

Overcoming Economic Barriers to Selective Gear Uptake



Background: Economic Barriers

1. Fear losing marketable catch & revenue
2. No assurance of profitability
3. Long-term gains > short-term losses?



Bottom line:
Fishermen need commercially available, financially viable gear solutions



Collecting financial data to support business and policy decisions



Costs



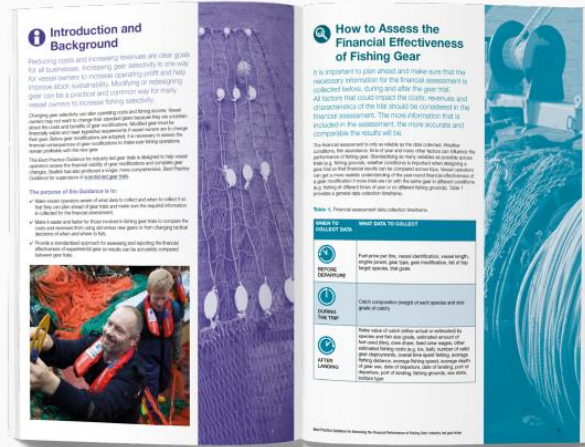
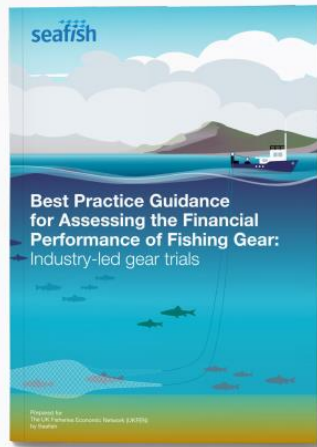
Revenue

- ✓ Catch composition
- ✓ Sales Value



Trial Details





Best Practice Guidance

Available for download from the [Seafish Gear Database](#) website.



Data Collection Sheet



Financial Assessment Calculator



Financial Assessment Spreadsheet: Trip Profile



Trip Profile			
Vessel Information		Trial Objectives	
Vessel Name		Top 3 target species <i>(please list)</i>	
Vessel PLN		Goals of trial <i>(please select all that apply)</i>	<input type="checkbox"/> reduce catch of certain species <input type="checkbox"/> reduce catch of undersize species <input type="checkbox"/> reduce gear wear <input type="checkbox"/> improve overall catch quality <input type="checkbox"/> reduce fuel consumption <input type="checkbox"/> reduce on-board sorting time <input type="checkbox"/> reduce habitat impact
Seafish Fleet Segment <i>(please select from list)</i>			
Vessel length (m)			
Engine power (kW)		Further description of trial objectives <i>(e.g. reduce catch of undersize)</i>	
Gear Information		Gear Operation	
Gear type <i>(please select from list)</i>		Steaming time TO fishing grounds (hours)	
If other gear type*, please specify		Steaming time FROM fishing grounds to port of landing (hours)	
Further gear description <i>(e.g. position of panel, size of mesh)</i>		Average haul duration (hours)	
Gear modification <i>(please select from list)</i>		Average tow distance (nautical miles)	
If other gear modification*, please specify		Average tow speed (knots)	
Further description of gear modification <i>(e.g. size and placement of square mesh panels)</i>		Average tow depth (m)	
		Please provide any further information about the gear operation:	
When & Where		Fishing Conditions	
Start date of trip (dd/mm/yyyy)		Number of days during trip with smooth or slightly wavy sea conditions while actively fishing (e.g. not steaming) (wave height 0-2.5m)	
End date of trip (dd/mm/yyyy)		Number of days during trip with moderate or choppy sea conditions while actively fishing (wave height 2.5-6m)	
Port of departure		Number of days during trip with very rough sea conditions while actively fishing (wave height 6m+)	
Port of landing		Bottom type <i>(please select from list)</i>	
ICES Area <i>(please select from list)</i>		If other bottom type*, please specify	
If other ICES Area or if operating in more than one ICES Area*, please specify		Please provide any further information about the fishing conditions:	
Latitude and Longitude coordinates or common name of fishing grounds <i>(e.g. Porcupine)</i>			



