

**No feedback requiring a response was received for the module ETO - Analogue Electronic Principles.**

**No feedback requiring a response was received for the module ETO - Applications of PLC.**

**No feedback requiring a response was received for the module ETO - Implementing Small Local Area Networks.**

Role	Captain	Engine Cadet	Marine Engineering Cadet	Engineering Sub Group	Designated Person Ashore	Vice Principal
Organisation	Non-Governmental Organisation	International Shipping Company	N/A	Professional Representation Body	International Shipping Company	Nautical College
Module	Marine Engineering - Stability and Structure of Merchant Ships	Marine Engineering - Stability and Structure of Merchant Ships	Marine Engineering - Stability and Structure of Merchant Ships	Marine Engineering - Stability and Structure of Merchant Ships	Marine Engineering - Stability and Structure of Merchant Ships	Marine Engineering - Stability and Structure of Merchant Ships
Your Feedback - Outcome 1	#N/A	Replacing lecturers with technology will not work. Lecturers and this new software program should work together. I think that videos are also a good method of showing the impact stability can have on a vessel.	It is difficult to answer "yes" or "no" to some of these recommendations. The theory feels too abstract to be applied while at sea. It can be tough material which makes it even harder if you feel like it won't be used on a practical level.	#N/A	#N/A	#N/A
Sub-Group 1.2 Response	#N/A	Many thanks for your feedback, it has been noted.  Please be assured there is no intention to remove lecturers. The lecturers will need to demonstrate how loading computers work and much more.	Many thanks for your feedback, it has been noted.  We hope that the introduction of the practical elements, such as loading computers, will help ensure that cadets understand the practical impacts on a vessel, rather than it being an abstract concept.	#N/A	#N/A	#N/A
Your Feedback - Outcome 2	I agree with all the recommendations, but I think some mention needs to be made of automated systems in stability management. Heeling tanks and remote tank gauges are simple examples, but there is an increasing number of systems that, for example, automatically conduct a short inclining experiment to calculate GM or automatically transfer ballast to achieve a desired outcome.  Cadets should be aware of the risks associated with automated systems, and learn how to manage them in each situation (eg. sensor failure, cyber attack on computer-controlled pump systems, etc.).	#N/A	It is difficult to answer "yes" or "no" to some of these recommendations. The theory feels too abstract to be applied while at sea. It can be tough material which makes it even harder if you feel like it won't be used on a practical level.	#N/A	#N/A	More emphasis to be put on conceptualisation rather than mathematical problem solving.
Sub-Group 1.2 Response	Many thanks for your feedback, it has been noted.  Automated systems are certainly prevalent at sea and should already be covered in this outcome as they are currently relevant technology.	#N/A	Many thanks for your feedback, it has been noted.  We hope that the introduction of the practical elements, such as loading computers, will help ensure that cadets understand the practical impacts on a vessel, rather than it being an abstract concept.	#N/A	#N/A	Many thanks for your feedback, it has been noted.  We hope that the introduction of the practical elements, such as loading computers, will help ensure that cadets understand the practical impacts on a vessel, rather than it being an abstract concept.
Your Feedback - Outcome 3	#N/A	#N/A	#N/A	3.4 not available to select. 3.4 suggested is Rudder Construction. This is included in Naval Architecture unit, should be removed from Naval Architecture unit if it is to be included here	Outcome 3 - Agree needs modernisation - but to include ALL ship types - not just standard cargo ships. Heavy lift ships, barges, semi-sub etc.	#N/A

Sub-Group 1.2 Response	#N/A	#N/A	#N/A	<p>Many thanks for your feedback.</p> <p>Apologies for the missing question for 3.4, we appreciate your feedback.</p> <p>While rudders are covered in the Naval Architecture module, it is in the context of balance, resistance and stress calculations. The introduction of rudders in this outcome would cover their construction.</p>	<p>Many thanks for your feedback, it has been noted. However, we will be unable to teach every single vessel type in depth, this outcome is purely focussed on the basic ship construction.</p> <p>We are in agreement that all ship types should be covered as this is an unlimited Certificate of Competency.</p>	#N/A
Your Proposed Outcome	Just as data science and human elements need to be included throughout the syllabus, so does an understanding of automated systems, how they work (at a high level), their risks, and how to manage them.	#N/A	#N/A	#N/A	<p>More modern ships types to be included. And more practical examples - i.e loading of a container ship, not a weight in such and such a position.</p>	#N/A
Your Rationale for this outcome	<p>While automated systems such as autopilots are already widely used at sea, the use of complex automated systems is increasing, up to and including marine automated surface ships (MASS). The current training does not cover key skills such as:</p> <ul style="list-style-type: none"> <li>- identifying when there is a fault in an automated system</li> <li>- understanding how system inputs and processes affect the outputs</li> <li>- the risks of over-reliance on apparently reliable systems, and the human elements involved (complacency, trust)</li> </ul>	#N/A	#N/A	#N/A	<p>Ship types have changed considerably in a short period of time.</p>	#N/A
Your Action for this outcome	<p>Include a general module on automation awareness, including topics such as:</p> <ul style="list-style-type: none"> <li>- what is a system?</li> <li>- the relationship between inputs, processes and outputs</li> <li>- relevant terminology</li> <li>- the strengths, weaknesses and failure modes of common sensors, how the failure could impact the automated system, and how the seafarer can realise there is a problem</li> </ul> <p>In addition to the specific module, ensure that automated systems are discussed, where relevant, throughout the syllabus.</p>	#N/A	#N/A	#N/A	<p>Additional modules on non typical cargo vessels.</p>	#N/A
Sub-Group 1.2 Response	<p>Many thanks for your feedback.</p> <p>We are in agreement with your suggestions, however, they are not relevant in this module. These are already covered in the modules related to chartwork, bridge watchkeeping and cargo operations. Fault finding would be covered in the ETO syllabus.</p>	#N/A	#N/A	#N/A	<p>Many thanks for your feedback.</p> <p>We are in agreement with your suggestion and believe this has been reflected through our suggestion contextualise many of the outcomes to show how they practically apply to modern ships.</p>	#N/A
Your Proposed Outcome	#N/A	#N/A	#N/A	#N/A	<p>Modern stability software.</p>	#N/A
Your Rationale for this outcome	#N/A	#N/A	#N/A	#N/A	<p>Major changes in stability software available on most vessels, including heavy lift type vessels.</p>	#N/A
Your Action for this outcome	#N/A	#N/A	#N/A	#N/A	<p>Expansion of modules.</p>	#N/A
Sub-Group 1.2 Response	#N/A	#N/A	#N/A	#N/A	<p>Many thanks for your feedback, we are in agreement and have made this suggestion for all outcomes in this module.</p>	#N/A

Role	Designated Person Ashore
Organisation	International Shipping Company
Module	Marine Engineering - Naval Architecture (Management Level)
Your Feedback - Outcome 1	N/A
Sub-Group 1.2 Response	N/A
Your Feedback - Outcome 2	N/A
Sub-Group 1.2 Response	N/A
Your Feedback - Outcome 3	N/A
Sub-Group 1.2 Response	N/A
Your Feedback - Outcome 4	4.1 - Modernise for all ship types - offshore vessels etc, 4.7 - Update for modern vessels - azimuths etc, not just traditional rudder and propeller designs
Sub-Group 1.2 Response	Many thanks for your feedback.  Outcome 4.1 is aimed to cover all ship types already.  Many thanks for your suggestion on outcome 4.7, we have taken it onboard and will amend the outcome from "Rudders" to "Control Systems" to ensure modern systems are included.
