



Windfarms and fishery

How to promote co-existence

Agenda

- Introduction
 - Danish Fishermen PO
- The Danish Fisheries Act
- The Danish regulation on cables
- Wind Farms
- Cables

DFPO

**32 local associations
662 vessels**



DPPO

10 vessels



(2018)



-  Hovedforening
-  Lokalforening

- **Fisheries policy** – internationally and nationally
- **Communications**
- **Advisory services**
- **Education – apprentices**
- **Fisheries research projects**
- **Sustainability / MSC certification**

Danish MSC Certified Fisheries

DFPO

- Oysters – Limfjorden
- Blue mussels and cockle – Limfjorden
- Blue mussels – Internal Danish Waters farvande

DFPO

(i samarbejde med udenlandske parter)

- Brown Shrimp – North sea
- Norway lobster, schrimp, cod, saithe, haddock, hake, ling, tusk, plaice,, sole, whiting – North Sea, Skagerrak and Kattegat

DFPO og DPPPO

- Herring – North Sea
- Sild – Skagerrak, Kattegat og Western Baltic Sea
- Herring and sprat – Baltic Sea
- Sandell, sprat og norway pout – North Sea, Skagerrak og Kattegat

DFPO

(i samarbejde med udenlandske parter)

- Blue Whiting – North Eastern Atlantic Sea
- Mackerel – North East Atlantic
- Atlantoskandisk Herring – Norskehavet

Vilsund Blue A/S

- Line – blue mussels – Limfjorden

Value of Danish fishermen's landings 2018 (mill. DKK)

Total danish waters
3.524 mill. dkk.

Other waters
452 mill. dkk.

Skagerrak
570 mil. dkk.

Kattegat
176 mill. dkk.

North Sea
2.108 mill. dkk.

