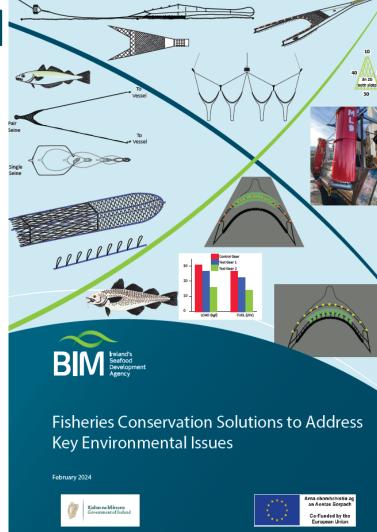






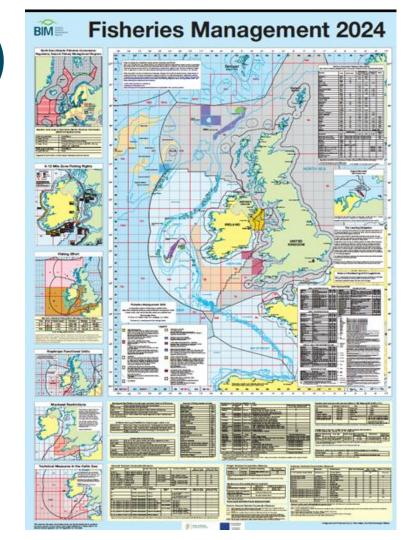
Enlarged mesh in trawl top sheets

- 1. The Landing Obligation (LO)
- 2. Technical conservation measures (TCMs)
- 3. Irish sea
 - 1. Nephrops



Landing Obligation (LO) — legislative drivers

- Article 15 CFP the LO
- Technical Measures Reg
 (EU) 2019/1241 –updated Jan
 2025
- Discard plan for Western waters (EU) 2023/2623 – Amended Jan 2024



Summary of BIM trials pre-2017

Selective measure	Whiting	Whiting	Nephrops
	< 27 cm (MCRS)	< 20 cm	≥ 25 mm
300 mm SMP	~ -52	~ 0	~ + 14
SELTRA 300	~ -53	~ 0	~ + 11
Sorting grid 35 mm (2015)	~ -77	~ -77	~ -4
Sorting grid 35 mm (2010 to 2014)*	~ -60	~ -50	
90 mm codend**	~ -58	~ -58	~ -21
90 V 80 mm codend**	~ -62	~ -62	~ -10



^{*} Based on observer coverage of long-term use by Industry

^{**} Codend only (not extension piece)

Summary of BIM trials post-2017

Whiting < 20 cm	Whiting < 27 cm	Nephrops ≥ 25 mm
-60	-47	-31
-15	-6	-12
-68	-45	-34
-78	-75	-19
	-60 -15 -68	cm cm -60 -47 -15 -6 -68 -45

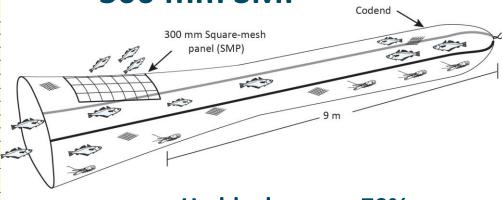


Nephrops

Nephrops Technical Conservation Measures

Area	Mesh size	Selective gear
5, 6 & 7 (except in areas below)	≥80 mm (note 1)	120 mm SMP or
		sorting grid (note 2)
5b & 6a East of 12°W	< 100 mm	300 mm SMP (note 4)
5b & 6a East of 12°W	100-119 mm	160 mm SMP
7a (note 2)	70-99 mm (note 1)	300 mm SMP (note 4)
7a (note 2)	70-99 mm (note 1)	SELTRA
7a (note 2)	70-99 mm (note 1)	Sorting grid
7a (note 2)	70-99 mm (note 1)	CEFAS net grid
7a (note 2)	70-99 mm (note 1)	Flip-flap trawl
Celtic Sea protection zone (note 2, 5)	≥80 mm	300 mm SMP (note 4)
Celtic Sea protection zone (note 2, 5)	≥80mm	SELTRA
Celtic Sea protection zone (note 2, 5)	≥80mm	Sorting grid
Celtic Sea protection zone (note 2, 5)	100mm	100 mm SMP
Celtic Sea protection zone (note 2, 5)	90 mm T90 (upper);	Dual codend
	≥80 mm (lower)	(until 31/12/2022)
Hake box	100 mm	100 mm SMP (note 6)

