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Short Course Programmes for Automated Systems in Shipping

2009-1-TR1-LEO05-08652

http://www.adam-europe.eu/adam/project/view.htm?prj=7247

Project Information

Title: Short Course Programmes for Automated Systems in Shipping

Project Number: 2009-1-TR1-LEO05-08652

Year: 2009

Project Type: Transfer of Innovation

Status: granted

Country: TR-Turkey

Marketing Text: This project aims to reduce the accidents and incidents due to automation failure at sea. The number of accidents due to engine system failure has been on the increase and many companies have been reporting engine stops on regular basis. Each Engine stop is an accident waiting to happen as was the case with many accidents like the Sevannah Express (2005). The project concerns the transfer the innovation already developed in the design, delivery and assessment of short courses in the Maritime Sector in order to fill the gap created as the result of emergence and application of the automated systems in the education and training of seafarers by the provision of a training course enabling them to have a full understanding of automated systems and these systems' weaknesses and limitations. The automation knowledge is also known but applying to ships provides an excellent opportunity for transfer of innovation.

Summary: The International standards for maritime education and training (MET) currently in place were introduced in 1995 (IMO STCW-95). Since 1995, there has been rapid revolution in design of ships and the equipment used in the navigation and propulsion systems on board these ships and yet there has been no serious attempt to revise the STCW and/or the International model courses such as IMO 7.03, 7.04, 7.01 and 7.02. One very important development has been the introduction of automation in operating a ship. The modern ships particularly container and fuel carrying vessels are becoming increasingly automated. The automation has brought with it two problems, one concerning the inadequacy of existing seafarers' education and training viz., that if any aspects of automation fails the crew often are not trained to use alternative systems and hence respond to it effectively (IMO MSC 82, 2006; Ziarati, 2007). The second problem has arisen from the review of the arguments from recent IMO Maritime Safety Committee (reports MSC 82/15/2 and MSC 82/15/3, 2006) namely that the human operators rarely understand all the characteristics of automatic systems and these systems' weaknesses and limitations which have now been found to be the main causes of accidents. The delivery and assessment of the project will be based on the results from two recent EU Leonardo funded investigations regarding the development of an online learning (developed and tested in Leonardo Pilot EGMDSS, 2006) and e-assessment (developed and tested in Leonardo MarTEL, 2009). The intended internet platforms have facilities for self-learning and assessment. For more information about SURPASS refer to www.surpass.pro.

Description: A paper (Ziarati, 2006) and report to IMO (MCA, 2006) clearly identify a major source of accidents particularly in the future to be the problems with application of automated systems and failures in any aspect of automation. STCW training standards for Engineers have not been updated to account for working with such new engines. Instrumentation and control systems including hydraulics and pneumatics need to be included in the syllabuses of the programmes for the Engineer and Deck officers. Under STCW there is no specific training requirement for electrical engineering officers on board vessels, and therefore no internationally or European agreed standard by which shipping companies can effectively assess their knowledge.

Themes:

Sectors:

Product Types:

Product information: The SURPASS project's (Ziarati, HPAS 2010) main aim is to fill this gap created as the result of emergence and application of the automated systems in the education and

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training of seafarers by provision of a training course enabling them to have a full understanding of automated systems, and these systems' weaknesses and limitations.

Projecthomepage:

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