**Western
Baltic**
141 mill. dkk.

**Eastern
Baltic**
77 mill. dkk.

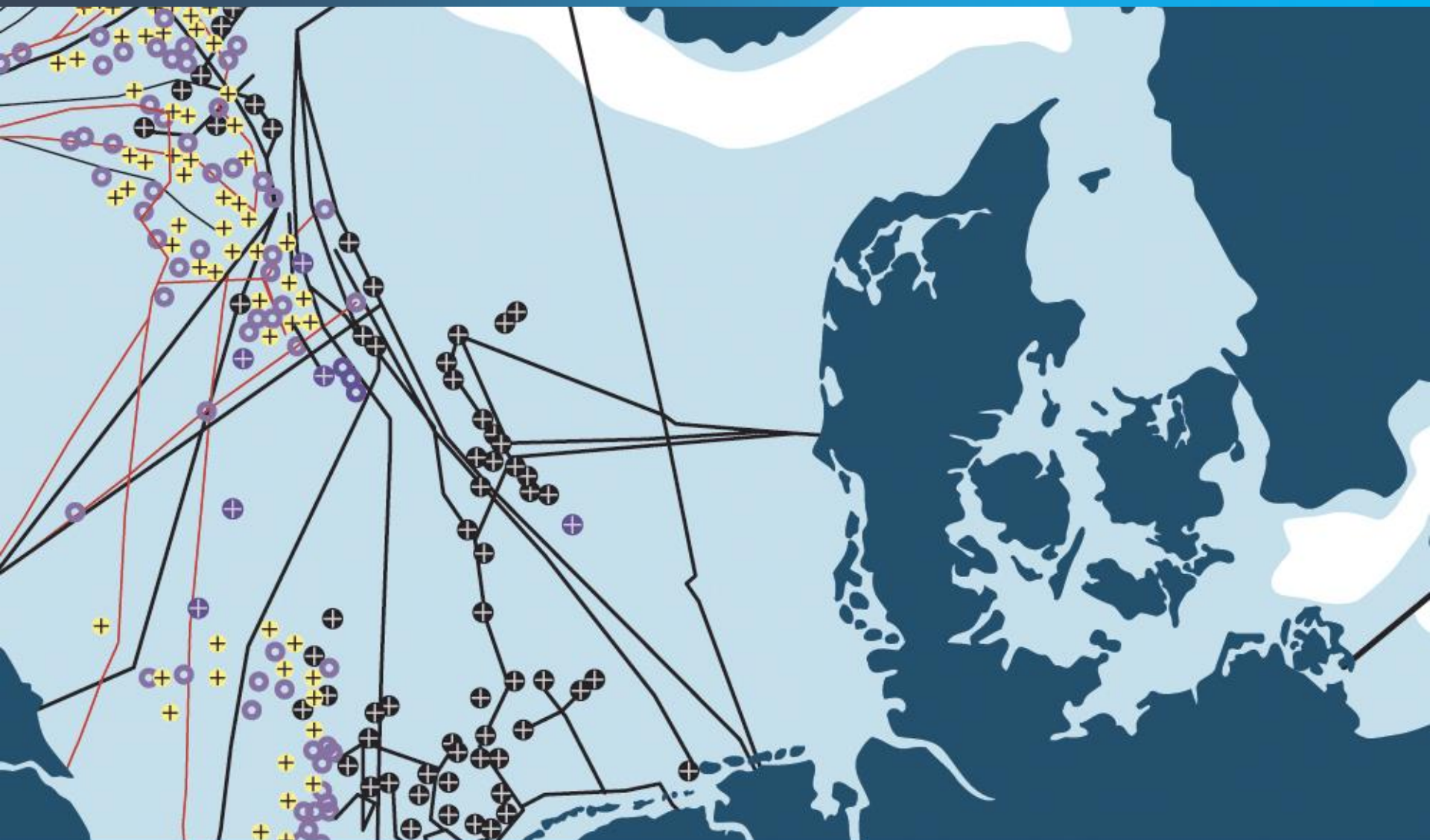
Activities in the Danish economic zone

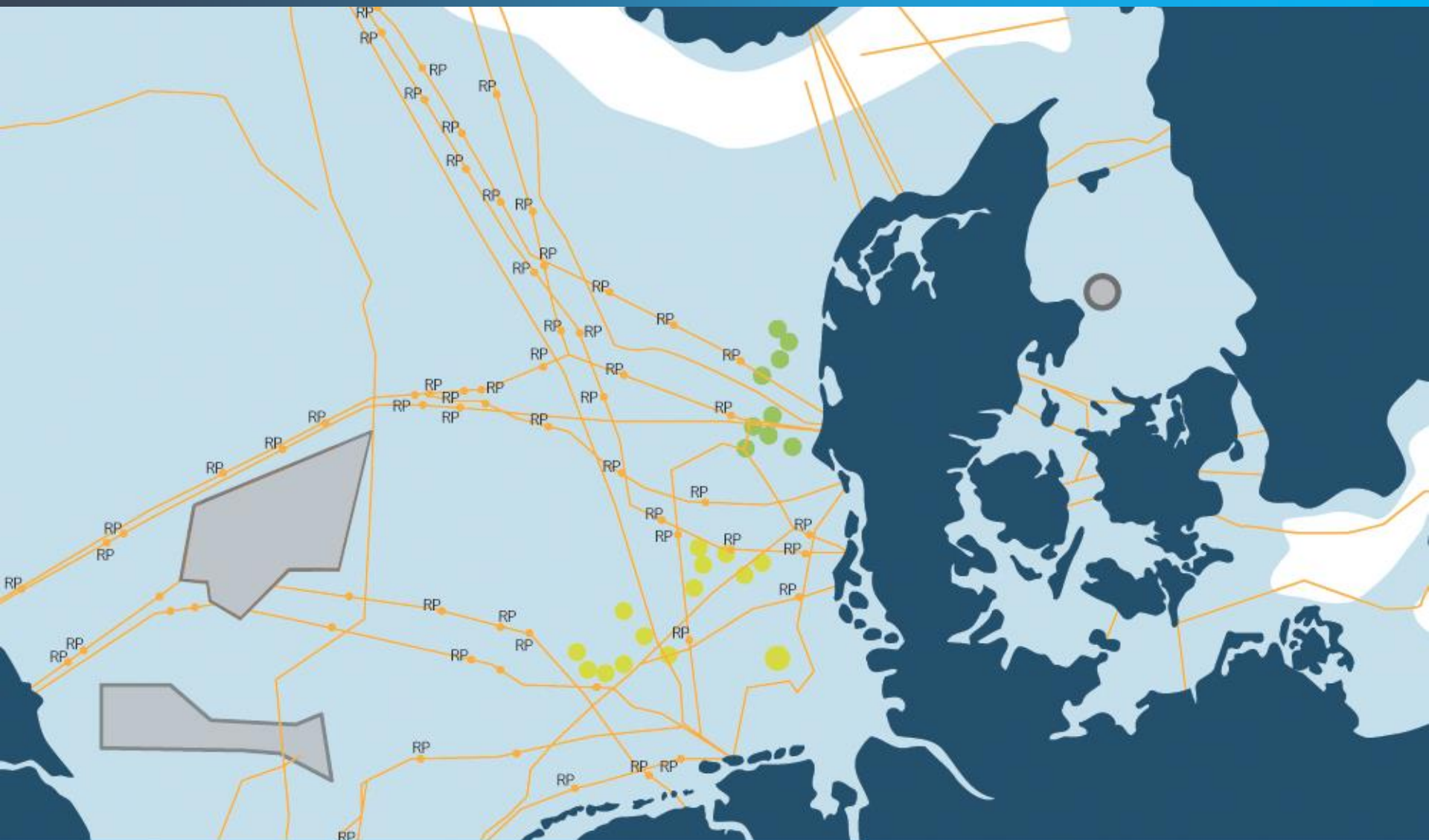
- Wind Farms
- Oil and gas platforms
- Cables (power and telecommunication)
- Pipelines (Gas)
- Closed areas/Marine protected areas (Marine strategi direktiv and Natura2000)

Oil and gas pipes have only in a few cases offered compensation















Activities at sea

– important issues

- **Planning /Location**
- **Respect for fishery/Co-existence**
- **Legal environment/ Framework**
- **Enviromental issues (impact assesment)**

Compensation for loss in fisheries

The Main goal for fishermen is to fish
– not to be compensated

But when fishery is obstructed or prohibited
we work for a proper and just compensation

The Danish Fisheries Act §76-79

Chapter 15

Regulations for the protection of fisheries

§ 76. Legal fishing activities must not be hindered in any way.

The Danish Fisheries Act §77

- § 77. Actions or interventions which may cause inconvenience or hinder fisheries in coastal areas, making conditions unsuitable for bottom fishing or otherwise affect the flora and fauna of fishing territory, may be conducted only after permission.
- Subsection 2. If the actions or interventions on fishing territory, cf. Subsection 1, do not require permission from other authority under law or state sovereignty over territorial waters, measures must be carried out only after permission of the Minister for Food, Agriculture and Fisheries.
- Subsection 3. In cases where permission is issued by another authority, this is done after consultation with the Minister for Food, Agriculture and Fisheries.

