

BIM Fisheries Conservation Work in the Nephrops Fishery

Ronán Cosgrove
Fisheries Conservation Manager

Outline

- Aims
- Team
- Challenges
- Solutions
- Future work



Aims

- **Provide technical support to the Irish fishing sector**
- **Help the sector make best use of available resources**
- **Develop technical solutions to meet environmental and regulatory challenges**
- **Develop technical solutions to improve carbon efficiency**
- **Promote and communicate work that builds societal support for the Irish fisheries sector and BIM**



The Fisheries Conservation Team



MFVs

Celtic Warrior
& Chieftan

Stella Nova

Arkh Angell

Foyle Warrior
& Fisher

Our Lass II

Northern Celt
Dearbhla

Ocean Breeze

Karen Mary

Roise Catriona

Eblana



Key Challenges

- EU Landing Obligation
- Carbon Efficiency
- Profitability
- Biodiversity
- Societal Support

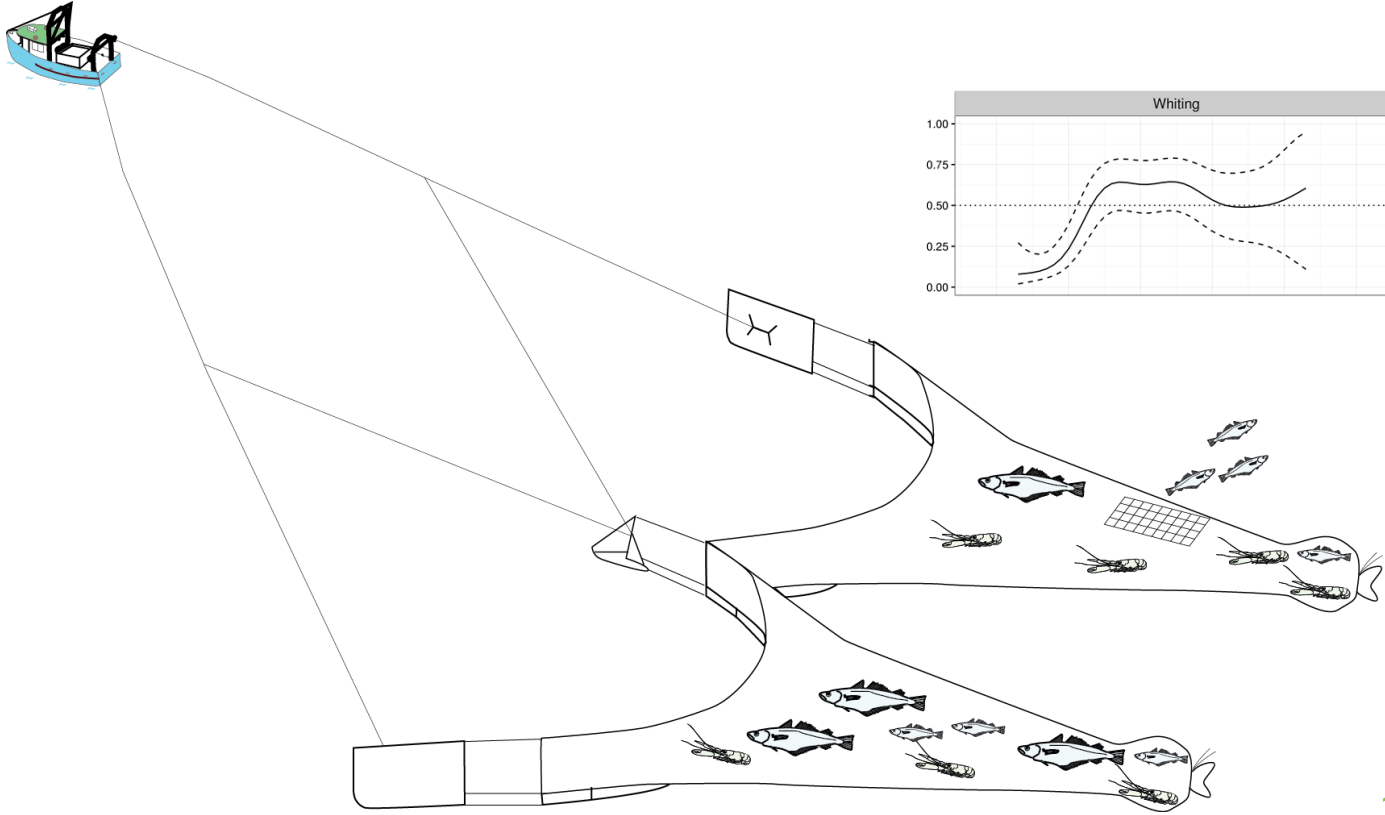


EU Landing Obligation

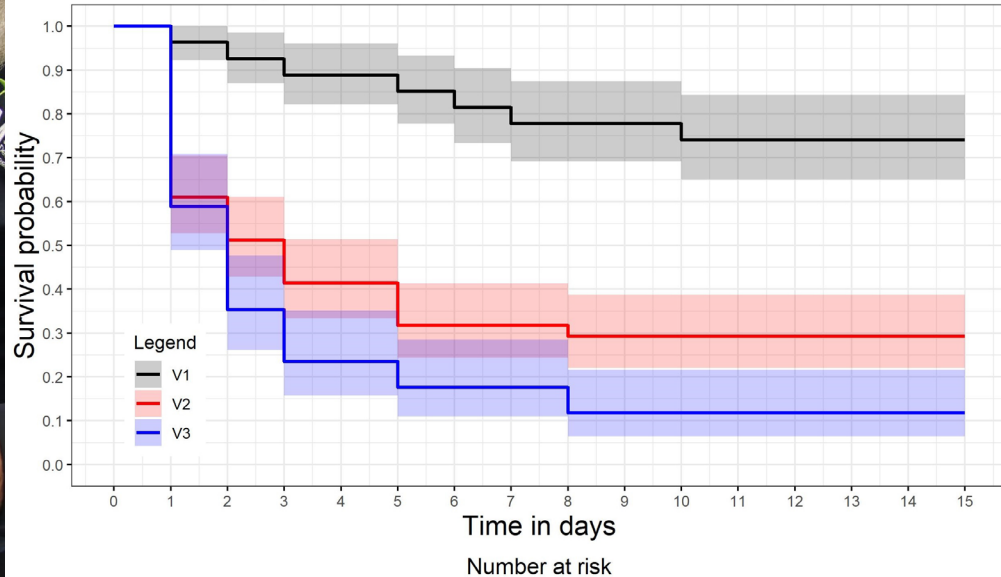
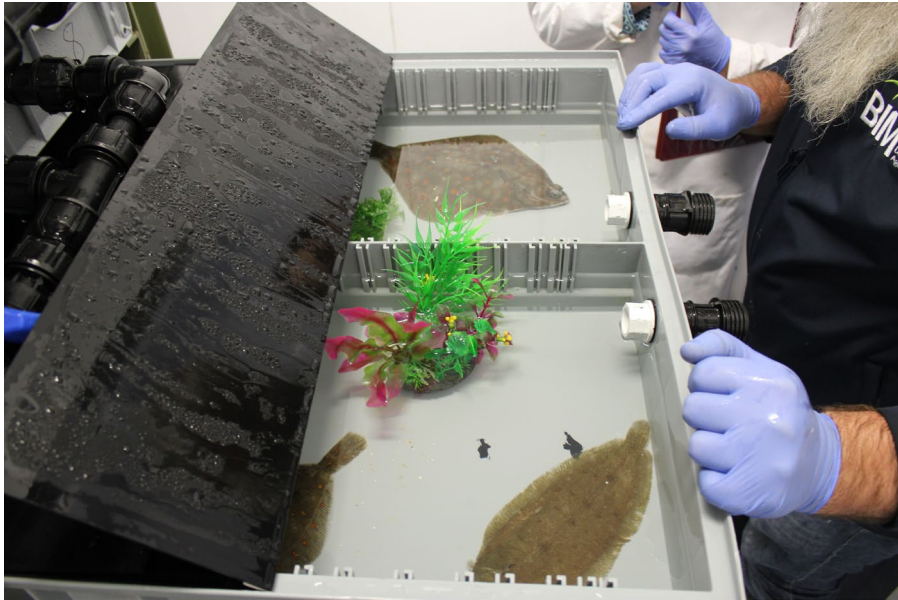
- Small Nephrops
- Over-quota fish
- Small fish



