



KYSTVERKET
NORWEGIAN COASTAL ADMINISTRATION

Autonomus Coastal Navigation

And the Pilotage Act



Compulsory Pilotage Act

- 2014 Pilotage Act
- Unofficial english version available at
- http://www.kystverket.no/en/EN_Maritime-Services/Pilot-Services/The-Pilotage-Act/
- *“In determining compulsory pilotage, emphasis shall be placed on the nature of the waters and whether the vessel by virtue of its size, cargo or the number of passengers may represent a risk of loss of human life, damage to the environment or loss of property.”*



Need for legal review

- Current Pilotage Act did not foresee the development of autonomus vessels and does not allow for autonomus coastal navigation.
- The Act requires human precence on the bridge, either:
 - pilot, or
 - Pilot Exemption Certificate (PEC).



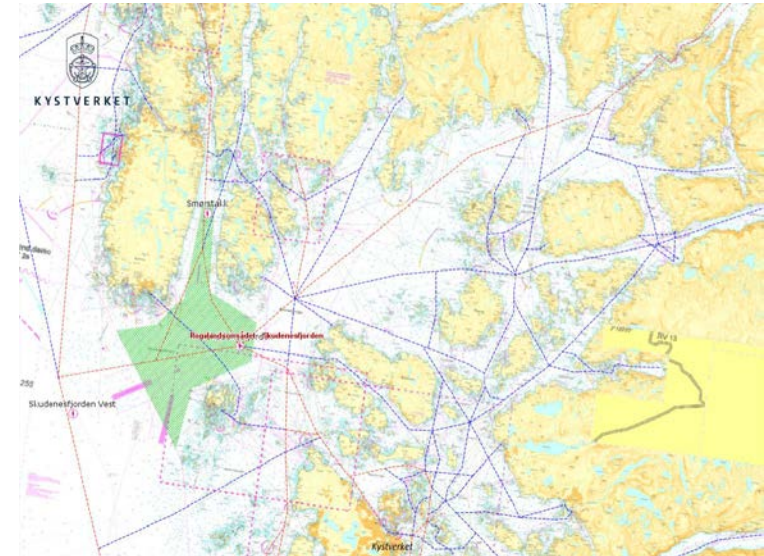
Public consultation on new provisions

- The Ministry of Transport and Communications has just released a public consultation whereby they propose amendments to the Pilotage Act, to allow vessels subject to compulsory pilotage to meet the requirement using autonomous systems.
- Act will apply to autonomous vessels, of similar sizes as conventional vessels subject to compulsory pilotage.



Permit, case by case

- Shipowner must apply for a permit which will be limited to specific vessels and areas of operation.
- Applications must be made to the NCA who will give the permit. Concept to be called:
 - **autonomous coastal navigation**



The application

- Applications will need to show that the autonomous systems of the vessel and any operators on land possess sufficient knowledge and data about the waters, including about all relevant navigational challenges, to navigate safely on the coast.
- The basic prerequisite is that the safety of the vessel and all affected ship traffic shall be at least at the same level as conventional vessels subject to compulsory pilotage.



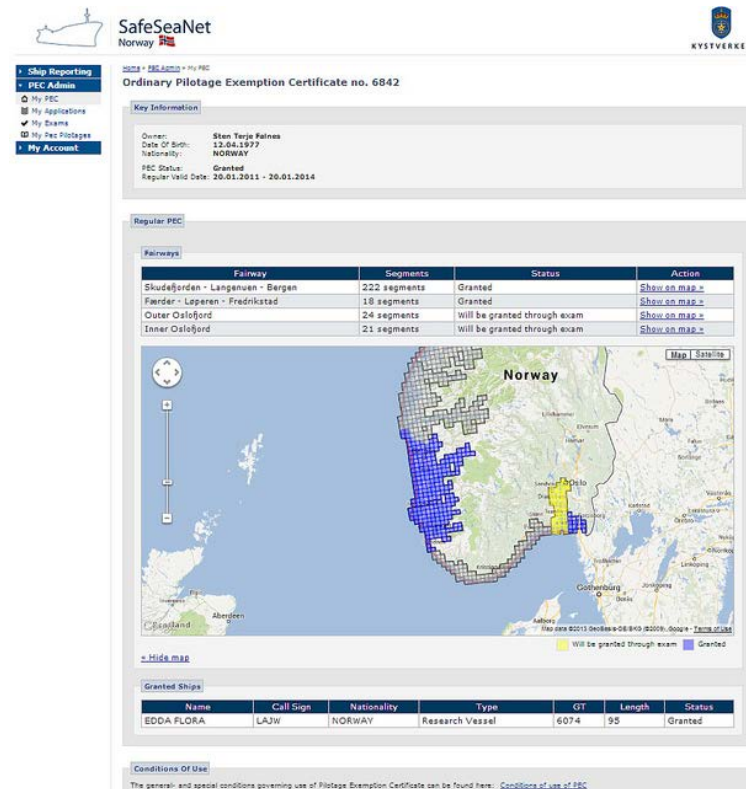
The permit

- Possible requirements of a permit
 - Surveys and step by step testing
 - Performance criteria for navigational system
 - Area and fairway limitations
 - Navigational skills of personnel
 - That pilot must be consulted
- Ship-owner responsible !



Just "one piece of the puzzle"

- Scope of the pilotage act is limited to "ensuring sufficient knowledge of local waters when navigating and maneuvering a vessel" in Norwegian internal waters and thereby contribute to safeguarding traffic at sea.
- Other aspects, such as technical requirements applicable to the vessel itself is outside the scope. This is under the auspices of our sister organization, the Norwegian Maritime Authority.



The screenshot displays the SafeSeaNet Norway interface for an Ordinary Pilotage Exemption Certificate (PEC) no. 6842. The user is logged in as 'Sten Torje Følles' (Date of Birth: 12.04.1977, Nationality: NORWAY). The PEC Status is 'Granted' and is valid from 20.01.2011 to 20.01.2014.

Regular PEC

Fairways

Fairway	Segments	Status	Action
Skudefjorden - Langen - Bergen	222 segments	Granted	Show on map
Færder - Løperen - Fredrikstad	18 segments	Granted	Show on map
Outer Oslofjord	24 segments	Will be granted through exam	Show on map
Inner Oslofjord	21 segments	Will be granted through exam	Show on map

Map | **Statistics**

Granted Ships

Name	Call Sign	Nationality	Type	GT	Length	Status
EDDA FLORA	LAJW	NORWAY	Research Vessel	6074	95	Granted

Conditions Of Use

The general and special conditions governing use of Pilotage Exemption Certificate can be found here: [Conditions of use of PEC](#)





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CLEAN, SAFE AND EFFICIENT SEAWAYS

www.kystverket.no