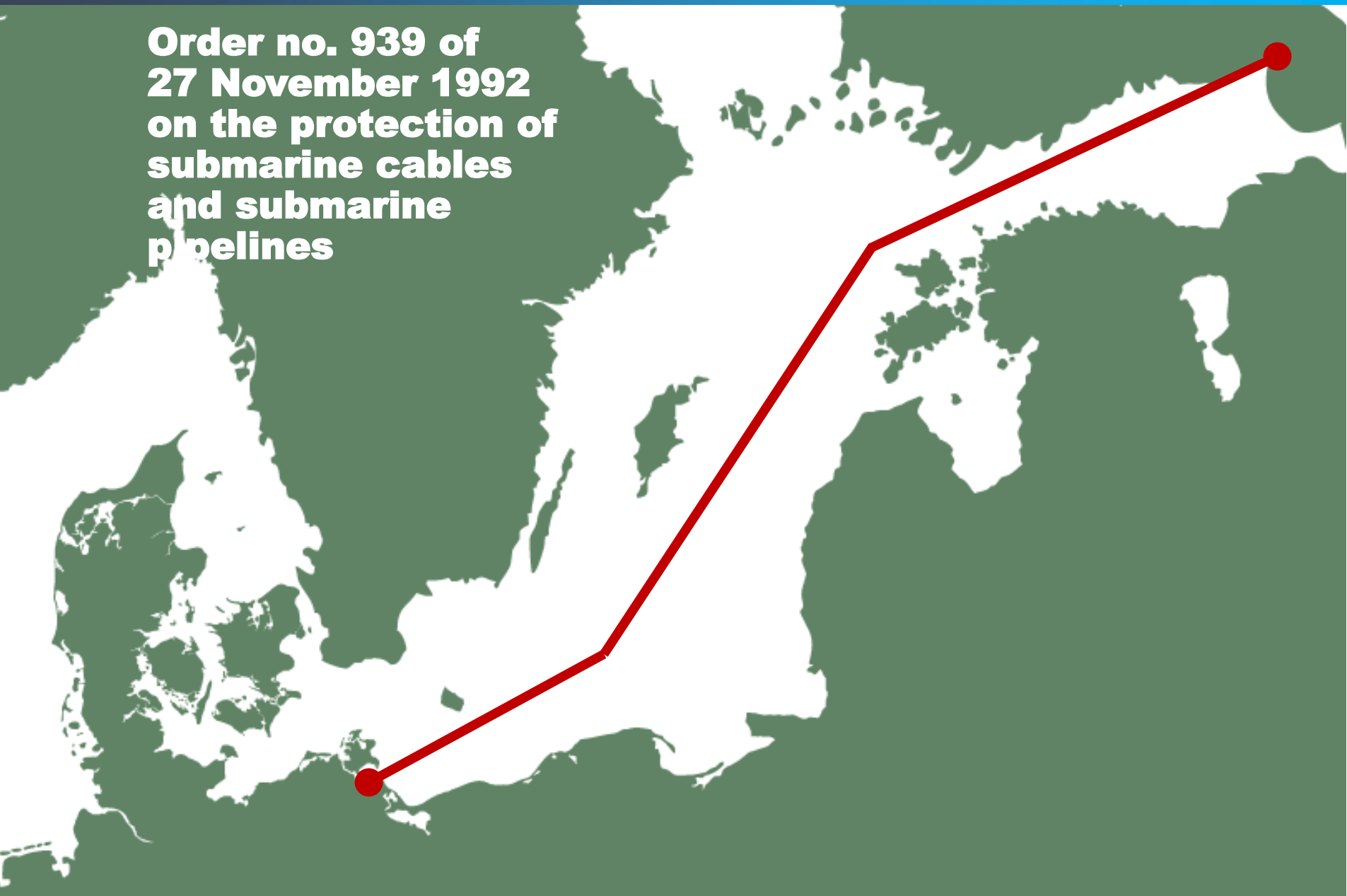
The Danish Fisheries Act §78

- § 78. Only measures or interventions may be granted which can obtain the in § 77, Subsection 1, effect when
 - 1) a definitive position on the issue of damages has been made in proportion to the commercial fishermen who normally pursues commercial fishing on this location, and whose earnings will be affected by the measure or intervention,
 - 2) negotiations on a possible compensation between the implementing authority of the measure or intervention and the commercial fishermen who normally pursues commercial fishing on this location, and whose earnings will be affected by the measure or intervention have been made, or
 - 3) the issue of possible compensation to affected commercial fishermen has been referred to the decision by a Board, see § § 79 and 80.
- Subsection 2. By permission to extract raw material under the Raw Material Law Subsection 1 applies only when the permit relates to extraction for the large individual construction works and the permit shall be issued to the developer.

The Danish Fisheries Act §79

- § 79. The Minister for Food, Agriculture and Fisheries or another authorizing minister, cf. § 77, Subsection 2, must at the request of the fishermen or the implementing authority of the measure or intervention, refer questions about possible compensation for the final administrative decision by a Board. The request can be made both before and after issuing a permission referring to § 77 Subsection 1. The relevant Minister will then constitute a Board, see § 80
- Subsection 2. The minister who constitutes the board may require the party requesting that the Board be constituted, providing security for the legal costs.

