UK Maritime Policy

"Regulation lags behind technology"

"There is an industry desire for regulatory action to be taken"

"We need a regulatory framework"

**Aims of Maritime 2050**

- Strengthen reputation for maritime innovation
- Clean maritime growth
- Grow maritime workforce and transform their diversity, and
- *Introduce legislative framework for MASS*
Supporting industry now...
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Regulatory Developments

The Workboat Code
Edition 2 - Amendment 1
The safety of small Workboats and Pilot Boats - a Code of Practice

Future of transport regulatory review consultation:
Maritime autonomy and remote operations

September 2021
“Remotely Operated Unmanned Vessel (ROUV)” means a vessel with no persons on board, that is operated from a location remote to the vessel.

“Remote Operation Centre (ROC)” means either a shore-based location which is permanent or mobile or a manned vessel from which a ROUV is operated.

“Remote Operator” means any person, including the Master, with recognised or certifiable experience who is engaged in the remote operation of a ROUV.
Transport Bill

Update primary legislation

- all sizes of MASS
- Remote Operation Centres
- Autonomous Underwater Vehicles
- software used to operate MASS
- Ports and Harbours regulations

Challenges

- Terminology
- Jurisdiction
Terminology

Dilemma 1: Is MASS a ship?
- If yes, then powers to create regulation and to regulate MASS already exist
- but, would “vessel” cover innovative designs?
- considering inclusion of the term “craft”

“ship

includes every description of vessel under navigation”

Dilemma 2: USV, MASS or autonomous ship?
- must cover fully autonomous and remotely operated (and the range between the two)
- no clear line between a ship and a MASS

“automated ship

A ship capable, for some or all of the time, of navigating, or being navigated, otherwise than by a person on board.”
Roles

“Remote Master

In relation to an automated ship a person (except a pilot) who has command or charge of the ship without being on board”

“Remote Operator

In relation to an automated ship means a person who is employed or engaged to control by electronic means any way in which the ship operates without being on board the ship”

Dilemma 3: Seafarer or not?

- MLC applies to seafarers on commercial, seagoing ships.
- Financial implications
- Sea-time and revalidation of certificates
- Local Health and Safety requirements

UK approach: Remote operators and Remote Masters are not seafarers.

Equivalent powers to ensure training, manning, and support for these roles is equivalent to those at sea.
Dilemma 4: ROCs: home or away?
- Defining a ROC in primary legislation?
- Power to regulate the safety of MASS and their operation (either remotely or via software)
- Support industry and technology

Dilemma 5: Enforcement overseas?
- Use powers already in place for enforcement
- Considering data location and accessibility
Conclusions

- MASS are ships
- Where possible use current powers
- Terminology being considered:
  - “automated ship”
  - “remote operator”
  - “remote master”
- ROUV regulations are ready