Solutions: Gear modifications



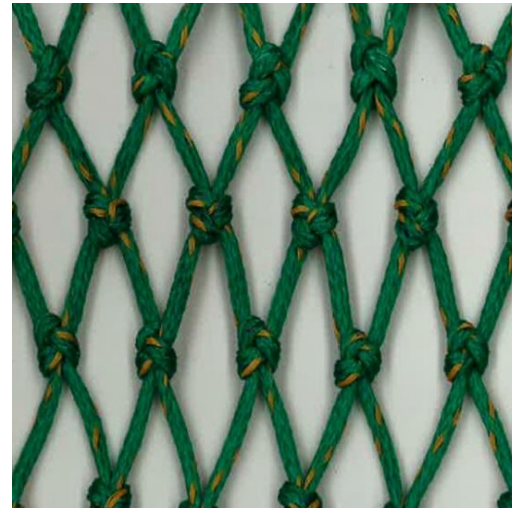
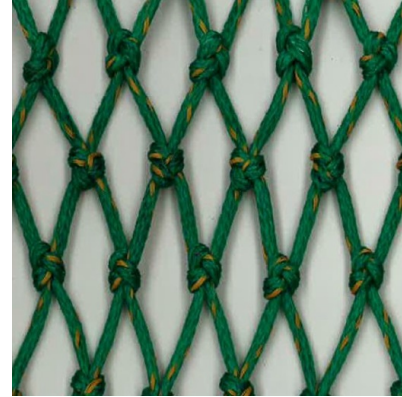
Solutions: Survivability studies



v1	80	80	77	74	71	71	68	65	62	62	62	59	59	59	59
v2	117	117	71	60	49	49	37	37	37	34	34	34	34	34	34
v3	78	78	46	28	18	18	14	14	14	9	9	9	9	9	9

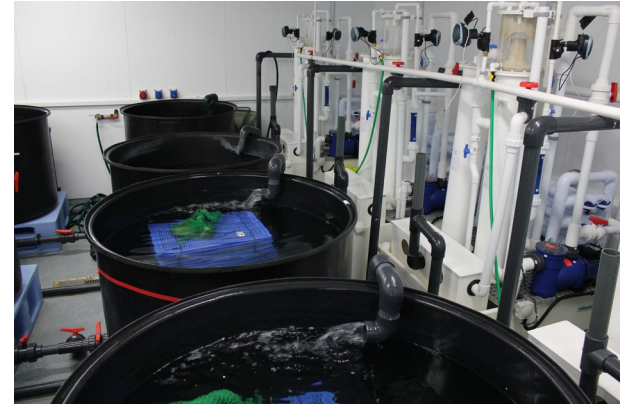
Small Nephrops

- Increase from 70 to 80 mm resulted in
- 45% reduction in undersize Nephrops
- No economic losses over the course of a fishing season
- S.I. No. 510 of 2016