**Order no. 939 of
27 November 1992
on the protection of
submarine cables
and submarine
pipelines**



§1

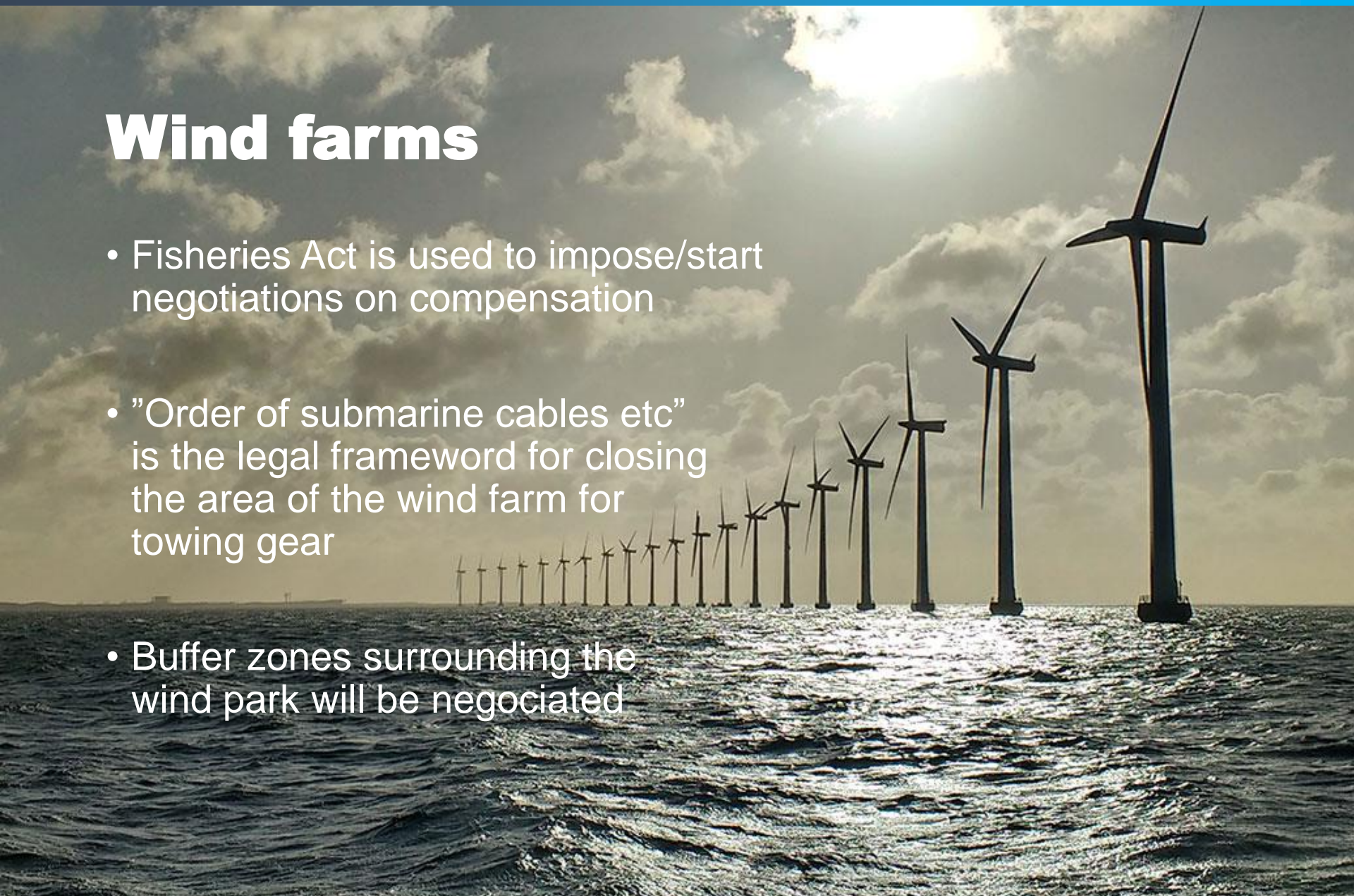
- Section 1. Ships may not, without urgent necessity, anchor in the cable and pipeline fields laid down for submarine cables and submarine pipelines of any type (pipelines for the carriage of hydrocarbons, etc.), which cover the associated protective zones, cf. Section 4.
- Subsection 2. In the protective zones, suction dredging, fishing for stones as well as any use of tools and other gear that are dragged on the seabed shall be prohibited. Before poles are placed in the seabed in these areas, the placing of the poles shall be negotiated with the owner of the cables or pipelines or with his or hers local representative.
- Subsection 3. Dumping in protective zones around cables and pipelines or in areas where spoil material could drift above cables or pipelines, including especially outfall and intake construction, shall have been approved by the owner of the cables or the pipelines beforehand. The approval shall be evident from the permit to carry out dumping operations.

§1

- Section 4. A cable or pipeline field covers a 200 metre wide protective zone along and on each side of the cable or the pipeline such as this field has been marked in the charts, respectively the beacon line for the cable or the pipeline unless expressly provided otherwise in each individual case, for example in the Danish “Notices for Mariners” – “Efterretninger for Søfarende”. Rather large cable or pipeline fields will, in general, be indicated by means of beacon lines for the uttermost cables or pipelines of the field and, now and then, also for beacon lines for cables or pipelines between these. If nothing else has been announced and marked in the charts, the protective zone of the cable and pipeline field covers the area between the uttermost beacon lines as well as an area of 200 metres outside these.
- Subsection 2. The cable and pipeline fields have been marked in Danish, Faroese and Greenland charts and mentioned in the associated navigation descriptions under the relevant waters. The laying down of new cable or pipeline fields as well as changes made to the existing ones shall be published in the Danish “Notices for Mariners” – “Efterretninger for Søfarende” – and in the Danish “chart corrections” – “Søkortrettelser”.
- Subsection 3. In the charts, cables and pipelines are shown as either single ones or as areas in which more than one cable or pipeline has been laid. In the latter case, the total extension of the cable and pipeline field will be shown in the charts. Protective zones around single cables and pipelines are marked in the charts only as the alignment of the cable or the pipeline.
- Subsection 4. The provisions of this Order shall not apply within the sea area of a port, but cables and pipelines as well as provisions on local conditions are found in “The Danish Port Pilot” – “Den Danske Havnelods”, “Port information on the Faroe Islands” – “Havneoplysninger for Færøerne” as well as “The Greenland Port Pilot” – “Den Grønlandske Havnelods”.