Financial Assessment Spreadsheet: Costs



Trip Costs					
	Control Gear	TRIAL Gear 1	TRIAL Gear 2	TRIAL Gear 3	TRIAL Gear 4
TOTAL number of *successful* hauls using each gear during trip					
TOTAL number of crew on board					
TOTAL Crew Costs, wages paid via crew share and to agency/fixed salary crew (£)					
Estimated crew costs per gear (£)					
Price of fuel (£ per litre)					
Estimated fuel use (litres)*					
Estimated fuel cost per gear (£)					
Quota leasing costs per gear, if applicable (£)					
Number of boxes filled					
Cost of ice per box (£)					
Estimated ice cost per gear (£)					
Other variable costs (£), please list:					
TOTAL of other variable costs (£)					
Estimated other variable costs per gear (£)					
Average on-board handling time per haul: sorting/gutting/grading/icing (minutes)					
TOTAL ESTIMATED FISHING COSTS					



Financial Assessment Spreadsheet: Results



Catch Marketability					
	Average TOTAL CATCH (kg) PER HAUL	Average total marketable catch (kg) PER HAUL	Average total marketable catch as % of total catch weight PER HAUL	Average total marketable catch as % of total catch weight PER HAUL change from control (+/- %)	
CONTROL Gear					
TRIAL Gear 1					
TRIAL Gear 2					
TRIAL Gear 3					
TRIAL Gear 4					

Financial Assessment					
	CONTROL Gear	TRIAL Gear 1	TRIAL Gear 2	TRIAL Gear 3	TRIAL Gear 4
Average FISHING INCOME from marketable catch (£) PER HAUL					
Change from control (+/- %)					
Average FISHING EXPENSES from trip (£) PER HAUL					
Change from control (+/- %)					
Estimated GROSS PROFIT per haul (£)					
Change from control (+/- %)					





Northern Ireland Gear Trials Project

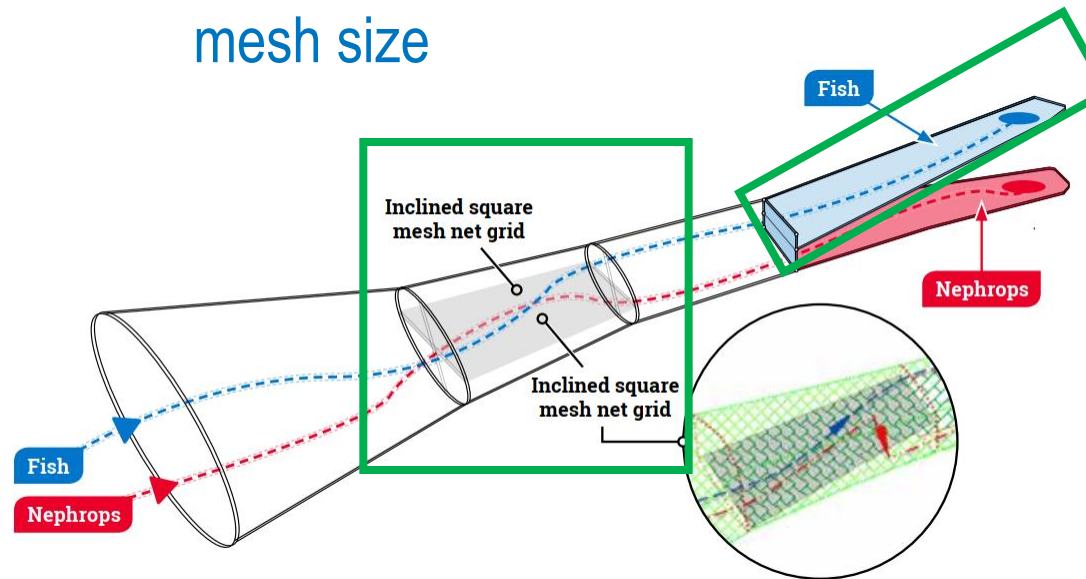
Both projects are EMFF funded



Case Study: MFV Amity, Scotland



1. 2015: skipper/owner Jimmy Buchan & skipper Philip Reid started testing
2. 2016-2017 phase 1 testing: inclined square mesh net grid
3. 2018 phase 2 testing: upper codend mesh size



Case Study: MFV Amity, Scotland

1. First UK trial to fully assess economic data using the Seafish toolkit
 - SFF observers collected trial catch data
 - Skipper collected financial data
2. Trial assessment underway, including financial assessment
3. Financial results -> Final gear report -> Marine Scotland Policy -> Policy decision
4. Gear made available to other vessels?



Future plans



1. Continue to work with GITAG and NI Gear Trials to efficiently incorporate economic data collection into trial protocol
2. Release version 2 of Best Practice Guidance and Financial Assessment Spreadsheet (spring 2019)
3. Work with fishermen and gear trial initiatives to facilitate economic data collection in future trials
4. Encourage normalisation of economic data collection during gear trials



Thank You

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