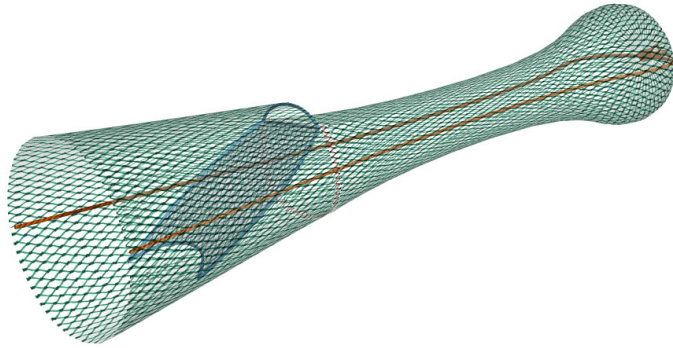


Small Nephrops

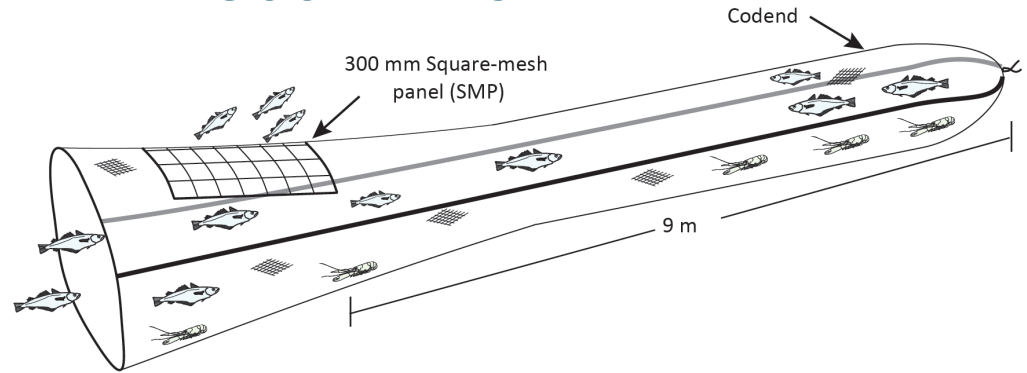
- Nephrops survivability study
- 64% survival for trawl caught Nephrops
- Comprehensive survival exemption for Irish vessels



