

# **The Relevance of a MASS Code for Maritime Law Enforcement (MLE)**

**IMO Seminar on Development of a Regulatory Framework for MASS**  
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# Autonomous ships and maritime security

## *A double-edged sword*

reduce lawlessness  
at sea



enforcer MASS

augment capabilities,  
effectiveness and  
reach; reduce costs

important tool to  
enforce law at sea

provide criminals  
with cutting edge



offender MASS

perpetrators no longer  
on board: lowers their  
risks

attractive tool to  
commit crimes at sea

# Autonomous ships and maritime crime

## *The example of smuggling and trafficking offenses*

### Drug smuggling: Underwater drones seized by Spanish police

By Leo Sands  
BBC News

🕒 4 July



Spanish police released this video of drones

Source: <[www.bbc.com/news/world-europe-62040790](http://www.bbc.com/news/world-europe-62040790)>

# Autonomous ships and maritime crime

## *The example of smuggling and trafficking offenses*



transporting illicit  
cargo along licit cargo:  
drugs, illegally traded  
weapons, sanctioned  
goods, ...

Source: <[www.laserfocusworld.com/detectors-imaging/article/14281772/the-eyes-of-a-ship-part-2-ir-detection-at-sea](http://www.laserfocusworld.com/detectors-imaging/article/14281772/the-eyes-of-a-ship-part-2-ir-detection-at-sea)>

# Rules on law enforcement at sea

*Assumptions on which they rest no longer met with MASS 3/4*

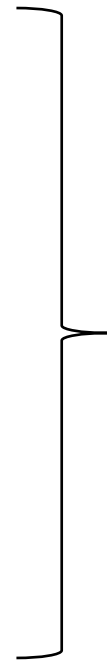
rules on MLE  
assumptions



perpetrators on board

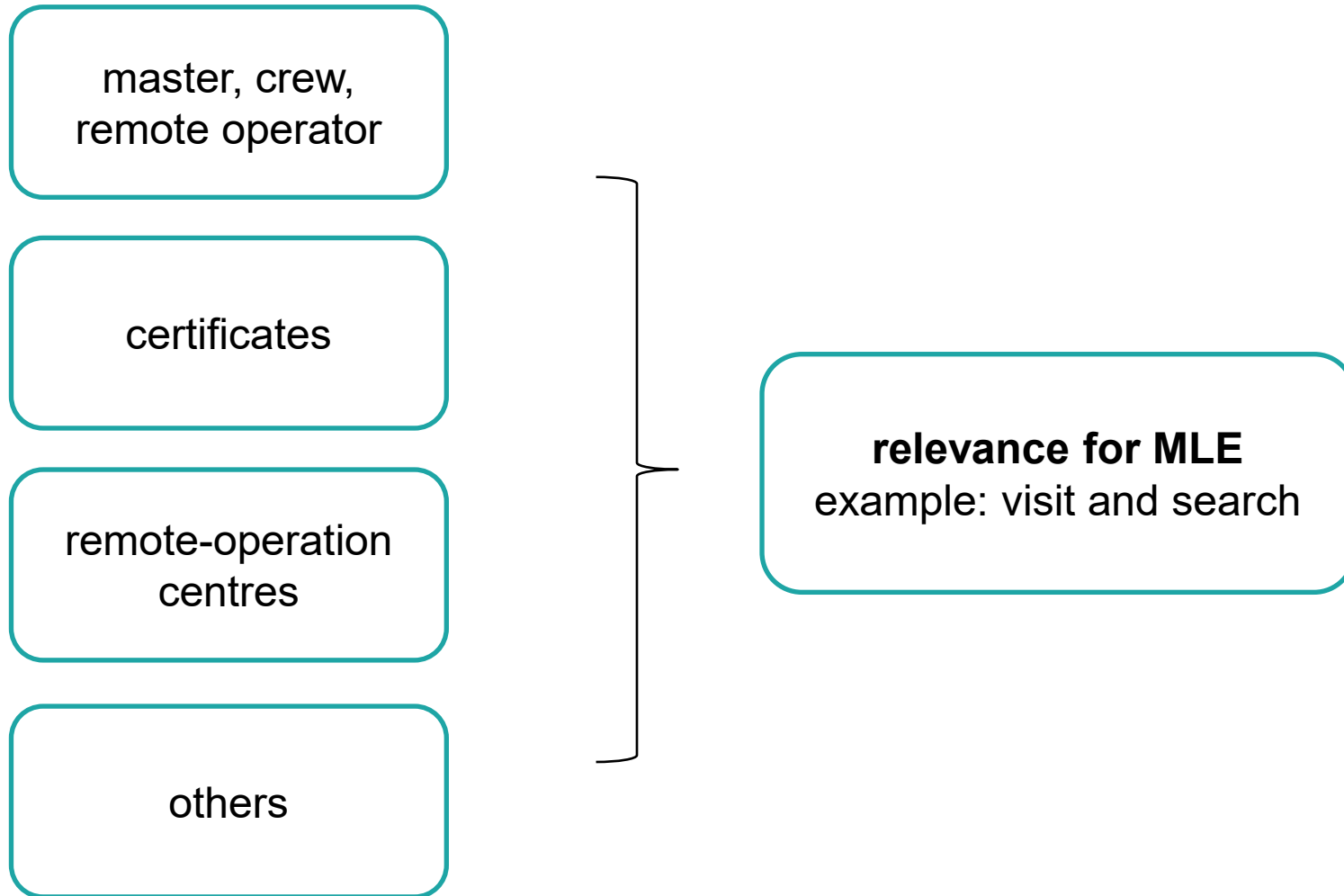
human-human encounter  
between suspects and  
enforcers at sea