Your Feedback - Outcomes Above and Beyond	N/A
Your Proposed Outcome	N/A
Your Rationale for this outcome	N/A
Your Action for this outcome	N/A
Sub-Group 1.2 Response	N/A

Role	Maritime Standards Manager	Vice President	Lecturer	Captain	Designated Person Ashore	Third Officer	MASTER MARINER (UNLIMITED) - MENTOR	
Organisation	Government Regulatory Body	International Shipping Company	University	Motor Yacht	International Shipping Company	National Shipping Company	Professional Representative Body	
Module	Deck - Marine Cargo Operations	Deck - Marine Cargo Operations	Deck - Marine Cargo Operations	Deck - Marine Cargo Operations	Deck - Marine Cargo Operations	Deck - Marine Cargo Operations	Deck - Marine Cargo Operations	
Your Feedback - Outcome 1	<p>1.1 whilst consideration of the use of loading computers, 'relevant software' and simulators in the teaching of this subject has its place it should not be at the expense of the traditional methods and with due regard to the fact that only an example of such calculators and software can be used. The inclusion of statutory requirements and industry guidelines is considered most desirable</p> <p>1.3 there can be no objection to relating training in this area to industry best practice with respect to 'effluent' cargo operations.</p> <p>1.5 the focus must be on the traditional methods of cargo calculations and the desirable covering of examples of loading computers, 'relevant software' and simulators within this subject must not come at the expense of providing those serving on vessels not required to carry the above with the necessary skills.</p>	#N/A	<p>Outcomes 1.1 - I totally agree with your recommendation. We need much more practical cargo related information, especially since half the students that come to the class now only have cruise ships so going experience of 6-12 months. Practical exposure to how a loadicator is used should be made a part of the curriculum (some universities do it on their own accord, but this should be a requirement).</p> <p>Outcome 1.2 - I agree, but there is a need for some improvement on this. These codes, IMO resolutions and UK SI's should be specified (for example - IMSBC Code, BLU code, etc.) so that there is some minimum level of uniformity amongst different colleges and institutions. Ro-ro safety should be added to this due to the large number of incidents that have occurred. Carriage of IMSBC Group A and B cargoes should be added due to the high level of attention it is receiving at the IMO.</p> <p>This is exigent, given that current trends show that a good number of them will work on Ro-ro ferries for a good part of their deck officer career.</p> <p>Outcome 1.3 - I agree, in addition, I would also suggest including a ship visit to a cargo loading / discharging operation, since all our universities are located within 2-4 hours driving distance of such a port, reason - it is very difficult for a cruise ship cadet to understand how tankers and dry cargo ships work cargo - as they have never stepped on one or seen one in port. Even a half day visit will help them understand these topics far better, helping them to 'make sense' of what they thereafter are taught in class.</p> <p>We want our future officers to have a better all-round knowledge of merchant navy cargo operations - even if they have and will only work on cruise ships. The above will help us achieve that goal.</p> <p>Outcome 1.4 - Needs Improvement. For example: there are a number of tanker practices (reflected in ISGOTT edn 6) which are not reflected in our current MCA SQA scope. It would be useful for the MCA to investigate and publish findings of what types of ships our cadets end up working on after they get their CoC - and then to assess if we are teaching them what they will use in their sea life. For example - many of our officers end up working on smaller dry cargo ships like the Scot Line ships - these are different in their operations from what is normally covered in the MCA syllabus and are not covered much.</p> <p>There is a need to also include CTV (Crew Transfer Vessel) and OSV (Off shore vessels - all types) into the scope of topics, as a good number of our students are sponsored by off shore companies and work on these ships.</p> <p>Outcome 1.5 - Agree completely.</p>	Without seeing the syllabus this may be a mute point however surely this should be modernised with new equipment coming out and outdated equipment no longer being used.	I have answered yes to all. However, I do believe there are some gaps in the cargo syllabus. Offshore vessels, for example, are not included or of limited mention. Supply vessels, heavy lift vessels etc all carry some additional cargo or project equipment that needs to be considered. I would include this in the modernisation of the syllabus.	#N/A	#N/A	
Sub-Group 1.2 Response	<p>Many thanks for your feedback.</p> <p>Regarding points 1.1 and 1.5, we are in agreement, the underpinning knowledge must still be covered. However, candidates must also be exposed to the equipment they will encounter onboard a vessel.</p>	#N/A	<p>Many thanks for your feedback.</p> <p>Regarding outcome 1.2, we appreciate that a list of codes, resolutions and SIs would prove useful. However, we are also mindful not to make the syllabus overly prescriptive as this can lead to issues as technology advances. We will endeavour to provide the correct balance within our academic guidance published after this consultation.</p> <p>Your suggestion regarding outcome 1.3 is a good idea and is undertaken by some colleges already. We will certainly suggest it as a useful teaching aid but cannot make it mandatory as not every college will be able to facilitate.</p> <p>While we appreciate that many UK Officers do work on multiple vessel types, such as tankers as CTVs, the UK OOW Unlimited CoC is STCW approved and allows an Officer to work on any vessel, as such all forms of cargo must be covered to allow the CoC to be classed as unlimited.</p>	Many thanks for your feedback, it has been noted.	That is indeed the correct assumption of how the syllabus should be taught. We hope that these outcomes remain flexible enough to allow for that to take place in practice.	This is already covered within the indicative content for this module and will continue to be taught. At this high level document, we are not covering specifics but this will be included in module descriptions. However, please note that the UK OOW Unlimited CoC is STCW approved and allows an Officer to work on any vessel, as such all forms of cargo must be covered to allow the CoC to be classed as unlimited and, as such, cannot become overly specific on one type of vessel.	#N/A	#N/A