Over-quota fish

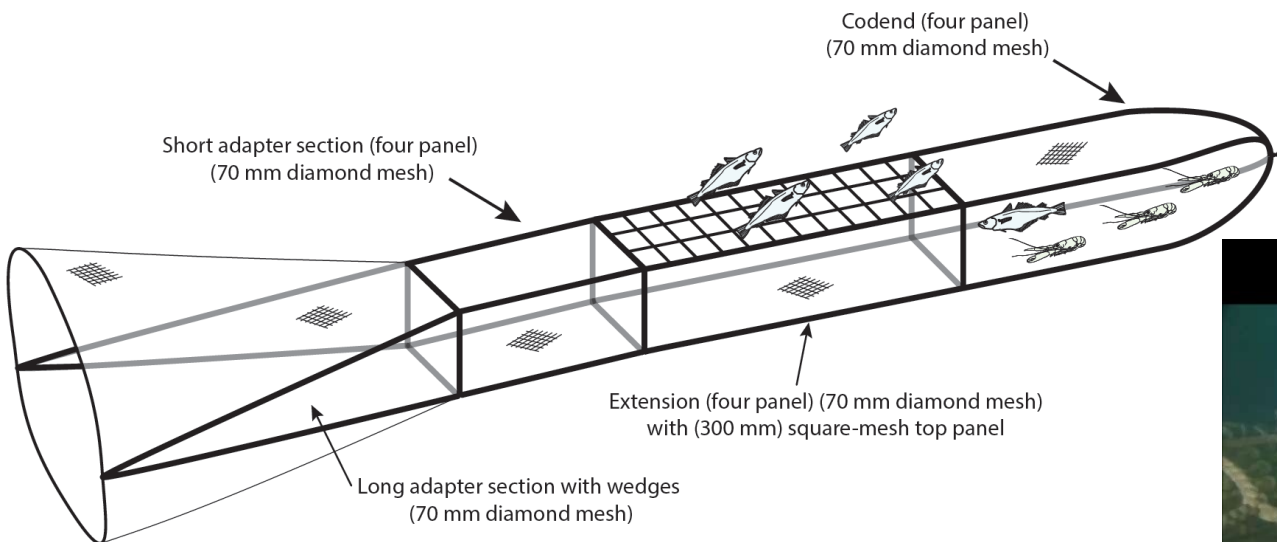


300 mm SMP



Haddock	-70%
Whiting	-52%
Nephrops	+14%

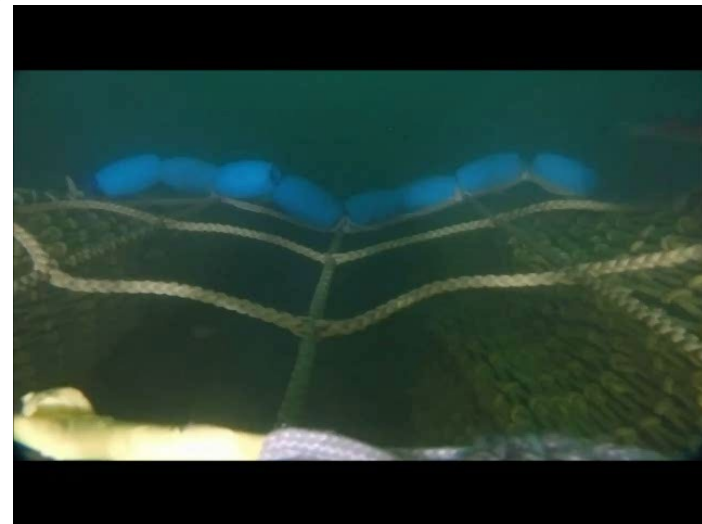
Over-quota fish



SELTRA v
300 mm SMP

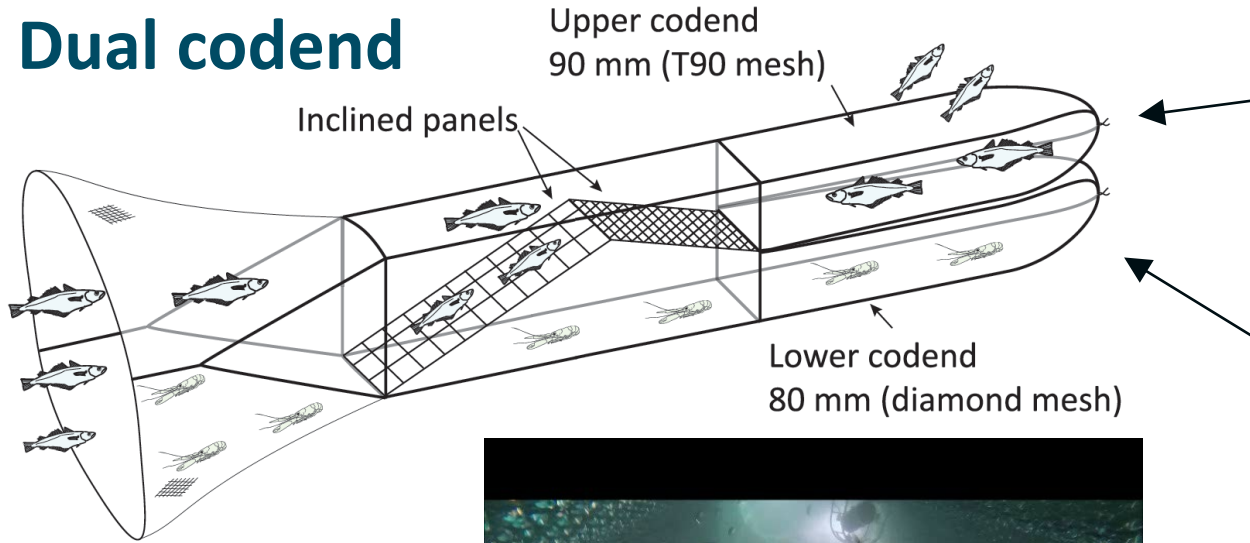
Whiting	-24%
Haddock	-51%
Flatfish	-55%
Dogfish	-74%