300 mm SMP



Haddock -70%

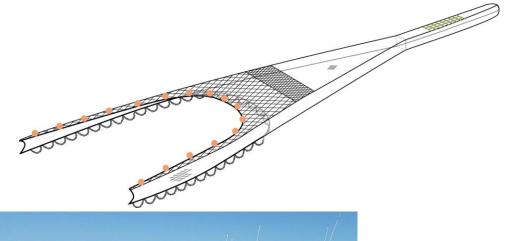
Whiting -52%

Nephrops +14%



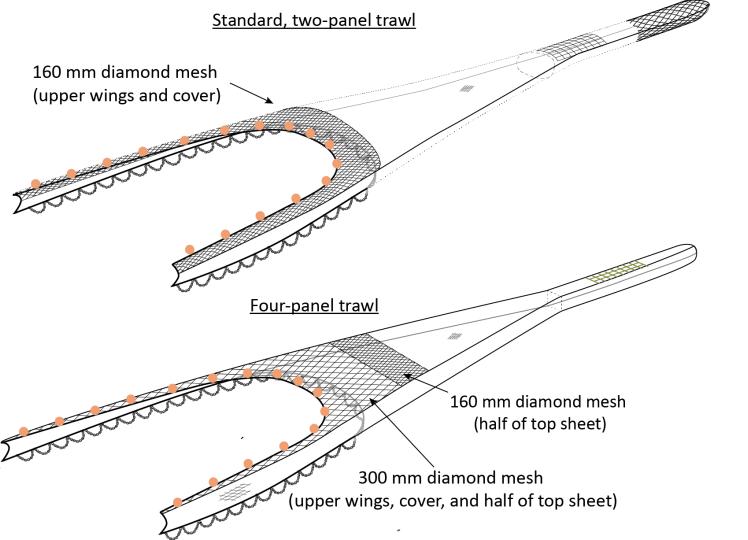


Four-panel 'Box' trawl





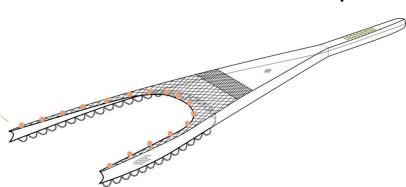


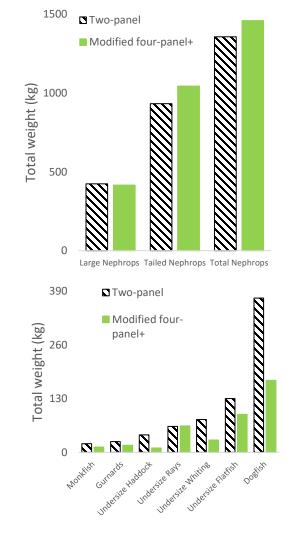




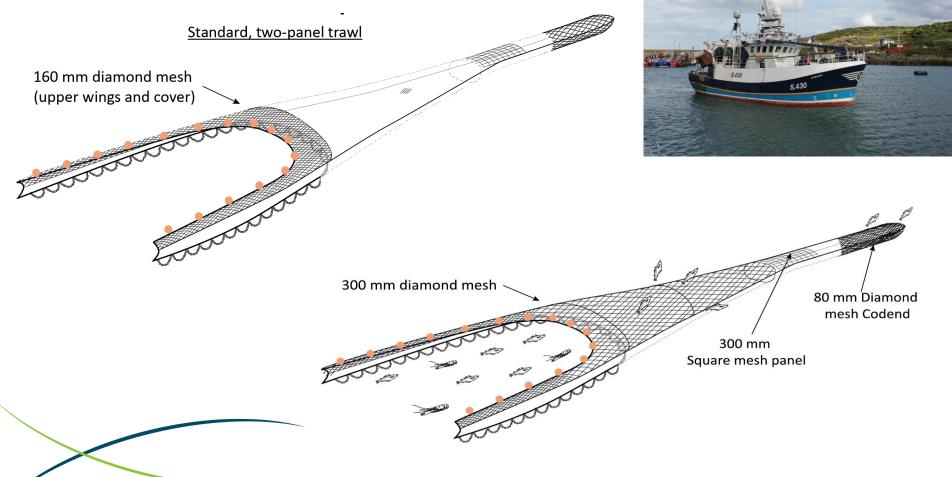
Box trawl

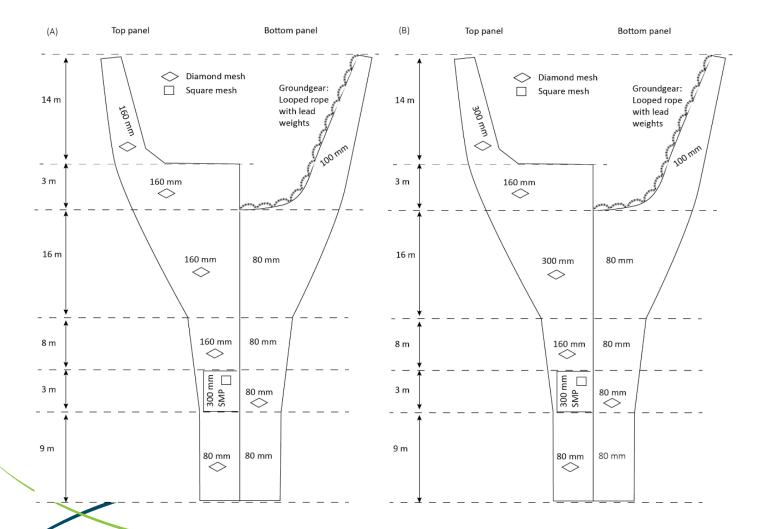
- Slight increase in Nephrops catches in the four-panel 'box' trawl compared with the traditional two-panel trawl
- Large mesh showed potential enhanced escapement of fish
- Potential to develop further





Enlarged mesh in Nephrops trawls







Enlarged mesh in Nephrops top sheets

- Significant 39% reduction in undersize whiting and good survival of escapees
- No loss in Nephrops catches
- Around a 10% reduction in fuel

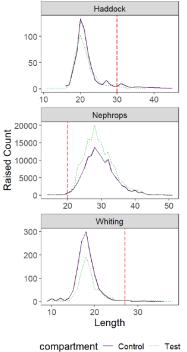


Figure 3. Length frequencies for Haddock, Nephrops, and Whiting caught in the control and test (160 and 300mm top sheet) trawls, Vertical dashed lines represent the respective species MCRS

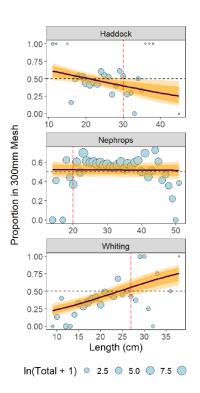


Figure 4. Proportions retained with GAM overlay for Haddock, Nephrops, and Whiting caught in the 300 mm top sheet trawls. Vertical dashed lines represent the respective species MCRS.



Future work

- Further work on large mesh in the upper sections of trawls
 - 80 Vs 160 mm mesh top sheets
- Smaller trawl doors



Links



- https://bim.ie/publications/fisheries/
- https://bim.ie/wp-content/uploads/2024/03/Fisheries-Conservation-Solutions-to-Address-Key-Environmental-Issues.pdf



• https://bim.ie/fisheries/advisory-services/fisheries-management-chart/



