



Proposal on Amendments to STCW&MLC due to MASS

Vitamin Sea



Contents

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- 2 Facts about the Seaman Law
- 3 Status of Seafarer & Captain
- 4 The Amendment of the International Agreement



MASS

Definition

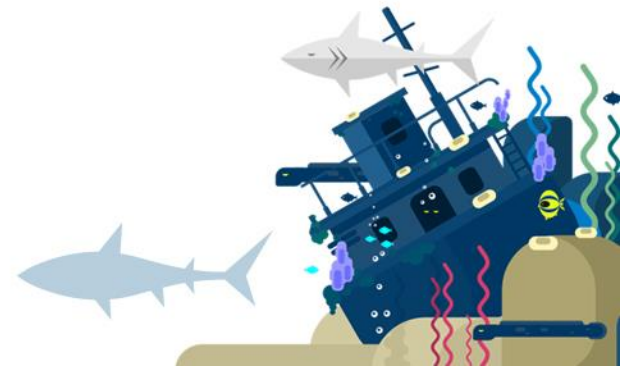
- ship that can operate without human interaction, AI & sensors

Usage

- coastal ferries, trade ships
- military purposes
- marine science surveys, marine exploration
- maritime transportation

Immense Technological Development

+ Development of Laws & People





Why necessary?

Autonomy

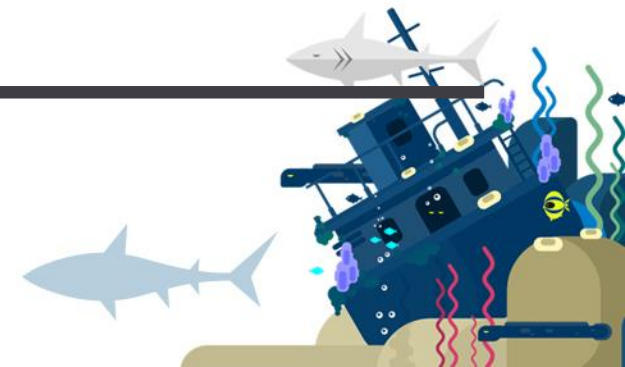
- Necessity for the maritime industry
 - Technology developing rapidly
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Problem

- past- captain in charge
 - now- shore-based operators can control ship: need acknowledgement
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Need of Discussion

- IMO is evaluating need to modify regulations
 - revision of regulations needed
-





Current Problems of MASS

The Development of MASS

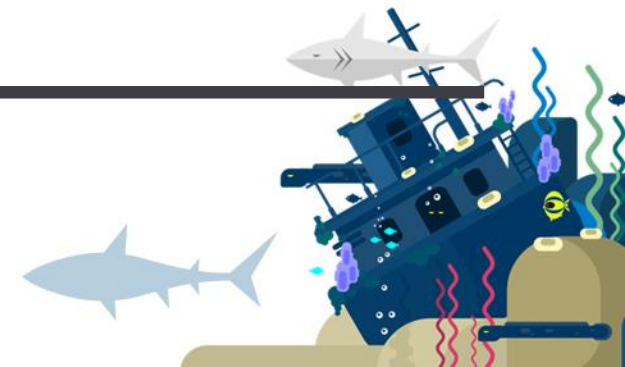
Problems

Workforce

- Employment
 - Education
 - Lack of Professional Forces
-

Responsibility

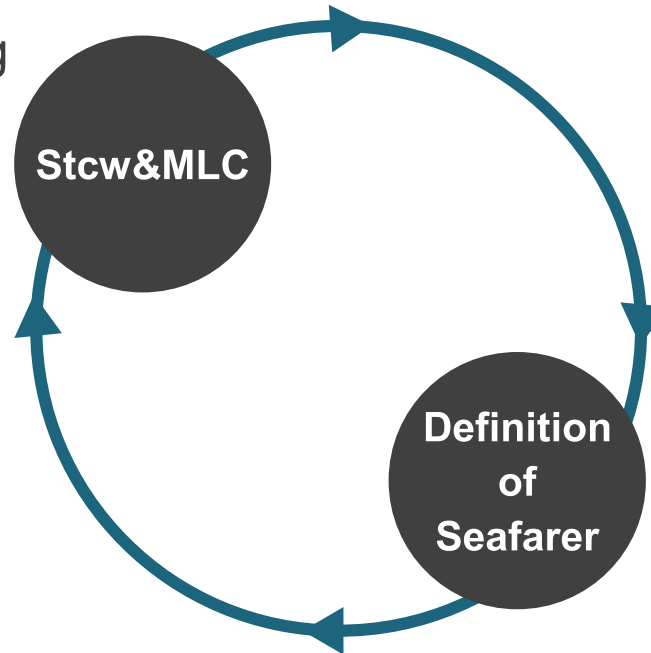
- Compensation of Damage
 - Ambiguity of who will take responsibility
-