Nephrops +19%



Small fish

Dual codend



Small Haddock	-48%
Small Whiting	-72%



Recent Irish Technical Measures

Nephrops

- 300 mm SMP ✓
- SELTRA ✓
- Sorting Grid ✓
- Dual codend ✓

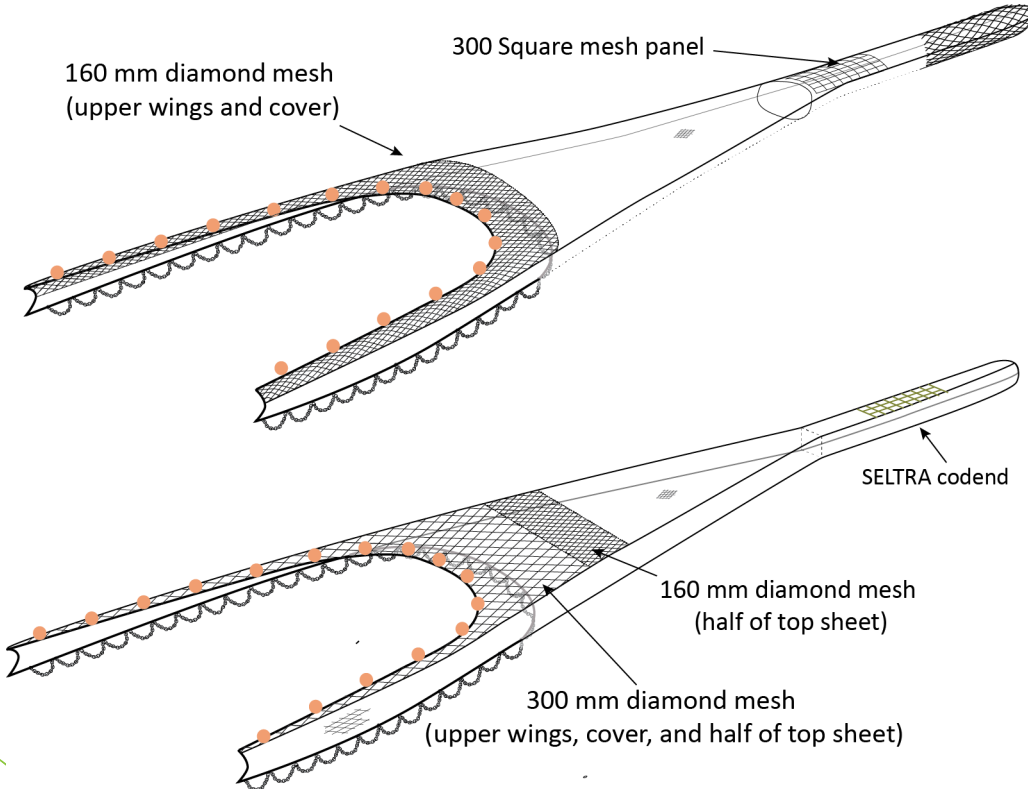
Whitefish

- 90 mm T90 ✓
- 100 mm T90 Review
- 120 mm diamond ✓
- Raised-Fishing Line ✓

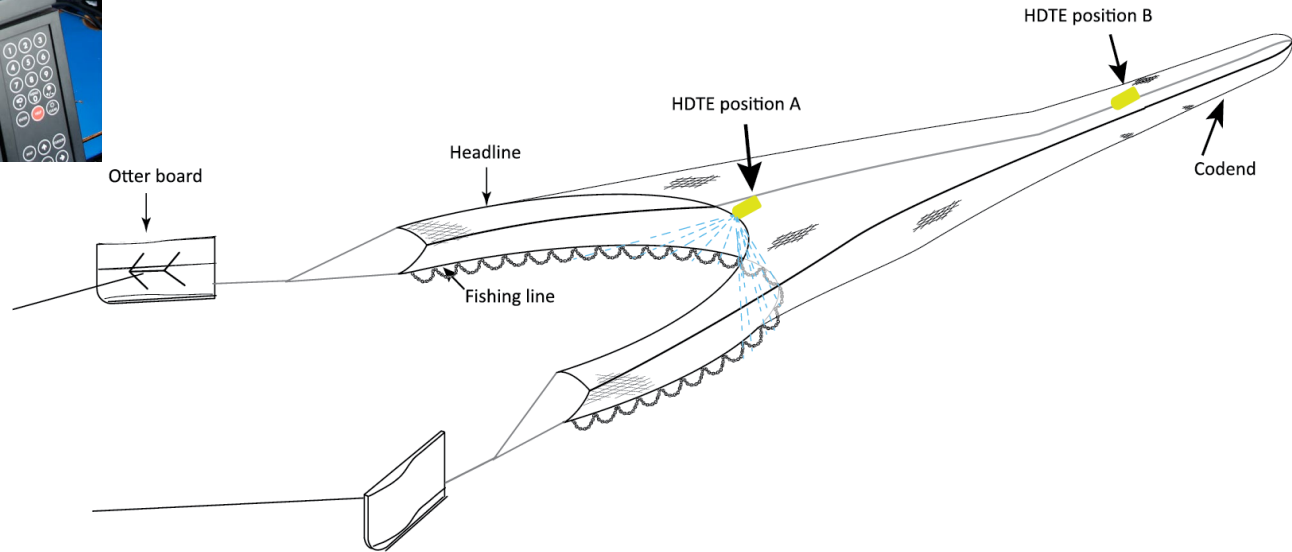
