

Proposal to modernise the Methodology of Teaching, Assessment/ Examination

Nautical - STCW II/1 CoC	Name of respondent, role and organisation:		
Competency/ Module: Bridge watchkeeping	<i>Maintain a safe navigational watch</i>		
Knowledge, understanding and proficiency	Recommendation of working group regarding the outcome and objective.	Rationale	Action required
Outcome 1: Interpret and apply regulations and systems for the safe movement of vessels.	Keep	Remains relevant	See sub-outcomes
1.1 Application and Interpretation of the IRPCS	Keep	Essential	Include practical application, and relevant Human Element Factors, of IRPCS and IALA Buoyage system using bridge or desktop simulation or equivalent.
1.2 Application and Interpretation of the IALA Buoyage systems	Keep	Essential	Include practical application, and relevant Human Element Factors, of IRPCS and IALA buoyage system using bridge or desktop simulation or equivalent.

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Outcome 2: Describe operational and emergency bridge watchkeeping procedures.	Keep	Essential	Suggestion to use simulators to enhance this outcome and highlight Human Element Factors, where relevant. (Excluding 2.6 for simulation)
2.1 Bridge watchkeeping procedures itemised in:	Keep	Essential	None
— current national regulations			
— international regulations			
— international and national guidelines			
— The International Chamber of Shipping (ICS) Bridge Procedures Guide (BPG)			
2.2 Communications between bridge and engine personnel	Keep	Essential	None
2.3 Requirement to call the Master to the bridge	Keep	Essential	None
2.4 Failure of bridge and engine room equipment	Keep	Essential	None
2.5 Emergency situations at sea	Keep	Essential	None
2.6 Introduction to Marine Engineering	Add	This outcome is required to show how marine engineering impacts on operation and emergency bridge watchkeeping procedures	Add this outcome.

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Outcome 3: Explain how to manoeuvre a vessel in a safe and controlled manner	Modernise	Candidates require practical ship handling experience in a simulator setting to fully understand the theory in this outcome.	Suggestion to use simulators to enhance this outcome and highlight Human Element Factors, where relevant.
3.1 Factors which have an effect on manoeuvres, turning circles, and stopping distances	Keep	Essential	None
3.2 Manoeuvring a vessel	Keep	Essential	None
Proposal submitted by:	Any other outcomes for this competency, above and beyond STCW which would be needed due to use of modern technology and impact of future fuels onboard:		
	Objective	Rationale	Action required
Cadet Training & Modernisation Working Group	Ensure all outcomes are contextualised to help Cadets understand what they are learning in relation to what they will experience at sea.	While some outcomes are intrinsically linked to work carried out at sea, some need to be contextualised to show how they apply to work on board. Where this is the case, it is important to make sure Cadets clearly understand how the outcome relates to work at sea and it is essential to make sure that this context is given with reference to current and future seagoing technologies and practices.	Where outcomes do not specifically cover a topic which relates to work carried out at sea, more must be done to contextualise the outcome and make it relevant to the maritime industry, giving specific shipping examples of how the outcome may be applied in a modern shipping context. Not every template has contextualisation recommendations but please do add any you feel may have been missed.

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<p>Cadet Training & Modernisation Working Group</p>	<p>Include Human Element Factors throughout the syllabus</p>	<p>To provide seafarers with a contextualised understanding of the Human Element in the maritime industry, showing how they can put theory into practice in the work they carry out at sea.</p>	<p>Raise awareness throughout the Cadet's training of the areas in which human element factors will have an impact. Recommendations on where this can be included have been noted throughout the entire syllabus. Not every template has Human Element Factor recommendations but please do add any you feel may have been missed.</p>
<p>Cadet Training & Modernisation Working Group</p>	<p>Include Data Science skills throughout the syllabus</p>	<p>Data Science Skills (Comprehension, Analysis, Presentation, etc...) are already required within much of the syllabus. A further, specific focus on these skills needs to be taught where relevant.</p>	<p>A specific topic will need to be introduced to improve Cadets' Data Science skills. Practical application of data science skills should be highlighted throughout the syllabus. Not every template has Data Science recommendations but please do add any you feel may have been missed.</p>