Definition of Seafarer

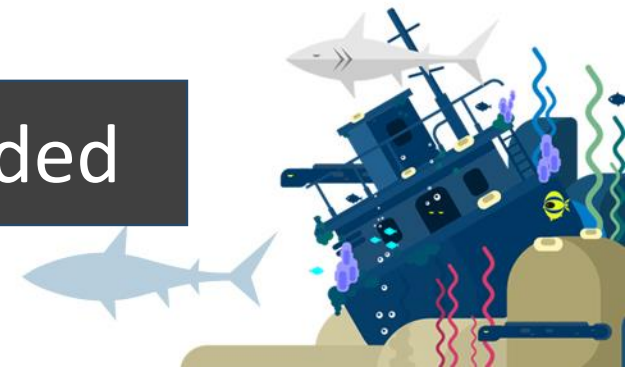
- The duty of seafarer
- Provide proper training
- Education programs



- Who does it apply to?

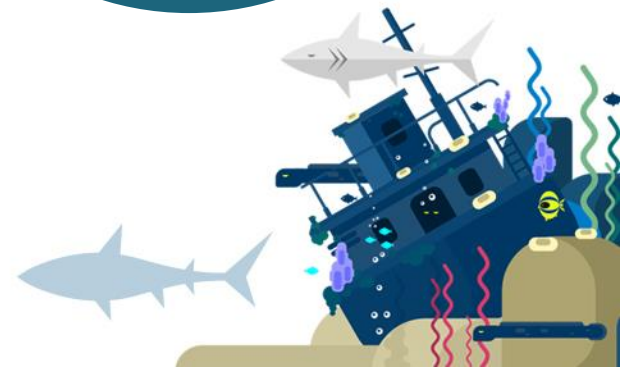
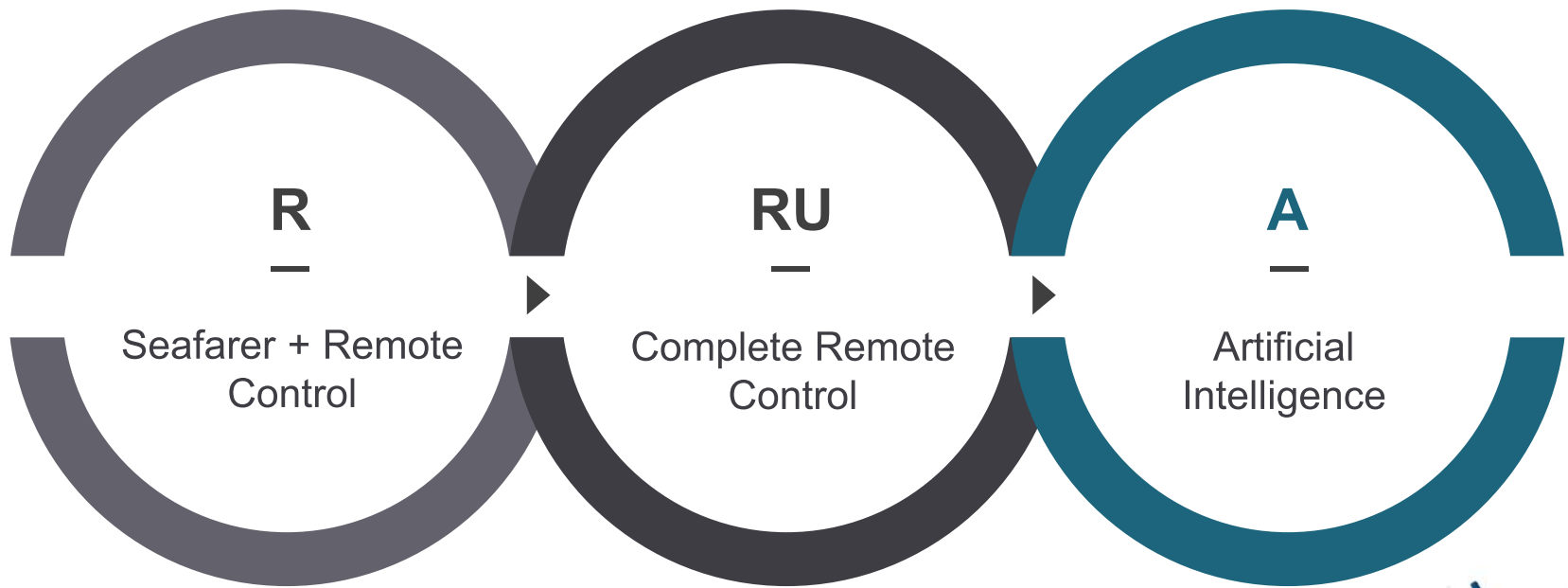
- New definition of seaman
- Renew the training
- Recreate regulations