Survivability exemptions

- Nephrops ✓
- Cuckoo ray (temporary) ✓
- Seine-caught plaice Review

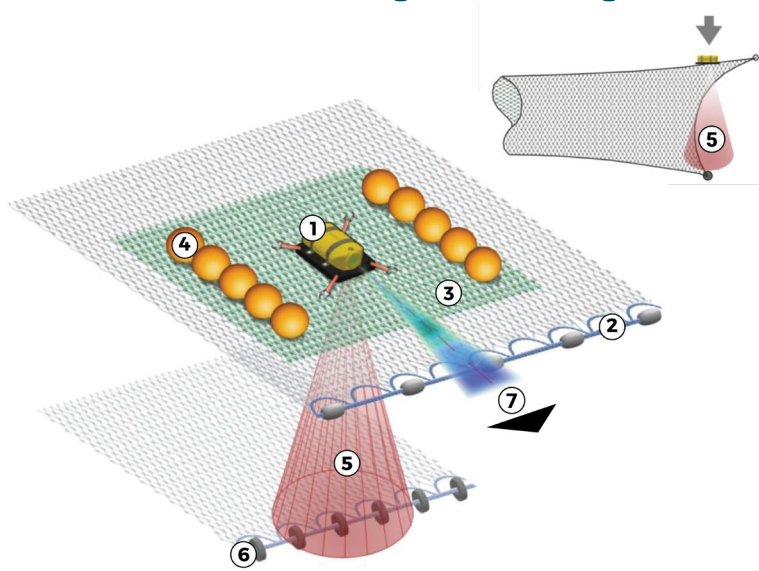
Future Work: The Box Trawl



Enhanced Gear Monitoring Service



HD sensor Nephrops trawl

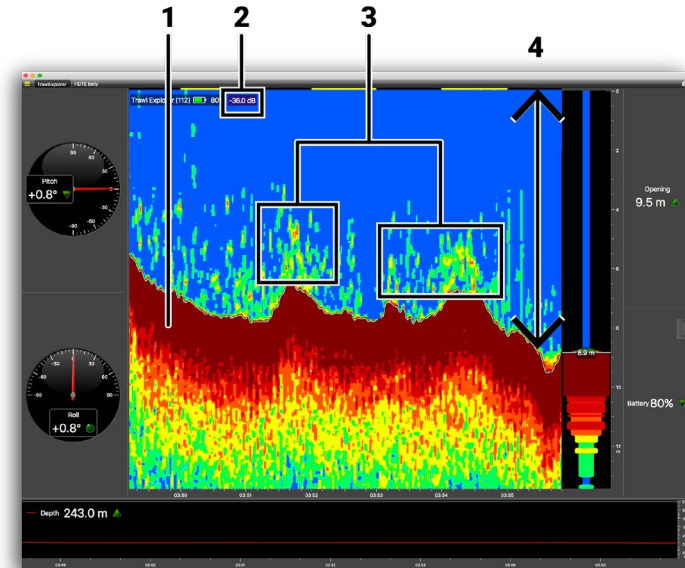


1 Seabed strength

2 Target

3 Fish opening

4 Trawl opening



Thank you