direct communication  
exchange of documents



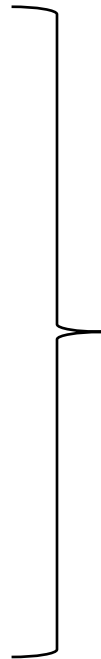
**MASS level 3 and 4  
no onboard crew  
assumptions no  
longer met**

# **MASS Code does not directly deal with MLE...** *... but its transversal issues are highly relevant for MLE!*



# Master, crew and remote operator

*How to hail, stop or warn a MASS?*



**MASS**  
new technologies and channels

# Master, crew and remote operator

*With whom do enforcers interact to hail, warn, stop a MASS?*

**traditionally**

master is person “in charge”  
on board the ship



**MASS**

new allocation of tasks  
some actors on dry land



Who is the interlocutory of  
MLE authorities?

- ❖ Who performs role of master?
  - ❖ Split role of master?
  - ❖ Natural or legal person?
  - ❖ Residual on-board crew?



# Certificates

## Assumptions underlying rules on visit and search of ship

physical documents

MASS  
e-certificates

visit and search on  
board the ship

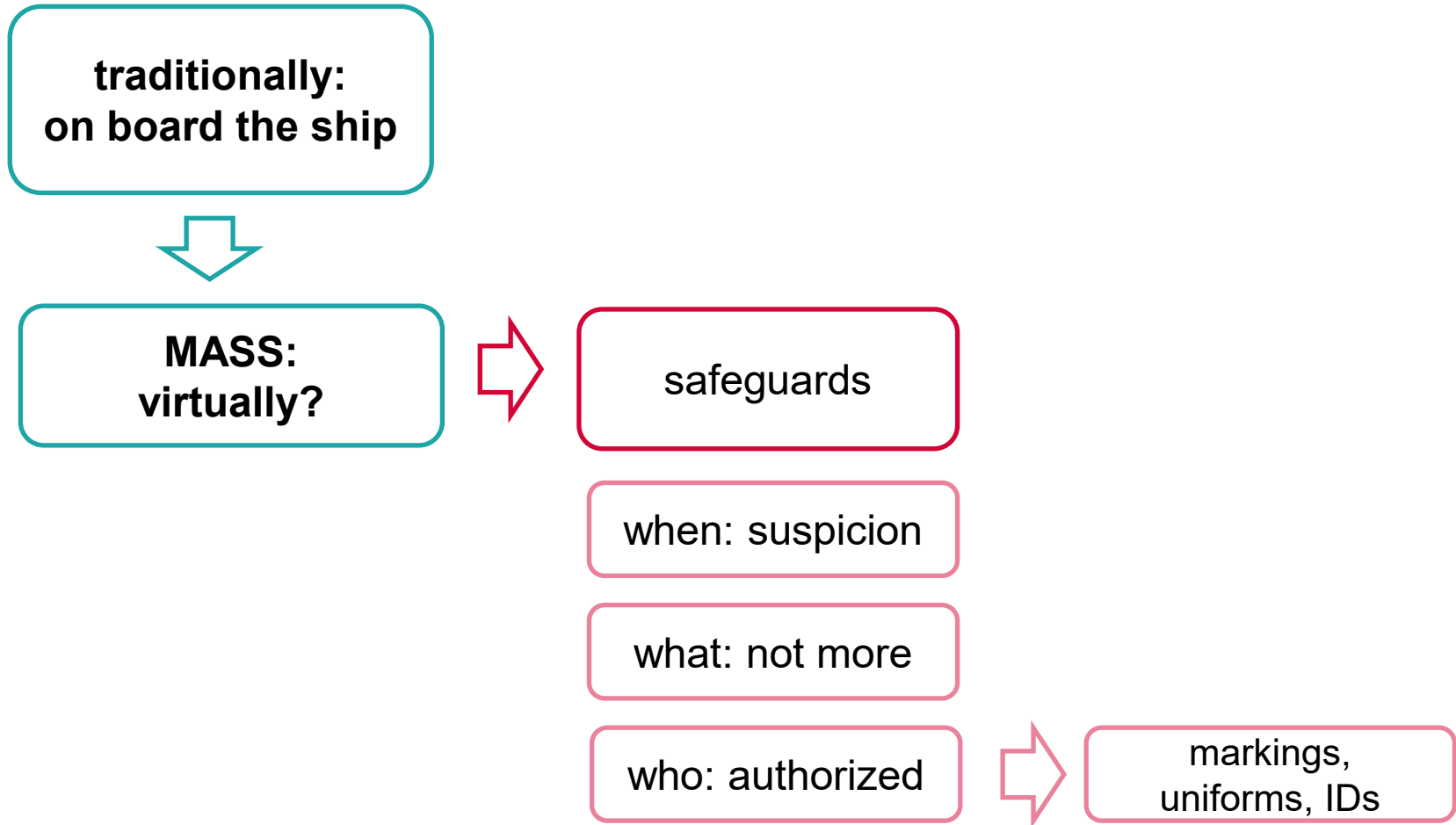
operational and  
security issues

UNITED STATES DEPARTMENT OF COMMERCE  
BUREAU OF NAVIGATION  
Certificate of Registry  
BY PURSUANCE OF CHAPTER ONE, TITLE XENET, Section 27  
"Regulation of Commerce and Navigation," Revised Statutes of the United States.  
William A. Robinson, Jr., Treasurer, of Massachusetts  
having taken and subscribed the oath *required by law and having sworn* that  
William H. Tapp, registered, a corporation duly organized under  
the laws of the State of Massachusetts, and having its usual place  
of business in South Dartmouth, Massachusetts  
ALL IN FULL COMPLIANCE WITH  
SECTION 27  
OF THE ACT OF OCTOBER 3, 1917, CH. 108, SEC. 1023, AS AMENDED.  
OF THE VESSEL CALLED THE *Charles J. Morgan* of *New Bedford, Mass.*  
whereof *William H. Tapp* is or was master and is a Collector of the United States, and that  