Amendment of law is needed





Stages of MASS





Status of Seafarer



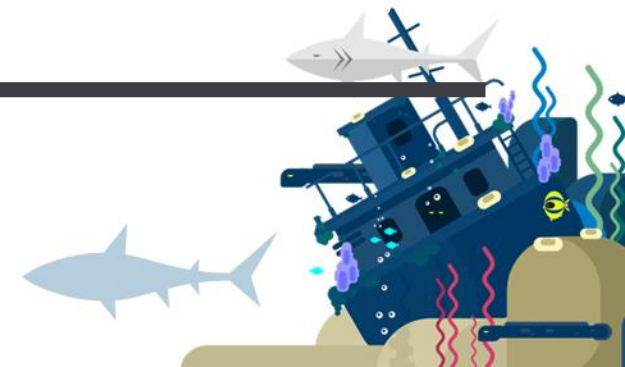
Seafarer's Status of Remote Control Operator on Land

Denial

- Definition of sailor at STCW and MLC
 - 'on board' is an absolute requirement
-

Acknowledgment

- Existing convention is outdated
 - Duty of the sailor is transferred from sea to land
-





Proposal 1. 'Seafarer' Status

Modification of STCW/MLC

Grant 'seafarer' status to
Remote Control Operators

New Qualifications

+ ICT, Knowledge of Deck
& Engine

Regulate under **STCW**
Chapter 5

Education

Re-education of original
seafarers

Education for new recruits





Proposal 1. 'Seafarer' Status

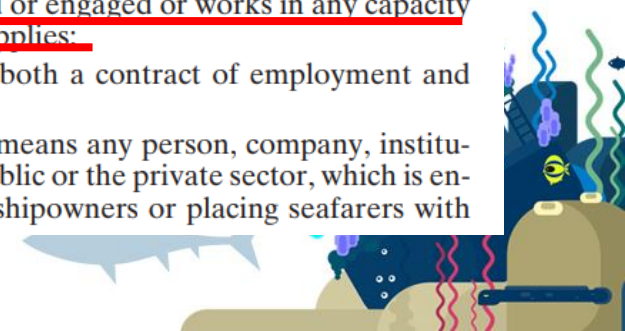
Article III

Application

The Convention shall apply to seafarers serving on board sea-going ships entitled to fly the flag of a Party except to those serving on board:

- a. warships, naval auxiliaries or other ships owned or operated by a State and engaged only on governmental non-commercial service; however, each Party shall ensure by the adoption of appropriate measures not impairing the operations or operational capabilities of such ships owned or operated by it, that the perso
of the Convention so far as is reasonable
- b. fishing vessels;
- c. pleasure yachts not engaged in trade;
- d. wooden ships of primitive build.
- (b) *declaration of maritime labour compliance* means the declaration referred to in Regulation 5.1.3;
- (c) *gross tonnage* means the gross tonnage calculated in accordance with the tonnage measurement regulations contained in Annex I to the International Convention on Tonnage Measurement of Ships, 1969, or any successor Convention; for ships covered by the tonnage measurement interim scheme adopted by the International Maritime Organization, the gross tonnage is that which is included in the REMARKS column of the International Tonnage Certificate (1969);
- (d) *maritime labour certificate* means the certificate referred to in Regulation 5.1.3;
- (e) *requirements of this Convention* refers to the requirements in these Articles and in the Regulations and Part A of the Code of this Convention;
- (f) *seafarer* means any person who is employed or engaged or works in any capacity on board a ship to which this Convention applies;
- (g) *seafarers' employment agreement* includes both a contract of employment and articles of agreement;
- (h) *seafarer recruitment and placement service* means any person, company, institution, agency or other organization, in the public or the private sector, which is engaged in recruiting seafarers on behalf of shipowners or placing seafarers with