Wind farms

- Fisheries Act is used to impose/start negotiations on compensation
- "Order of submarine cables etc" is the legal framework for closing the area of the wind farm for towing gear
- Buffer zones surrounding the wind park will be negotiated



An aerial photograph of the Horns Rev 3 wind farm. Numerous white three-bladed wind turbines are visible, arranged in a grid-like pattern across a dark, choppy sea. The turbines are partially obscured by thick, white clouds that fill the upper half of the image. The sky is a pale blue.

Horns Rev 3 Wind Park 400 MW

Forslag



Environmental impact assessment

- As a general rule, environment assessments should always be completed before decisions are made which can seriously impact the environment.
- This applies at all levels such as policies, programmes, plans and projects. For instance, bills and decisions in the Folketinget (the Danish Parliament), national or regional plans and programmes for infrastructure, building projects, energy etc., municipal plans, and specific construction projects such as building roads or establishing and expanding enterprises which are likely to seriously impact the environment.

Environmental impact assessment

Provide an overall description of the entire project, also demonstrate, describe and assess the project's direct and indirect effects on human, fauna and flora, soil, water, air, climatic conditions, transport, material goods, architectural heritage, archaeological heritage, landscape, routes at sea etc.

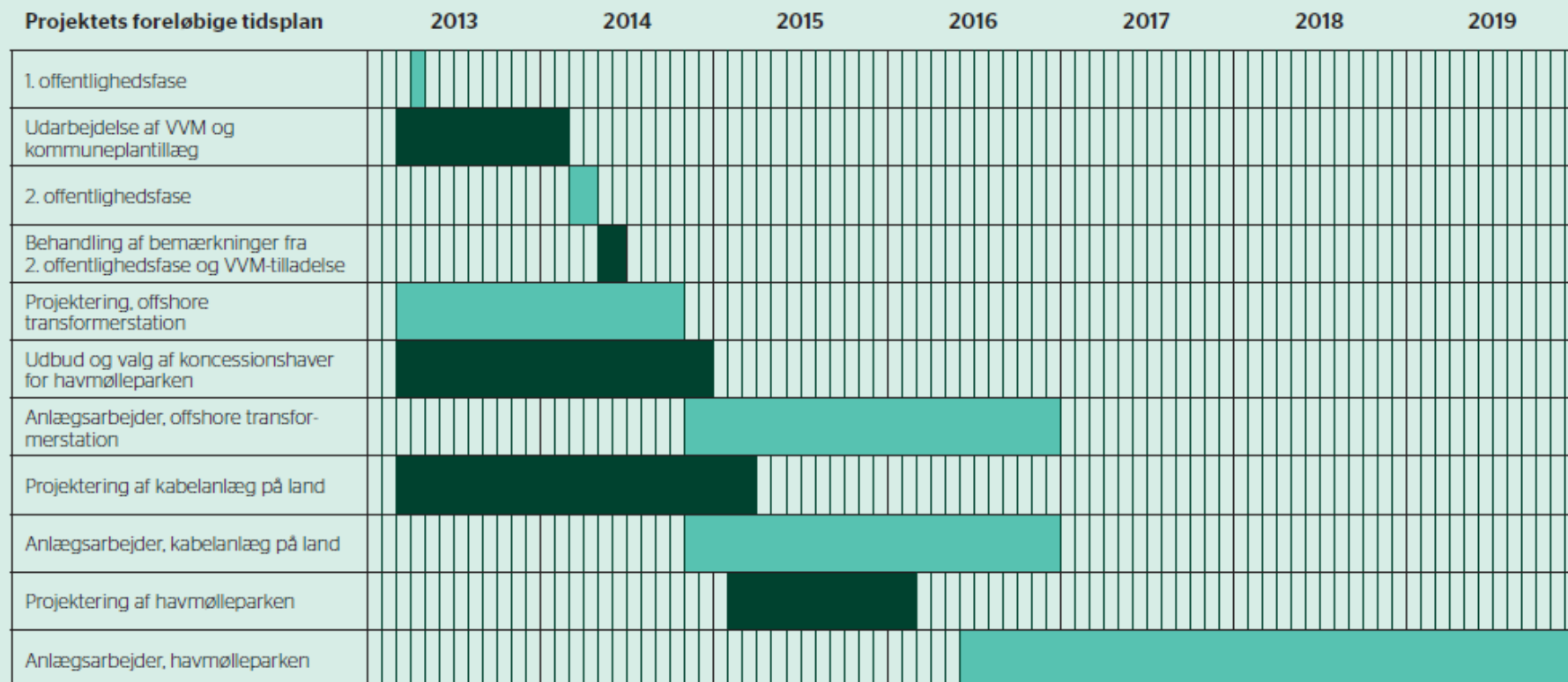
AND fisheries in the area will be described and assessed.
Different fisheries, species – and value of fishery.