he was first registered on the *15th* day of *October* 1905 at *New Bedford, Mass.* and  
as appears by *Permanent Register No. 2* issued at *New Bedford* the *15th* day of *October* 1905  
and *said* register  
having verified that the said vessel is a ship  
that she has  
ton *106* length *106* breadth *27* and a *single* masted *single* masted  
her register length is *106* feet her register breadth is *27* feet her register depth is *17* feet  
her height is *17* feet that she measures as follows:  
Capacity under tonnage deck *315* 75  
Capacity between Decks above tonnage deck  
Capacity of hold below the upper Deck viz: *27* *17* *17*  
Deductions under Section 4122, Revised Statutes as amended:  
Gross space *15.69* Masthead cabin *15.69*  
Steering gear *15.69* Masthead cabin *15.69*  
Giant house *15.69* Masthead cabin *15.69*  
Storage of mail *15.69* Masthead cabin *15.69*  
Total Deductions *15.69*  
Net Tonnage *299*  
The following described spaces, and no others, have been omitted, viz: *Forecast and foremast hall* *open deck* *open deck*  
and *open deck* *open deck* *open deck* *open deck* *open deck* *open deck* *open deck* *open deck* *open deck* *open deck*  
light and open over foremast foremast *open deck* *open deck* *open deck* *open deck* *open deck* *open deck* *open deck* *open deck* *open deck* *open deck*  
masthead cabin *open deck* *open deck* *open deck* *open deck* *open deck* *open deck* *open deck* *open deck* *open deck* *open deck*  
and the vessel  
above specified appearing below and vessel has been duly registered at this date  
Given under my hand and seal at the City of *New Bedford* this *15th*  
day of *November* *1905* in the Year One thousand Nine hundred and *Five*  
Register of Vessels Deputy