Your Feedback - Outcome 2	<p>2.3 the proposed widening of this area needs to be carefully addressed and still include the principles and practice for older systems still at sea, GHG emissions. International guidelines should be covered as a reference and PIG and PFC requirements should focus on IMO guidelines and UK practice.</p> <p>2.5 ballast management training should focus on stability, stress, and the required treatment standards of ballast water and a variety of treatment systems. The use of examples of loading computers, 'relevant software' and simulators has a place in this but not at the expense of traditional methods.</p> <p>2.6 &amp; 2.7 the use of examples of loading computers, 'relevant software' and simulators has a place in this but not at the expense of traditional methods and understanding of the principles.</p>	<p>2.2 - Industry still has high level of incidents with Tank Entry, this section needs bolstering to reinforce safe operation / culture / emergency response.</p> <p>2.5 - To include Ballast Water Treatment Systems and regional environmental factors</p>	<p>I totally agree with 2.1 to 2.5</p> <p>Outcomes 2.6 and 2.7 - Loadicators for tankers - multi grade - cargo calculations - too theoretical and not of any practical use for a 3rd and 2nd officer. This is best kept for Chief Officer syllabus. It is too specialised and intricate for a person who will not even work as a 3rd officer on tankers. 90% of our students do not work on tankers as 3rd officers. Spending time learning Tanker cargo calculations and Loadicators is really a waste of their time. It is also something they find very difficult to relate to, not to mention that loadicator operation and tanker cargo calculations takes quite some time for even certified 3rd officers to actually do.</p> <p>It would be far better to use this time instead to teach them practical aspects of tanker operations, and to include Ro-ro ferry and RoPax ships - which is far more relevant to UK shipping - not to mention that accidents related to cargo operations and personal injury during cargo operations keep happening on them every few months.</p>	#N/A	<p>Outcome 2 - needs to be modernised especially for supply vessels - not just traditional cargo ships, tankers etc.</p> <p>Outcome 2.2 - COSWP is good, but basic. More detail on enclosed spaces is needed. Continued deaths and injuries supports this claim.</p> <p>Outcome 2.5 - Should include heavy lift barges etc. Heeling tanks (pax) as well as ballast systems.</p>	#N/A	2.5 - Include importance of Official Ballast Log Book, required to evidence protection of unique ecology, in different Sea areas.	
Sub-Group 1.2 response	<p>Many thanks for your feedback.</p> <p>Regarding all the outcomes you have mentioned, we are in agreement, the underpinning knowledge must still be covered. However, candidates must also be exposed to the equipment they will encounter onboard a vessel.</p>	<p>Many thanks for your feedback.</p> <p>We agree with your suggestion for outcome 2.2 and have included it in the updated module.</p> <p>The factors you have mentioned for outcome 2.5 are already covered within this outcome.</p>	<p>Many thanks for your feedback.</p> <p>We believe that this has been covered through our suggestion to teach these outcomes with a more contextualised approach, focusing on onboard practice.</p>	#N/A	<p>Many thanks for your feedback.</p> <p>Outcomes 2 and 2.5 already cover a range of vessels, including those such as supply vessels, etc...</p> <p>For outcome 2.2, we have added an extra suggestion from industry feedback to include more human element factors in this outcome. If you have any further suggestions to improve the outcome, please contact us at <a href="mailto:training@maritime.gov.uk">training@maritime.gov.uk</a>.</p>	#N/A	<p>Many thanks for your feedback.</p> <p>The factors you have mentioned for outcome 2.5 are already covered within this outcome.</p>	
Your Feedback - Outcome 3	<p>It is agreed that the teaching of this area is at present satisfactory and meets current needs</p>	<p>Include all cargo type safe operations and pertaining legislation (inc. stevedore - forklifts / car &amp; trailer loading / bunkering / working at heights - containers)</p>	<p>Agree with nearly all of these.</p> <p>For 3.1 - Please consider stating RoRo safety specifically, as this topic is not covered adequately in all colleges.</p> <p>Though the SQA Operations written exam does ask this, many students in the current streams do not have to give SQA written exams (a bad idea imho - the two SQA written papers should be mandatory for every person before they are allowed to give their MCA OOW Orals).</p> <p>For 3.7 - Suggest which emergencies they should be aware of, as there are more than 20 different types of emergencies that we can encounter on board - listed in some company SMS emergency manuals (For example - Fire, Enclosed space medical emergency, Medevac, Oil spill, DE spill on a container ship, Oil spill overboard, Oil spill on deck, Grounding, Collision, Man Overboard in port, Man overboard at sea, Mooring which failure, Crane failure - and we have not even covered half of the list).</p> <p>Perhaps you could correlate it with the kind of incidents that MAB has encountered / investigated? That would give a practical angle to what appears theoretical and far from what we will experience at sea?</p>	#N/A	<p>1.1 - Security part has changed considerably and continues to do so - see drone issues in Gulf of Aden and Norway.</p> <p>More modernisation of security parts recommended.</p> <p>3.3 - I have agreed this needs modernised. But COSWP is not all. Some flags and countries have adopted LOLER and there are class considerations.</p>	<p>Have more training on emergency response. Case studies. Performance in decision critical moments.</p>	#N/A	