EIA and the fishery

Most of the figures needed for compensation negotiations will be contained in the EIA

- Value of fishery in the ICES kvadrat (30*30 sømil) (5,4*5,4 mil)
- Distribution in the area
- Figures for 10 years

Projektets tidsplan



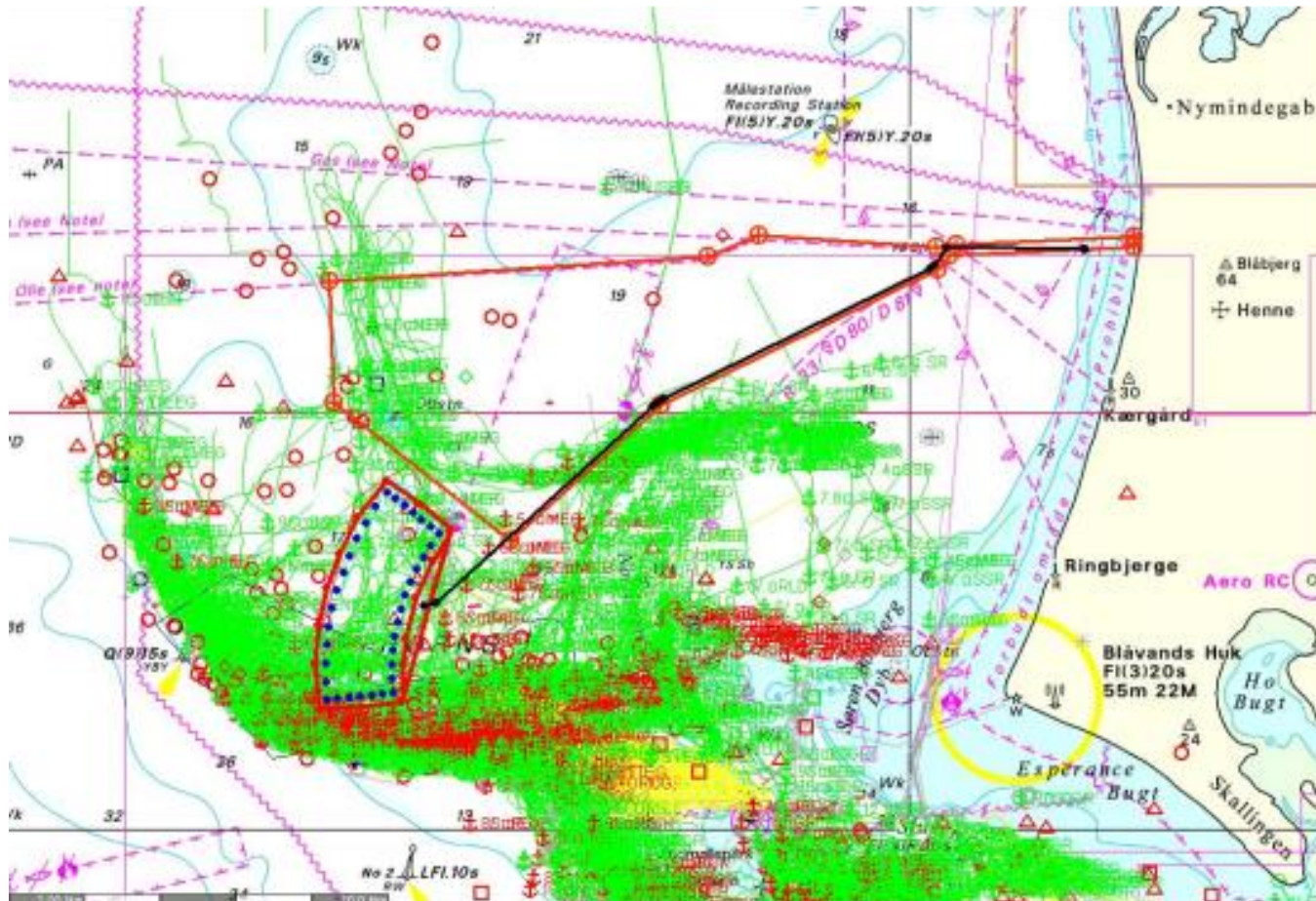
Facts

- 400 MW will need approximately 80 km²
- The wind mills are between 4-8 MW each.
- We expect there will be between 750-1200 meters between mills
- We expect that fishery with static gear allowed.
- We expect that fishery with towed gear will be regulated.
- We expect that fishery with towed gear will be allowed over the cables to shore (Order of cables...)