Maritime Labour Convention, 2006





Comparison: UAV vs MASS

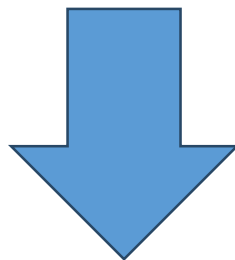


Operator Certification & Responsibilities

Pilot > Operator

FAA certified Aviation Knowledge Test

Re-evaluation every 2 years



New STCW should include:

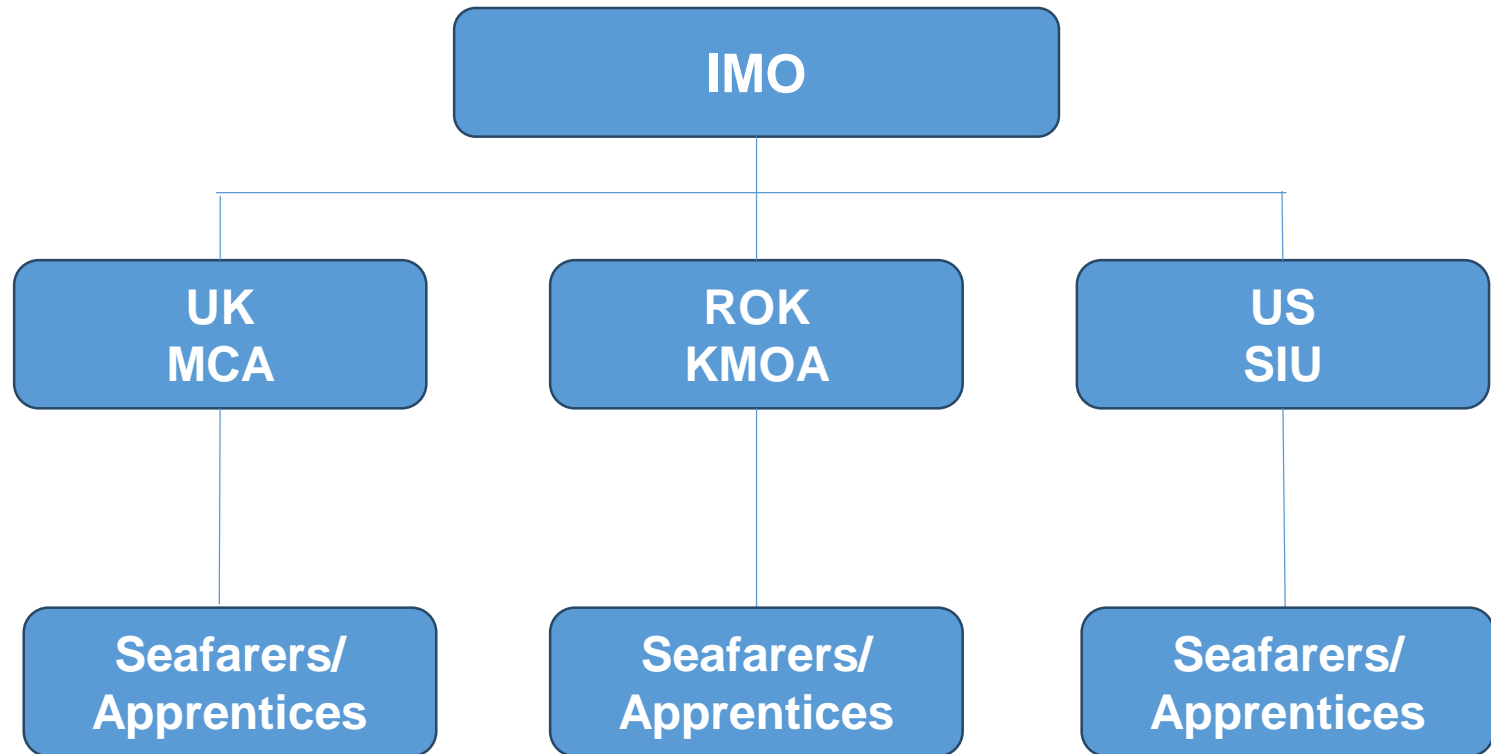
Education Model

Examination recognized by the agencies of each country or International Certifications (CCNA)

Re-evaluation every 2 years



Education Model





STCW: Present

Qualification of seaman

Navigation

Cargo handling
and stowage

Controlling the
operation of the
ship and care for
persons on board

Marine
engineering

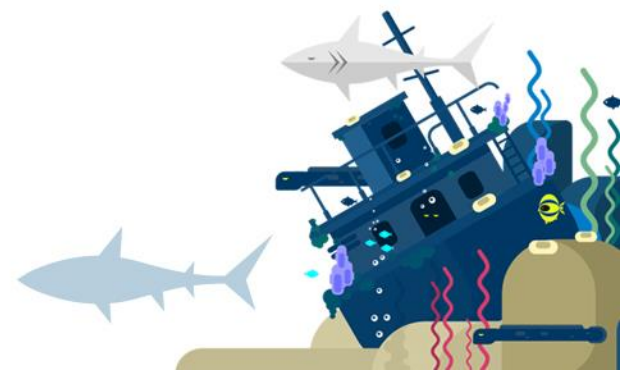
Electrical,
electronic and
control
engineering

Maintenance
and repair

Radiocommunic