Sub-Group 1.2 Response	<p>Many thanks for your feedback, it has been noted.</p>	<p>Many thanks for your feedback.</p> <p>We believe that these should already be covered by outcomes 3.2 to 3.5.</p>	<p>Many thanks for your feedback.</p> <p>We believe that RoRo vessels should already be covered adequately by colleges, outcome 3.5 covers the whole of COSWP, including the chapter regarding RoRo.</p> <p>With regards to outcome 3.7, while we appreciate that more focus could be given to more common emergency scenarios, the syllabus is not the place to deline this as these trends can change. This should be monitored by the colleges and focus applied as appropriate as per their continuous professional development requirements.</p>	#N/A	<p>Many thanks for your feedback.</p> <p>With regards to 3.1, we agree that modern security threats are covered, however the wording of this outcome already allows for these to be updated within the syllabus content.</p> <p>With regards to 3.3, LOLER is covered in the Management Level module.</p>	<p>Many thanks for your feedback, we are in agreement and have added this suggestion to outcome 3.7.</p>	#N/A	
Your Feedback - Outcome 4	<p>the above forms a useful basis but Ballast water management also links to this area.</p>	<p>To add: Awareness of all sources of overboard discharges / environmental requirements</p> <p>AV and noise pollution</p> <p>Environmental stewardship and future sustainability</p>	<p>4.2 - Suggest re-frame this as "SMPEP and SDPEP" due to a difference in these two nearly equally important topics.</p>	<p>Consider further sub-outcomes, for example on Inventory of Hazardous Materials, Ballast and Antifouling which all have specific requirements</p>	<p>4.3 - Needs modernisation. New legislation on Inventory of Hazardous Materials is now in place.</p>	#N/A	#N/A	

Sub-Group 1.2 Response	Many thanks for your feedback.  Ballast Water Management is an important topic, however, we feel it has already been covered in outcome 1.1 through our suggestion to "include statutory requirements and industry guidelines (IMO, ICS, etc...)" which would include the BWMC.	Many thanks for your feedback.  These factors will be covered within outcome 4.1 already.	Many thanks for your feedback.  SOPEP is already covered within outcome 4.1.	Many thanks for your feedback.  Ballast Water Management and antifouling are important topics, however, we feel they have already been covered in outcome 1.1 through our suggestion to "include statutory requirements and industry guidelines (IMO, ICS, etc...)".  With regards to the inventory of hazardous materials, this has been noted and we will add to the syllabus.	Many thanks for your feedback.  This has been noted and we will add to the syllabus.	#N/A	#N/A
Your Feedback - Outcomes Above and Beyond	I do not feel that the UK should move ahead of IMO and therefore do not feel that the time is right for 'Data Science Skills' to be taught as a specific topic, examined or count towards a cadet's assessment until changes to STCW are made. development of such skills may be encouraged during teaching of various elements within the training.	#N/A	Yes - below please find some suggestions - 1) Suggest add a mandatory field trip to one tanker, one ro-ro and one dry cargo terminal - organised by the sponsoring company, and guided by the training college / university staff and lecturers - so that our officers at least get to see, first hand, how cargo operations proceed on these ship types.  Reason - 80% of our current cadets never work on tankers and dry cargo ships for their 18 months of sea time. Since the above is not done currently, that means we have now landed up with more than half of our officers who have no practical idea of how cargo is loaded and discharged. Their theoretical knowledge is too shallow, as merchant shipping operations have always have a large practicality to them which is impossible to gain / learn of without going on board a ship, at least for a few hours if not a few days.  The sponsoring company is best suited to organise this, as they have ships that regularly come to ports in / around UK and have the funds to organise these trips. It will benefit the entire maritime community - most of all the cadets and future officers - as well as the companies themselves.  2) Please do send me the final decision that you all make, so that we can frame our teaching in accordance with the same - make changes as required to comply with your guidelines  3) Once your review are completed, please consider organising (through the MCA in Southampton) a half / 1 day seminar, for maritime college faculty and staff, explaining the outcomes, so that we are all on the same page, and are fully aware of what the MCA and authors intent was. That will help all universities and colleges, and hence the students who come to us for their learning.  Thank you all for this excellent consultation, your actions and work, and for this opportunity for us to give you our feedback.	Strongly agree with points 1 & 2	#N/A	#N/A	#N/A
Sub-Group 1.2 Response	Thank you for feedback, it has been noted.  This is a topic which we are looking to introduce above and beyond the requirements of STCW, in order to future proof the skills of seafarers. It will be included as a UK recommendation as part of the IMO's comprehensive review of STCW.	#N/A	Many thanks for your feedback, it has been noted.  Your suggestion regarding ship visits is a good idea and is undertaken by some colleges already. We will certainly suggest it as a useful teaching aid but cannot make it mandatory as not every college will be able to facilitate.  We believe that this has already been kept in mind through the design of the cadet phase structure with phase one being short, followed by a shorter first sea phase. The bulk of learning and seagoing service is included in Phases 3 and 4. This is not the appropriate forum to take this work forward. However, if you would like to discuss further, please email ctandm.enquiries@mcga.gov.uk  Please be advised that these templates will be converted into academic guidance templates and circulated to the nautical colleges for implementations.	Many thanks for your feedback, it has been noted.	#N/A	#N/A	#N/A