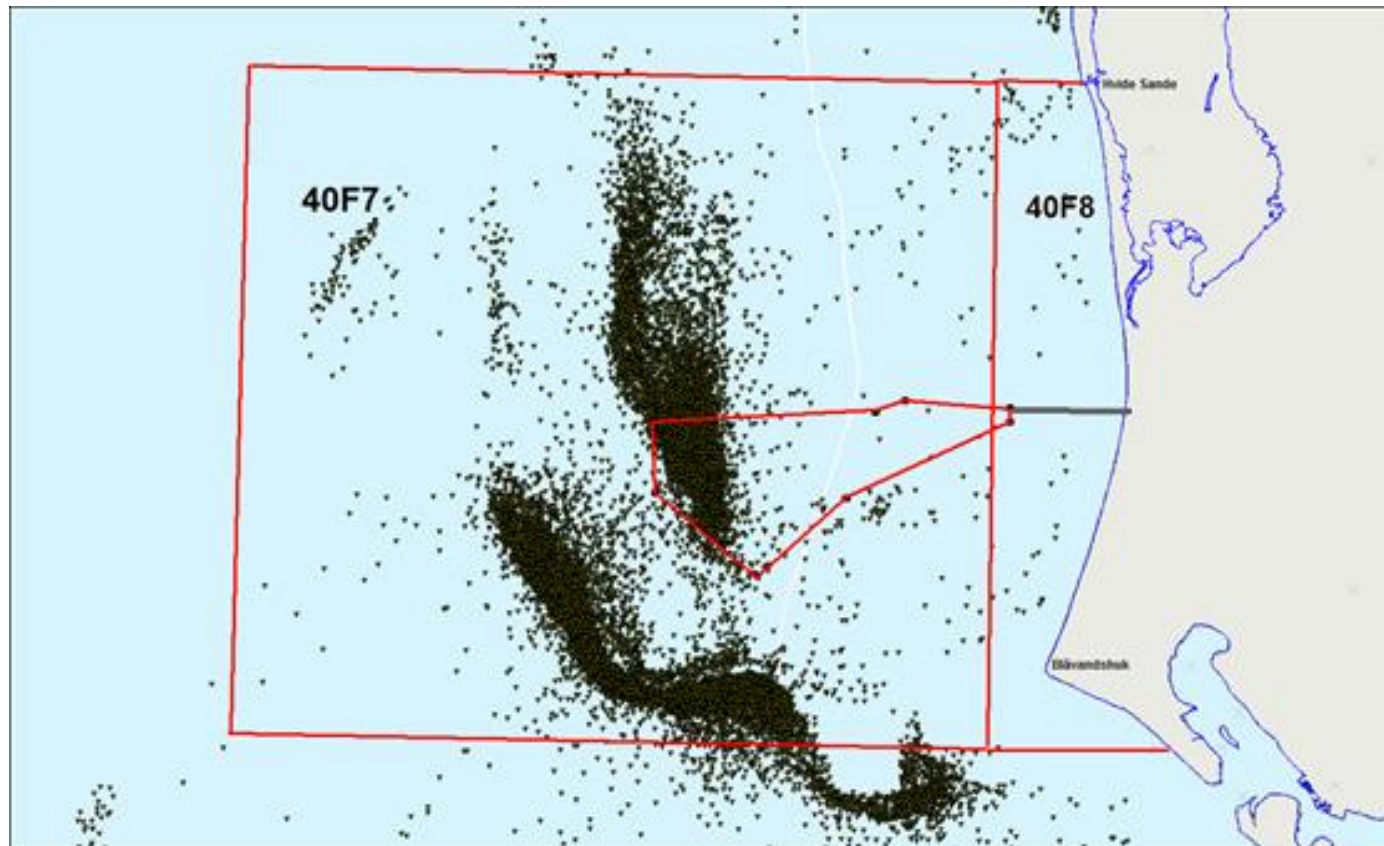
Compensation

- Landing values by the whole ICES square are used.
- Scaled down to fit the area of the wind farm.
- Landing values of the most important species of the area are used.
- Evaluation - if the area of the wind farm is better or worse than the main area. Species are then multiplied by the factor.

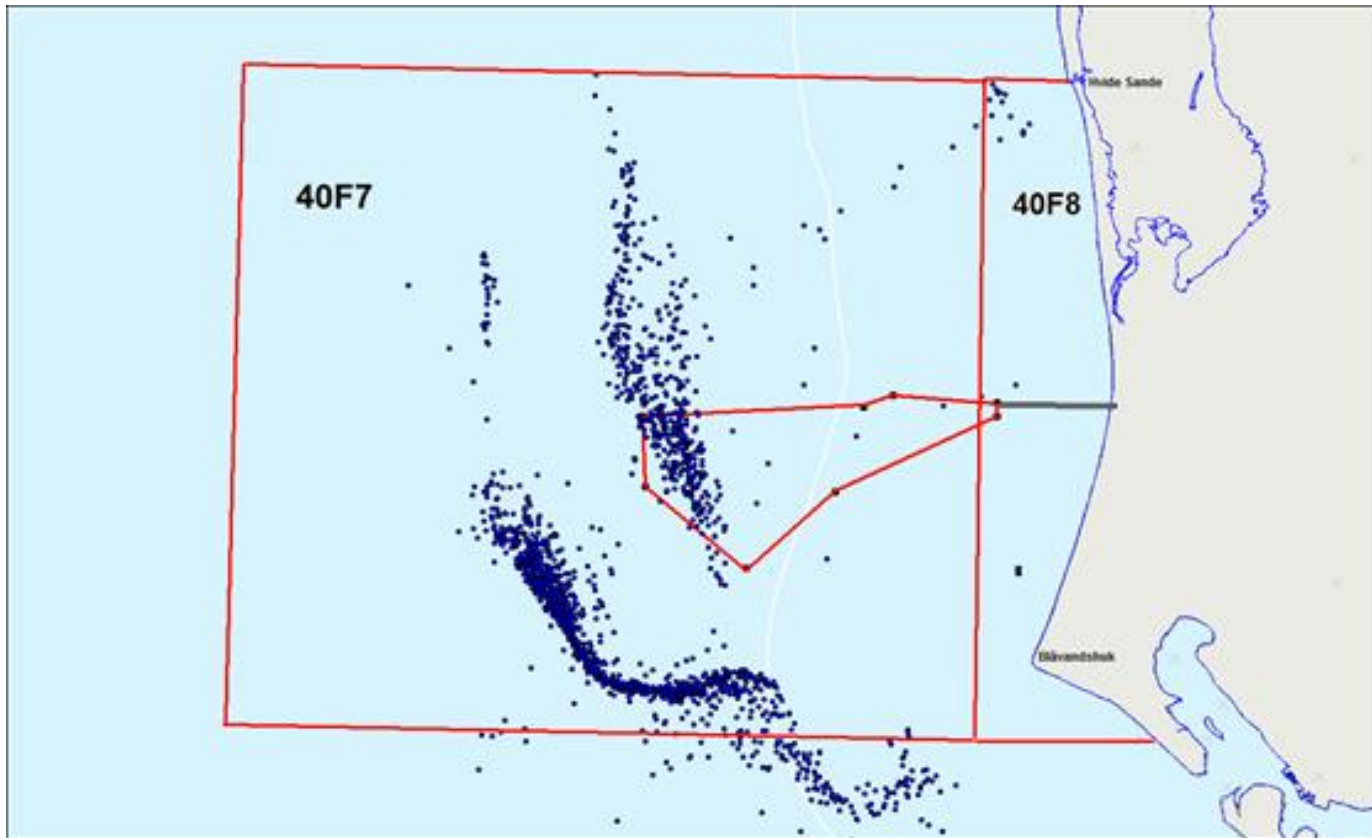
Sand eel fishery plots



Sand eel VMS 2005-2012 (bottom trawl)