Source: <<https://research.mysticseaport.org/item/I029400/#>>

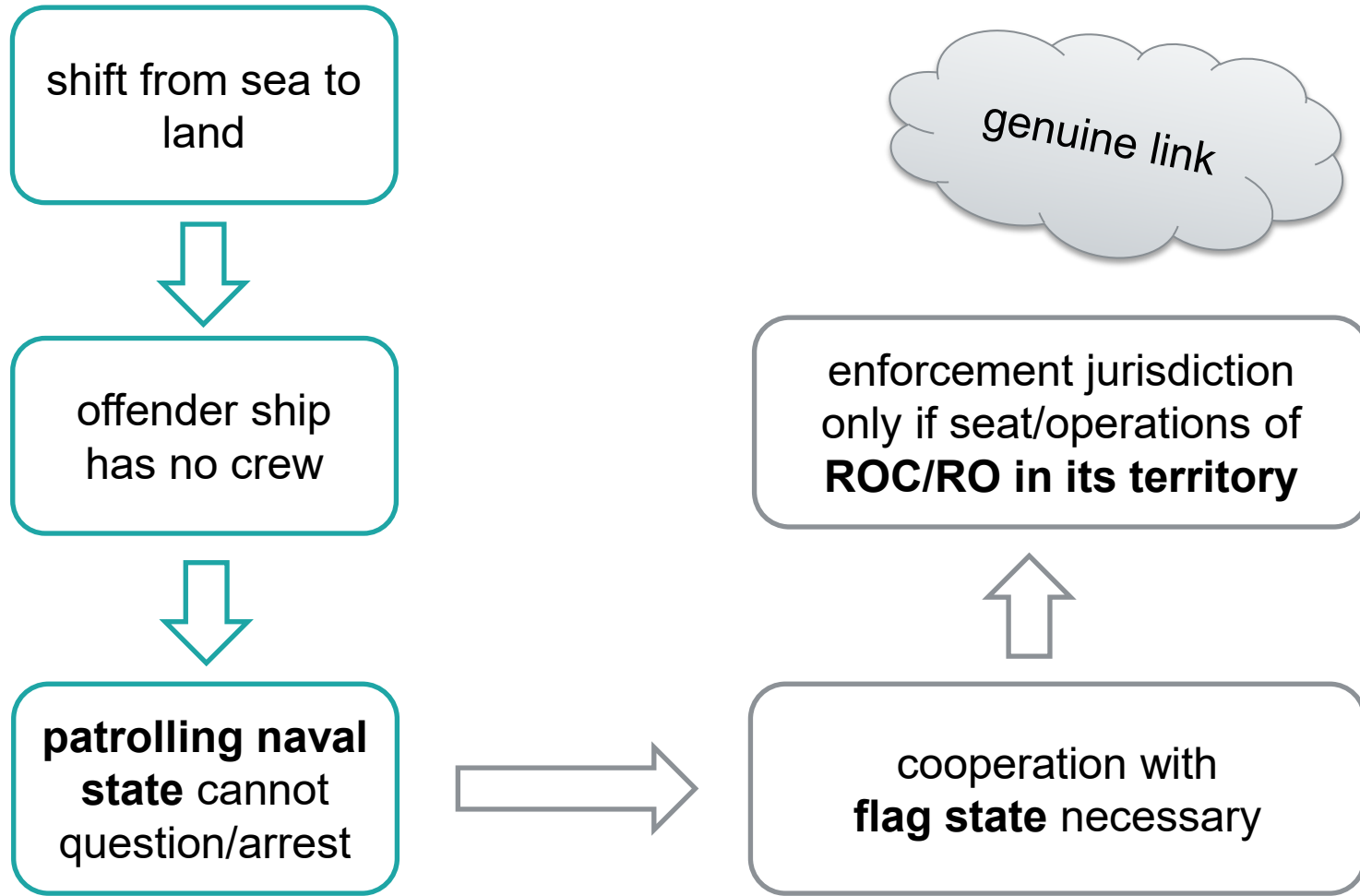
# Certificates

*Virtual rather than physical visit and search?*

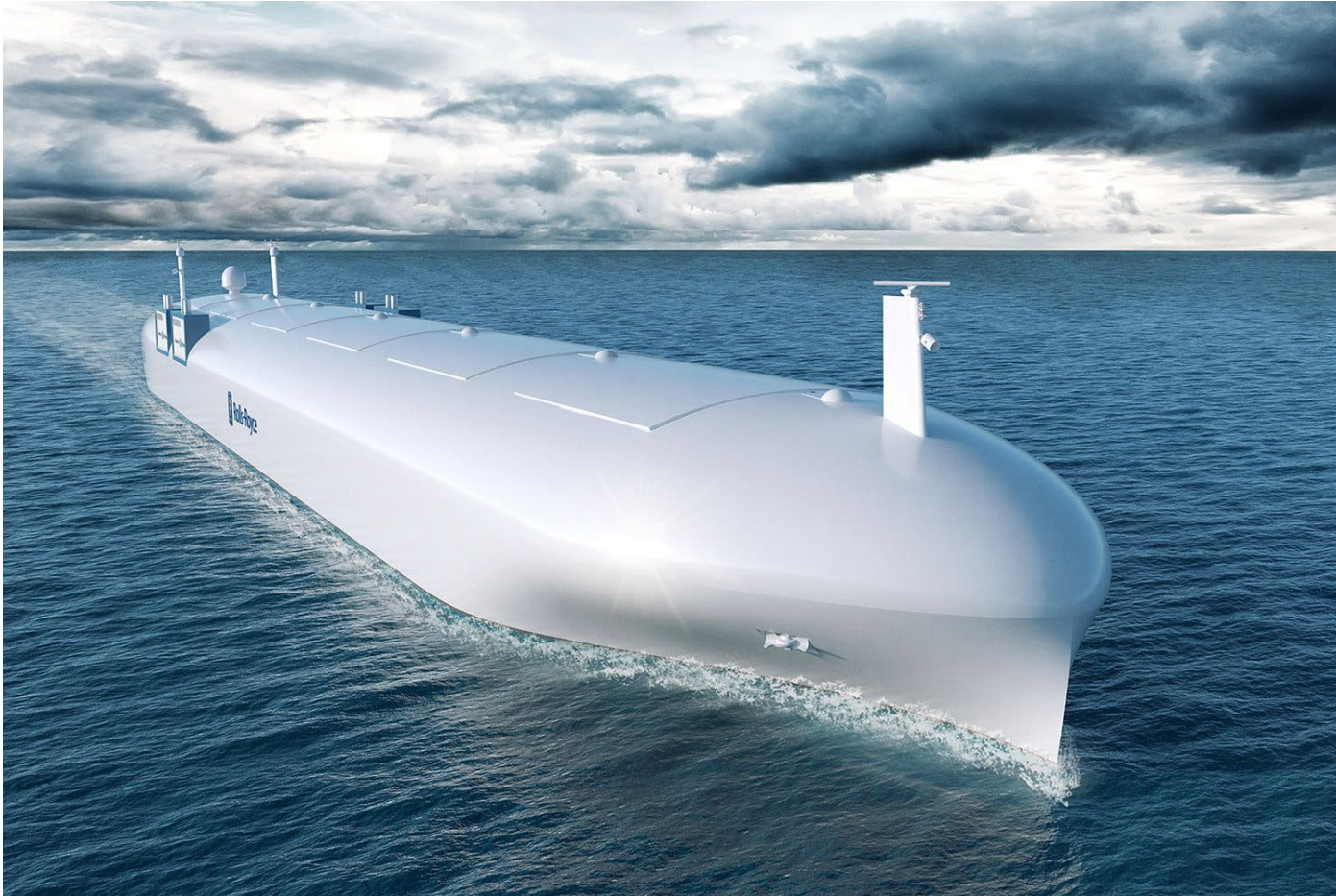


# Remote operation centre and remote operator

## *How to ensure effective jurisdiction?*



# **IMO MASS Code does not address MLE directly...** *... but deals with issues highly relevant for MLE!*



Source: <[https://s29755.pcdn.co/wp-content/uploads/2019/06/The\\_future\\_autonomous\\_1.jpg](https://s29755.pcdn.co/wp-content/uploads/2019/06/The_future_autonomous_1.jpg)>



University  
of Basel

**Thank you very much**  
for your attention!