Your Proposed Outcome	#N/A	Presume the MNTB Cadet Record Training Book will reflect and align to this update syllabus? Any opportunity to create an electronic record book?	#N/A	This maybe more relevant to the Mates level however there is no exam for a Chief Mate (Y) <3000GT from an DOW ticket (only short courses and some served) so is definitely relevant in the yachting sector. There should be further expansion on management theory and interpersonal skills from the very beginning of ones career. Only by starting early can the emphasis be placed on the importance of these soft skills.	#N/A	#N/A	#N/A
Your Rationale for this outcome	#N/A	See above	#N/A	In my experience Junior Officers have an extremely varied level of awareness and ability when it comes to soft skills	#N/A	#N/A	#N/A
Your Action for this outcome	#N/A	Suggest review and implement as above	#N/A	Educate people at the start of their careers in soft skills such as leadership and personnel management	#N/A	#N/A	#N/A
Sub-Group 1.2 Response	#N/A	Many thanks for your feedback.  We can confirm that the Training Record Book (TRB) will be reviewed upon completion of the syllabus and assessment reviews, in order to reflect the updated materials. The Merchant Navy Training Board is in the process of developing an electronic TRB system	#N/A	Many thanks for your feedback.  We are in agreement and have attempted to include Human Element Factors throughout the syllabus in order to demonstrate why they are important and how they can be used in practice at sea.	#N/A	#N/A	#N/A



Role	Marine Standards Manager	Marine Standards Manager	Vice President	OOW	Third Officer	Captain	Designated Person Ashore
Organisation	Government Regulatory Body	Government Regulatory Body	International Shipping Company	International Shipping Company	International Shipping Company	Motor Yacht	International Shipping Company
Module	Deck - Management of Vessel Operations	Deck - Management of Vessel Operations	Deck - Management of Vessel Operations	Deck - Management of Vessel Operations	Deck - Management of Vessel Operations	Deck - Management of Vessel Operations	Deck - Management of Vessel Operations
Your Feedback - Outcome 1	It is necessary for training to reflect modern developments but also the traditional methods still in use on older vessels that the future deck officer and cadet may serve on. I would be reluctant to see the basis seamanship aspects of Dry Cargo operations lost.	1.1 It is necessary for the training to cover all types of general cargo vessels and whilst there is a place for including examples of Loading calculators 'relevant software' and simulation this should not be at the expense of the ability of the young officer to use first principles where such items are not available and also that there are a far wider variation of electronic aids to cargo operations then can be covered. Legislative requirements do not rely on loading calculators (except for carriage). 1.2 introduction of training in the use of electronic aids to cargo securing management and control must not be at the expense of first principles and traditional practices which are still in use.	Ensure Stowage / Packing / Segregation in sufficient depth (IMDG code etc)	#N/A	#N/A	#N/A	Modernise for heavy lifts as well - barge lift vessels.
Sub-Group 1.2 Response	Many thanks for your feedback, it has been noted.  While we are looking to modernise this outcome to include practices on board modern vessels, the underlying principles of dry cargo operations will remain.	Many thanks for your feedback, it has been noted.  While we are looking to modernise this outcome to include practices on board modern vessels, the underlying principles of dry cargo operations will remain.	Many thanks for your feedback.  This is already covered within the indicative content for this module and will continue to be taught. At this high level document, we are not covering specifics but this will be included in module descriptors.	#N/A	#N/A	#N/A	Many thanks for your feedback.  This is already covered within the indicative content for this module and will continue to be taught. At this high level document, we are not covering specifics but this will be included in module descriptors.
Your Feedback - Outcome 2	Care needs to be taken that use of loading equipment/ relevant software/ and Simulators is sufficiently generic to cover types of equipment in use and not focus on a particular type in the training college.	2.1 The rationale is fine but, whilst covering examples of the electronic aids to liquid cargo operations has its place, it should not be at the expense of the basics. I do not consider that the BMC should be within the section on Bulk Liquid cargoes in the syllabus, being equally relevant to all types of vessels it would be better potentially covered under control of pollution. Use of electronic aids to liquid cargo operations has its place but should not be at the expense of older methods and first principles. Including the other latest legislative requirements is essential. 2.2 no objection to including examples of electronic aids to liquid cargo management and control but not at the expense of first principles. current legislative requirements and best practice should form part of training in this as well as all other subjects.	#N/A	#N/A	#N/A	#N/A	Outcome 1 - Modernise for all types of liquid cargoes as well - potable water, fuel, brine, mudd etc.
Sub-Group 1.2 Response	Many thanks for your feedback, it has been noted.	Many thanks for your feedback, it has been noted.  While we are looking to modernise this outcome to include practices on board modern vessels, the underlying principles of liquid cargo operations will remain.  With regards to BMC, we agree, this is not only relevant to Bulk Liquid Cargo and we have added to Outcome 1.1 to be covered in the context of dry cargo vessels as well.	#N/A	#N/A	#N/A	#N/A	Many thanks for your feedback.  We are in agreement and these are already covered within the syllabus.