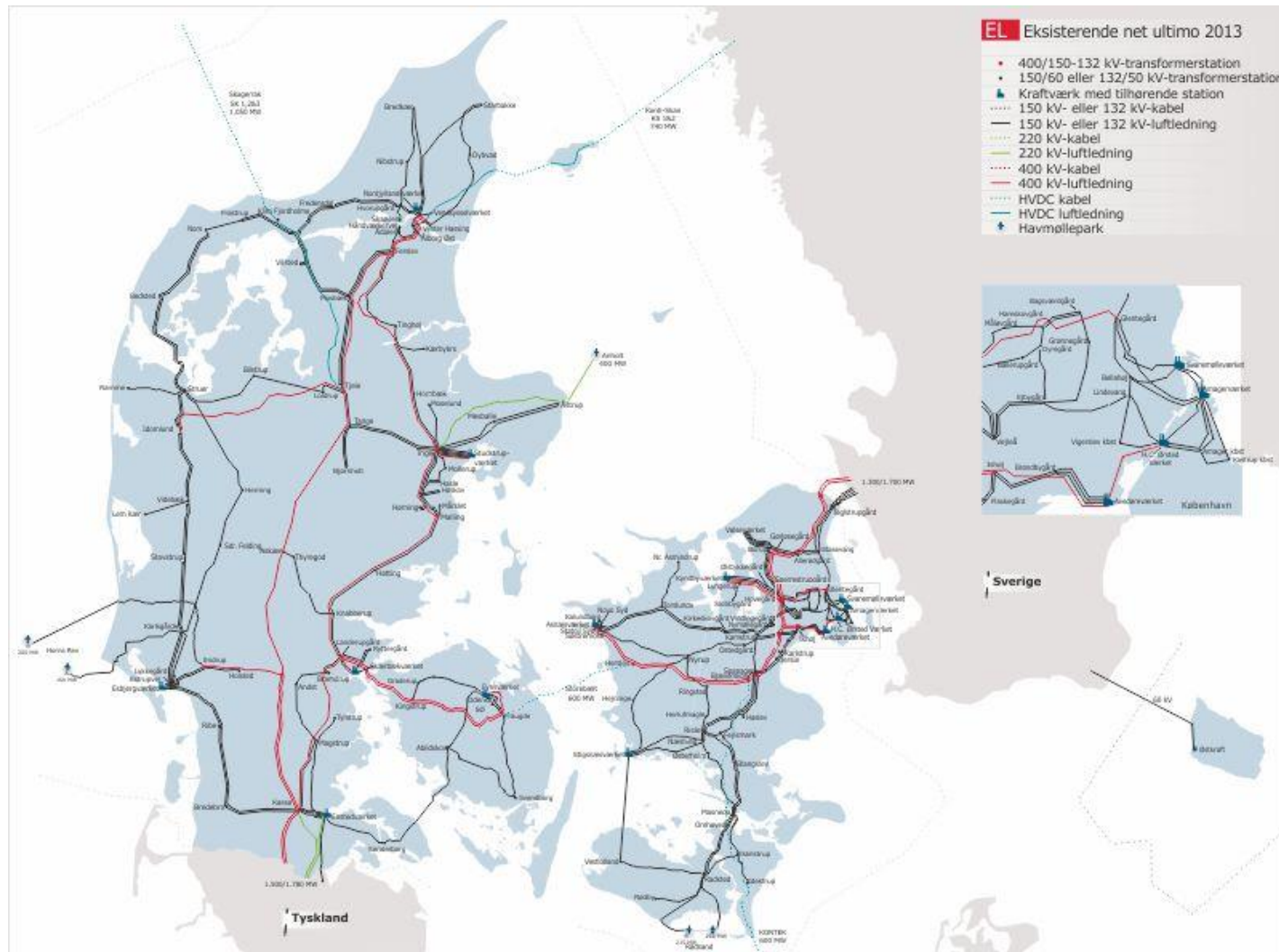
Sand eel VMS 2005-2012 (pelagic trawl)



Submarine cables

- Fisheries Act is the legal framework for starting negotiations
- "Order of submarine cables" include all cables under water.
For allowing fishery with towing gear a dispensation is needed.

Submarine cables (Energinet.dk)



Cooperation between Danish Fishermen PO and Energinet.dk

Kort og koordinater for beskyttelseszonen omkring søkablet



Det er den orange tværgående streg på kortet, der indikerer søkablets beliggenhed.

TP	LONGITUDE *	LATITUDE
1	007 37,349	55 35,972
2	007 37,869	55 35,978
3	007 37,930	55 35,985
4	007 37,987	55 36,002
5	007 48,068	55 41,174
6	007 48,315	55 41,283
7	007 48,605	55 41,382
8	008 01,043	55 44,801
9	008 01,162	55 44,841
10	008 01,255	55 44,811
11	008 01,635	55 45,110
12	008 01,740	55 45,141
13	008 01,847	55 45,151
14	008 10,598	55 45,392

* Data er angivet i grader og minutter (med 3 decimaler).

Oplysninger om fiskeri i
200 m's beskyttelseszonen
for søkablet ved Horns rev 2



Summary/ lessons learned

- Important/essential that the fishermen get involved before the final location is decided
- The Fisheries Act apply and is used when new activities are decided in Danish waters.
- "Order of submarine cables apply all cables and the owner of the cable decide to apply for a dispensation to allow fishery crossing the cables.
- Post-evaluation of windparks

Thank you for listening

