletter reports on the progress have been made of SURPASS project after February 2012.

The SURPASS project started in November 2009 and ended successfully in December 2011. A recent article has been published about SURPASS in Nautilus magazine in February, 2012.

[http://www.marifuture.org/Publications/Articles/Surpass the test.pdf](http://www.marifuture.org/Publications/Articles/Surpass%20the%20test.pdf)

The recent accident on passenger vessel Costa Concordia has been analysed in SURPASS article. For more information, please refer to websites. www.surpass.pro and www.surpass.pro/moodle

All partners are still supporting these projects to sustain and exploit the end products and outcomes. The SWOT analysis of the post project being carried out carefully by all partners to continue the sustainability of the project. A through review has been carried out of the existing SURPASS course with the support of Plymouth University students.

Main actions are being taken as agreed by the project partners at the SURPASS final conference are to:

- retain the project partnership and to seek new partners through which stakeholders from throughout the world can be informed, so that they will be able to contribute their experiences and discuss their problems with this sector of learning.
- retain and develop further collaborations with awarding, accrediting and licensing bodies such as :Edexcel, IMarEST, RINA etc., and continue further development of links with International and European maritime bodies such as IMO, EMSA, IMLA, IAMU etc.
- retain and incorporate SURPASS in EU funded UniMET project – www.unimet.pro.
- provide support to MariFuture (www.marifuture.org) and MarEdu (www.maredu.co.uk) to offer SURPASS as a network to learn from and to contribute towards maintaining and fostering relationships on an on-going basis at a local, national and European level.

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Lifelong Learning Programme

CONTRACTOR: TUDEV Institute of Maritime Studies

PARTNERS: Centre for Factories of The Future; Maritime University of Szczecin; Plymouth University; Satakunta University of Applied Sciences; Spinaker d.o.o





Course Development & Accreditation

2012

SURPASS: COURSE DEVELOPMENT & ACCREDITATION

TUDEV and researchers from partner countries have developed bonds with the shipping industry and the seafarers' communities. They made contact with a number of these communities in the context of the user requirements workshops that took place in Turkey and partner countries.

The materials of SURPASS will be used as part of HND and short courses within existing maritime programmes, leading to qualifications recognised worldwide.

SURPASS materials are adopted and implemented into VET institutions across Europe beyond 2012. All learning and assessment materials produced during the project are freely available after the project's conclusion. The registration and maintenance of the material and assessments and their associated products including the project website are maintained and managed by C4FF.

Course and learning content and the Integrated e-learning and e-assessment using scenario-based interactive simulations for application in ship simulators and on PCs have been developed. More information about the project and the training materials can be accessed at www.surpass.pro.

New innovative methods and nature of teaching and learning, represent a challenge to traditional understanding and educational practices. The proposed Scenario-based Learning approach that is used for teaching automation can be used to other maritime courses and similar courses in other sectors such as: Electrical and mechanical Engineering, or expand in teaching Maritime subjects to other target groups. The platform itself could be used in all sectors and for teaching delivery of other maritime courses.

A comprehensive and novel data-structure has been developed containing the entire SURPASS course, its scenarios, animations, graphics and so forth as a complete teaching and learning package on ship automation for maritime education training providers.

The SURPASS courses can also be used by ship's crew who are working on board these vessels and pilots at ports, as an up-dating programme of personnel for self development. Furthermore, many employees and individuals would be able to enhance their skills and competence; hence, become more employable.

The SURPASS course is now being accredited by EDEXCEL. Due to the nature and contents of

the unit, it has been divided into two parts namely: Part one as:

"The Principles of Instrumentation and Automatic Control Systems on board Commercial Ships" and part two as: *"Applications of Instrumentation and Automatic Control Systems on board Commercial Ships"*.

In Part one, the following outcomes are covered in detail. Where on successful completion of the unit, a learner will:

- 1 be able to investigate and describe instrumentation systems used in process control on board commercial ships
- 2 be able to describe process control systems and controllers on board commercial ships
- 3 be able to describe and evaluate the use of regulating units on board commercial ships

The Part two of the SURPASS unit is being accredited by EDEXCEL. It addresses the earlier pneumatic and hydraulic automation devices as well as more modern programmable logic control systems used in ships. It provides an easy access to required knowledge and skills for the desired effect of improved safety at sea.

It also provides a forum for theory, laboratory, workshop and computer simulation exercises as well as hands-on training to monitor various automated equipment including alarm system, log calibrations, display data and control equipment.

Where on successful completion of this unit a learner will:

1. examine the Information and energy control systems on board commercial ships.
2. be able to operate Instruments and automated systems on board commercial ships.
3. be able to manage Instruments and automated systems on board commercial ships.

The multimedia training platform of SURPASS is so designed that its whole structure, without any difficulty, can easily be revised, expanded and evaluated so that rapid changes that are expected to occur in the automation applications, can be accommodated in the future. In order to achieve its goal, SURPASS will continue to develop but it should also address the need of non-officers. Further developments of a new draft proposal for SURPASS March- December 2012, are being considered: http://www.surpass.pro/media/post-funding/SURPASS_Evaluation_process_report.pdf.