Your Feedback - Outcome 3	completely agree with the approach in all areas, however passenger control and monitoring also needs to focus on control in the wider sense such as dealing with criminal acts and Flag state responsibility.	3.2 teaching of young officers in passenger control and monitoring operations does not need to be overly focussed on emergency operations, there are also wider aspects of control and legislative aspects of the handling of passenger complaints and potential criminal and antisocial acts by and to passengers.	Ensure robust: Safe access, passenger counting (Souls on Board requirement), effective management and communication, mobility (particularly emergency). STCW requirements.	More emphasis required during cadet theory training for all passenger operations. Very small amount of legislative areas covered in regards to passenger operations. From my experience there is next to no passenger legislative theory taught in cadet college work - maybe this was college specific	Need to do more casestudies on successful pax operations in emergency.  Also emphasis the moral responsibility aspect. This country's Ship's officers have a reputation for putting passenger safety before their own. Reference David broadfoot GC	Is there any mention of the specific requirements of the yachting sector? Control of a small number of passengers is a very different scenario to crowd control, this could be in the way of a separate sub-outcome or included in 3.2. Especially when they are the Ultimate Beneficiary Owner and perceive their rights to be greater than that of "just" a passenger.	#N/A

Sub-Group 1.2 Response	Many thanks for your feedback. We are in agreement, however, these aspects are covered in the business and law module.	Many thanks for your feedback. We are in agreement, however, these aspects are covered in the business and law module.	Many thanks for your feedback. We are in agreement and have reflected this in our recommendation for outcome 3.2.	Many thanks for your feedback. This should already be covered under outcome 3.1 and also in the Business and Law module.	Many thanks for your feedback. We are in agreement and will add the use of successful case studies to outcome 3.2.	Many thanks for your feedback. While this would not be covered under passenger operations, owing to yachts not being classed as passenger vessels, this would be covered in human factors and leadership modules.	#N/A
Your Feedback - Outcome 4	Please ensure that whilst the use of loading computer, 'relevant software' and 'simulators is introduced the basis principles and ability to achieve the aim using traditional methods is retained.	4.1 agree wrt inclusion of aspects of polar operations 4.2 4.3 & 4.4 Teaching with respect to examples of electronic aids to liquid cargo calculations, stowage factors and broken stowage and draft surveys have their place as does some use of simulation but the ability to carry out such calculations from first principles in the traditional manner better aids understanding of the issues.	#N/A	#N/A	#N/A	#N/A	#N/A
Sub-Group 1.2 Response	Many thanks for your feedback, it has been noted. While we are looking to modernise this outcome to include practices on board modern vessels, the underlying principles will remain.	Many thanks for your feedback, it has been noted. While we are looking to modernise this outcome to include practices on board modern vessels, the underlying principles will remain.	#N/A	#N/A	#N/A	#N/A	#N/A
Your Feedback - Outcomes Above and Beyond	I feel that the inclusion of 'Data science skills' as an examinable topic at Cadet level is unnecessary and whilst such skills can be developed as part of cadet training the topic should not be examinable or from part of the cadet's assessment unless and until it becomes a mandatory STCW element.	Data Science Skills can be included in various areas however UK should not move ahead of IMO and therefore a specific topic which is either examinable or forms part of a cadets assessment should await STCW changes. work may usefully be carried out to cover Liquid Hydrogen Cargo within the general cadet syllabus for deck and engine departments.	#N/A	#N/A	Human element - there is a lack of command, leadership and management training and we need to make leadership training better. Perhaps consult the RN or RFA for guidance.	Human element factors can be expanded upon in vessels that normally carry passengers further.	#N/A
Sub-Group 1.2 Response	Thank you for feedback, it has been noted. This is a topic which we are looking to introduce above and beyond the requirements of STCW, in order to future proof the skills of seafarers. It will be included as a UK recommendation as part of the IMO's comprehensive review of STCW.	Thank you for feedback, it has been noted. This is a topic which we are looking to introduce above and beyond the requirements of STCW, in order to future proof the skills of seafarers. It will be included as a UK recommendation as part of the IMO's comprehensive review of STCW.	#N/A	#N/A	Many thanks for your feedback. We are in agreement that Human Element Factors should be expanded upon and are actively engaging with subject matter experts to improve this topic.	Many thanks for your feedback. We are in agreement that Human Element Factors should be expanded upon and are actively engaging with subject matter experts to improve this topic.	#N/A
Your Proposed Outcome	#N/A	#N/A	#N/A	Overall more passenger targeted theory work required during cadet college phases. A large number of UK cadets will come to work on passenger vessels and training always seemed to be cargo targeted. Particularly in the management of vessel operations unit there could be more targeted learning outcomes for passenger operations to require the colleges to deliver this. Legislation, certificates in particular are areas I've found that I'm lacking in knowledge after coming to work for a large cruise company after completing my UK Oow.	#N/A	#N/A	#N/A
Your Rationale for this outcome	#N/A	#N/A	#N/A	Cargo work in college was very useful and some transferable skills gathered, however still feel the college training was cargo bias and avoiding the passenger side of industry. Units added for more particular passenger operations would be beneficial.	#N/A	#N/A	#N/A