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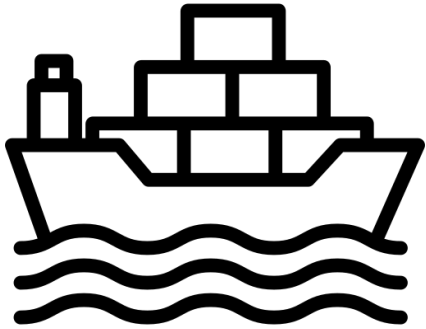
+

ICT

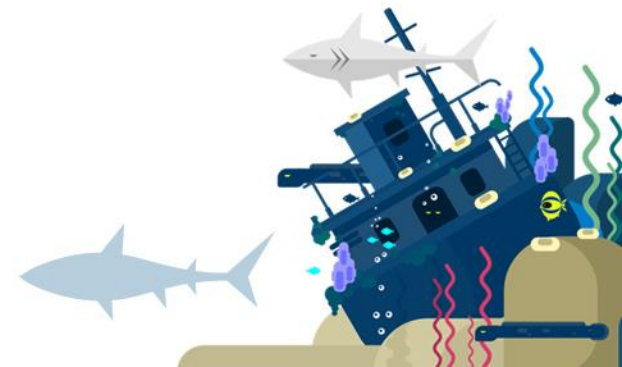
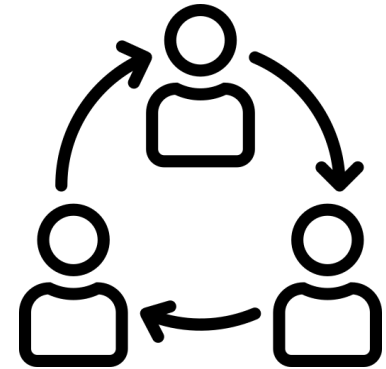




Proposal 2. Revision of MLC



**Remote control
Operator**





References

1. Lim Yo Jun, Lee Yoon Chul. (2018). Issues of IMO Convention on Maritime Autonomous Surface Ship and Its Implications on the Application of Maritime Law. Law Review, 18(3), 155-181
2. International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978
3. Maritime Labour Convention, 2006
4. Choi Yoon Won. (2018) A Study on the Change of the Role of Deck Officer in Maritime Autonomous Surface Ships(MASS) by Analysis of Standards of Competence.
5. Kim Chang Kyun.(2019) Study on Maritime public law system regarding MASS, <http://www.riss.kr/link?id=T15362852>





Thank you