Your Action for this outcome	#N/A	#N/A	#N/A	Change/update in syllabus to target passenger Oow candidates.	#N/A	#N/A	#N/A
Sub-Group 1.2 Response	#N/A	#N/A	#N/A	Many thanks for your feedback. While we appreciate that many UK Officers do work on board passenger vessels. The UK OOW Unlimited CoC is STCW approved and allows an Officer to work on any vessel, as such all forms of cargo must be covered to allow the CoC to be classed as unlimited.	#N/A	#N/A	#N/A

**No feedback requiring a response was received for the module Marine Engineering - Pneumatics and Hydraulic Systems.**

Role	Second Officer	DPA	Captain	Maritime Standards Manager	Vice President	Curriculum Manager	Master	Deck Cadet	Captain	Designated Person Ashore	Third Officer	MASTER (UNLIMITED)
Organisation	National Shipping Company	National Shipping Company	Non-Governmental Organisation	Governmental Regulatory Body	International Shipping Company	Nautical College	UK Dredging	N/A	Motor Yacht	International Shipping Company	National Shipping Company	Professional Representative Body
Module	Deck - Navigational Mathematics and Science	Deck - Navigational Mathematics and Science	Deck - Navigational Mathematics and Science	Deck - Navigational Mathematics and Science	Deck - Navigational Mathematics and Science	Deck - Navigational Mathematics and Science	Deck - Navigational Mathematics and Science	Deck - Navigational Mathematics and Science	Deck - Navigational Mathematics and Science	Deck - Navigational Mathematics and Science	Deck - Navigational Mathematics and Science	Deck - Navigational Mathematics and Science
Your Feedback - Outcome 1	#N/A	#N/A	The recommendation specifies that the learning outcomes should be demonstrated on ECDIS to enable seafarers to identify the possible errors. This does not go far enough. While ECDIS is currently the main navigational system on most ships, automated systems including decision support systems and augmented reality systems are already commercially available and in use. In addition, there is a growing number of marine autonomous surface ships (MASS) in use.  The use of these automated systems, and MASS, is likely to increase in the coming years, so seafarers should learn how to work with them as aids for safe navigation.	Outcome 1. Navigation should not be based purely on ECDIS and traditional methods MUST be maintained. ECDIS aspects should only be introduced AFTER the basics have been mastered from First principles. 1.4 1.5 & 1.6 being able to use ECDIS for these calculations and recognise errors is important. BUT understanding from first principles and the ability to perform the calculations in a traditional manner must not be lost. I would not support a move away from the latter to the former.	Add: Route Optimization	I totally agree with outcome 1, and although I have said no for some outcomes, it isn't strictly a no.  What I am asking is, assuming paper charts are going to be fully removed, how will this training take place. A modern ECDIS will work out your 'rhumb lines' 'great circles' and all other things, so I would agree that it is important to understand these terms and what they mean, but how necessary is it, moving forward, to be able to construct them?  Again, for ETA calculations, ECDIS works this out for the user. Would it be better for the user to understand this, and set up their ECDIS in a proper manner to ensure there ECDIS is correct based on required speeds throughout the journey, then a simple speed/distance/time mental maths verification by the user to make sure the ECDIS is accurate.  I don't see the relevance of a long winded process of working out ETA's speed requirements etc when modern methods remove this element. Maybe MGN 379 should also be amended about over reliance of ETA's etc?  If we are to modernise, then should we not be doing what happens on a ship rather than teaching methods which may no longer have the relevance that they once did have.	#N/A	Morse Code seems to be very outdated for the most part.	#N/A	#N/A	#N/A	#N/A
Sub-Group 1.2 Response	#N/A	#N/A	Many thanks for your feedback.  While MASS is certainly an important topic and will have an impact on the future of shipping, we do not think it is currently the right time to include this topic within this module. While it could certainly be mentioned, we believe there is not currently the background information to add an entire module on MASS, however, we expect this to be developed as further information is produced.	Many thanks for your feedback.  We are in agreement and believe this is reflected in our action required section.	Many thanks for your feedback, it has been noted.  This is certainly a relevant subject, however, it is covered in the Marine Passage Planning module.	Many thanks for your feedback.  We are in agreement with your point regarding covering topics no longer relevant at sea.  The intention for teaching this module is to provide seafarers with knowledge of the basic principles of these calculations and how they are relevant to onboard processes. This will allow for crosschecking of automatic calculations. We are placing an emphasis on the use of ECDIS and the basic calculations could be used for cross checking and in a contingency situation.	#N/A	Many thanks for your feedback, it has been noted.  However, please note that Morse Code is not covered in this module.	#N/A	#N/A	#N/A	#N/A
Your Feedback - Outcome 2	#N/A	#N/A	#N/A	the inclusion of magnetic compass maintenance is a positive step. Otherwise the subject is being adequately covered at present for junior Officers.	Agree BASIC theory only.	All still relevant and agree with these outcomes	#N/A	#N/A	#N/A	#N/A	#N/A	2.2: - Include knowledge of placing 'hard' & 'soft' iron correctors, in correcting both Ship's Deviation & Earth's Variation, respectively, in order to understand what Compass Adjuster is doing. Include requirement for proper stowage, away from Bridge, of spare Magnetic Compass bowl.
Sub-Group 1.2 Response	#N/A	#N/A	#N/A	Many thanks for your feedback, it has been noted.	Many thanks for your feedback, it has been noted.	Many thanks for your feedback, it has been noted.	#N/A	#N/A	#N/A	#N/A	#N/A	Many thanks for your feedback, it has been noted.  As per the rationale, we believe that an OOW should understand the basic knowledge to assist and understand the work of a compass adjuster. The topics you have mentioned would fall into this description.
Your Feedback - Outcome 3	#N/A	#N/A	#N/A	3.3 the amendments with respect to the training in recognition and response to Gyro errors is considered desirable	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Sub-Group 1.2 Response	#N/A	#N/A	#N/A	Many thanks for your feedback, it has been noted.	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Your Feedback - Outcomes Above and Beyond	Programmes to determine compass error - this appears to replace a key component of competent bridge watchkeeping and celestial navigation. Can it really be the case that an effective lookout is maintained whilst using a computer programme? I have never encountered a licensed compass error software in 15 years as a Deck Officer. Occasionally I have come across ship-generated excel spreadsheets which show the azimuth of a selected celestial object, but I always thought that the skill should be retained by regularly practicing it. And if we regularly practice manual calculations, why do we need computer assistance for a simple calculation? Also, I don't agree that compass error programmes are prevalent on modern vessels - at least not on the 15+ ships I have been on. If this outcome was to be included in the curriculum, I suggest it is limited to an overview of the existence of such programmes, rather than practice tuition on how to use them. A far better use of time would be teaching students how to effectively use star charts, diagrams and other sources of information to determine which celestial body was being observed.	#N/A	#N/A	'Data Science Skills' should not become a separate examinable or assessable topic unless and until a change is made to STCW. They can be developed informally within relevant subject training. Inclusion of knowledge of and training in alternative forms of compass is considered desirable even prior to formal SOLAS approval. The knowledge of electronic aids to calculate compass error can be included but not at the expense of calculation manually. It does not need to be part of the formal syllabus	#N/A	If a compass is not SOLAS approved, why does it need to be in the syllabus? Most ships have a magnetic log and gyro, fibre optic compasses where meant to be the 'next big thing' over 10 years ago, but to my knowledge, haven't really taken off. When I ask my students if they have sailed with a fibre optic compass, 99.9% of the time it's a no. Quite often people haven't even heard of it.  Regarding programmes to determine compass error, I am 100% behind this. This is the modern way and unfortunately, celestial navigation is never used on ships, save for an eager cadet who needs it signing off. I believe that celestial should be removed and modern software programmes used such as 'nav pac'	Using software to determine azimuth and amplitude increases the risk that the Cadet / junior officer will be unaware of any significant changes to the errors, potentially identifying it as a calculation error rather than a compass error. Whilst acknowledging that the need and requirement to use all onboard software is a natural development, to remove the manual calculations required to determine an error may erode the core knowledge and understanding of the cadet in future development.	#N/A	I would also include a short section on why having 3 gyro compasses is safer due to the assessment on which gyro has the error in the event of a failure, (can be copied from the DP syllabus from the NI)  The calculation software will always be taught onboard as a more practical alternative and would negate the need for manually working out the required information leading to skill fade. Each ship is likely to use different software and apps and so it would be very difficult for the colleges to keep up to date and ensure relevance	#N/A	Software used on my ship is admiralty NAV pac	#N/A
Sub-Group 1.2 Response	Many thanks for your feedback, it has been noted.  While we agree that there is a need to cover the underlying calculations for celestial navigation, and these will still be taught, the response from the industry consultation has indicated that the introduction of calculation software would be desirable.	#N/A	#N/A	Thank you for feedback, it has been noted.  This is a topic which we are looking to introduce above and beyond the requirements of STCW, in order to future proof the skills of seafarers. It will be included as a UK recommendation as part of the IMO's comprehensive review of STCW.	#N/A	Many thanks for your feedback, it has been noted.  While we appreciate that non-SOLAS approved compasses are not necessary to be covered by STCW, we believe that by adding this outcome it will allow us to cover any future developments to North-finding technology, therefore futureproofing the syllabus.  Many thanks for your support with regards to calculation software.	Many thanks for your feedback, it has been noted.  While we agree that there is a need to cover the underlying calculations for celestial navigation, and these will still be taught, the response from the industry consultation has indicated that the introduction of calculation software would be desirable.	#N/A	Many thanks for your feedback, it has been noted.  While we appreciate your feedback, the intention of this module is to cover the principles of compasses and the relevant calculations, regardless of the number of gyrocompasses on board. Anything specific to DP would be covered within the specific DP course, as you have mentioned.	#N/A	Many thanks for your feedback, it has been noted.	#N/A
Your Proposed Outcome	#N/A	Whilst the mathematical and technical element of the subjects covered in this module are necessary to a general level of understanding, we must try to ensure that the requirement to study these topics is not to the detriment of cadets who, although not numerically or technically literate to a high degree, would otherwise make competent and capable Bridge Officers.	Just as data science and human elements need to be included throughout the syllabus, so does an understanding of automated systems, how they work (at a high level), their risks, and how to manage them.	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Weather routing, fuel consumption - planning, effects and impacts - environmental awareness and cost savings.	Do Not discontinue traditional navigation. It still has its uses. We use vertical sextant angles to check ships position when anchored off Shoreham using the power station.  Also include simulator time and helping cadets manage a watch. Navigation, traffic, GMDSS, log book, brm and etc. This will best be achieved if sim time is part of the normal syllabus apart from NAEET.	#N/A
Your Rationale for this outcome	#N/A	As above.	While automated systems such as autopilots are already widely used at sea, the use of complex automated systems is increasing, up to and including marine automated surface ships (MASS). The current training does not cover key skills such as: <ul style="list-style-type: none"><li>- identifying when there is a fault in an automated system</li><li>- understanding how system inputs and processes affect the outputs</li><li>- the risks of over-reliance on apparently reliable systems, and the human elements involved (complacency, trust)</li></ul>	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	More focus on environmental savings, less emissions through good passage planning, weather routing.	We will produce better navigational officers as a result.	#N/A
Your Action for this outcome	#N/A	-	Include a general module on automation awareness, including topics such as: <ul style="list-style-type: none"><li>- what is a system?</li><li>- the relationship between inputs, processes and outputs</li><li>- relevant terminology</li><li>- the strengths, weaknesses and failure modes of common sensors, and how it could impact the automated system</li></ul> In addition, ensure that automated systems are discussed, where relevant, throughout the syllabus.	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Additional module to discuss environmental impacts, ways to improve passage efficiency.	Sim time Carrying on teaching traditional NAV.	#N/A

Sub-Group 1.2 Response	#N/A	<p>Many thanks for your feedback, it has been noted.</p> <p>We are moving the emphasis of this module towards the use of calculation software, however, we believe that the first principles of calculation must still be covered.</p>	<p>Many thanks for your feedback.</p> <p>We are in agreement with your suggestion, however, they are not relevant in this module. These are already covered in the modules related to chartwork, bridge watchkeeping and cargo operations.</p> <p>Fault finding would be covered in the ETO syllabus.</p>	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	<p>Many thanks for your feedback.</p> <p>We are in agreement that these topics should be covered, however, they are already included in the Marine Passage Planning, applied marine meteorology and Chartwork modules.</p>	<p>Many thanks for your feedback.</p> <p>We are in agreement that these topics should be covered, however, they are already included in the Celestial Navigation and Bridge Watchkeeping modules. We have suggested the use of simulators to enhance teaching at appropriate points throughout the syllabus. In addition, there is an ongoing pilot project for the introduction of more simulator time as part of the cadet training programme.</p>	#N/A
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