



Bord Iascaigh Mhara
Irish Sea Fisheries Board

Technical Conservation Measures to Respond to Cod Recovery Measures

Dominic Rihan, Bord Iascaigh Mhara

www.bim.ie



Gear Options for *Nephrops* Fisheries

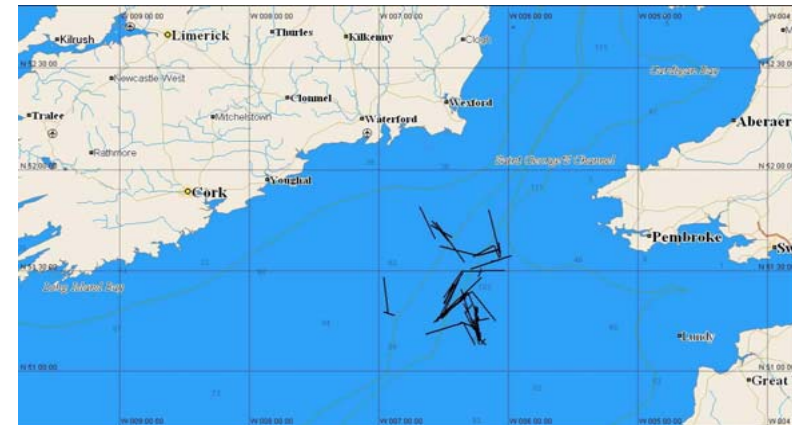
- What are they?
- What do they need to do?
 - Meet the thresholds (1%, 1.5%)
 - Maintain *Nephrops* Catches
- What are the impacts?
 - Economic?
- Are there practical issues?
 - Handling
 - Cost

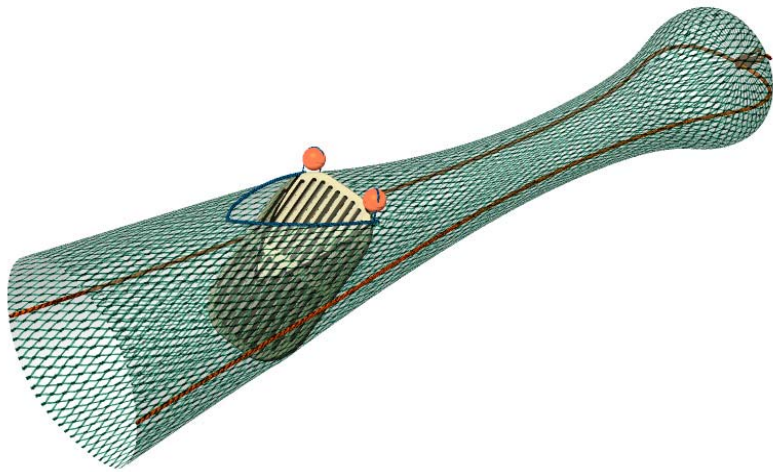
Possible Solutions

- There aren't that many!
- Eliminate or reduce
- Applicable to *Nephrops*:
 - Grids
 - Inclined separator Panels
 - Large mesh SMP's
- Other fisheries
 - Bacoma/T90 Codends
 - Eliminator style/Orkney Trawl

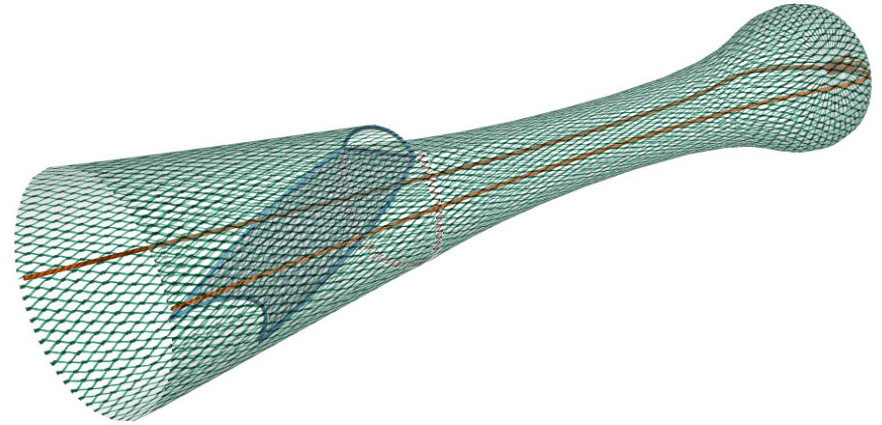
Recent Trials

- Supreme II (24m/600hp)
- Smalls grounds (VIIg)
- More cod!
- 20 days in March – April
- 60 tows
- Catch comparison
- Normal commercial conditions

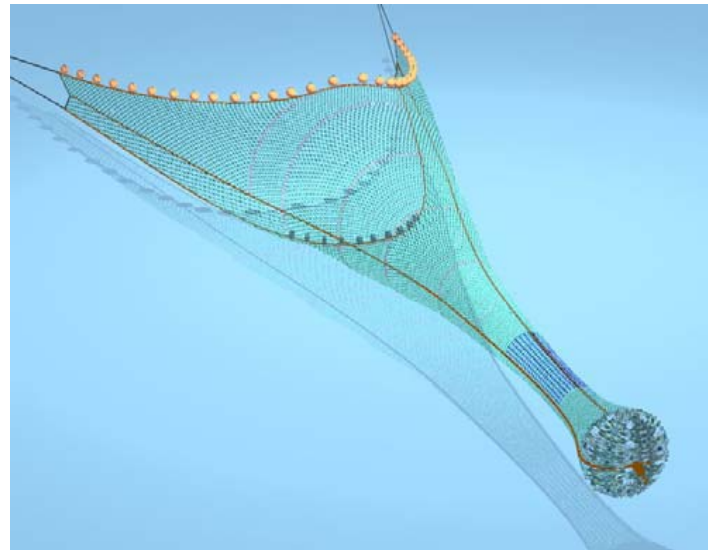




Rigid Grid

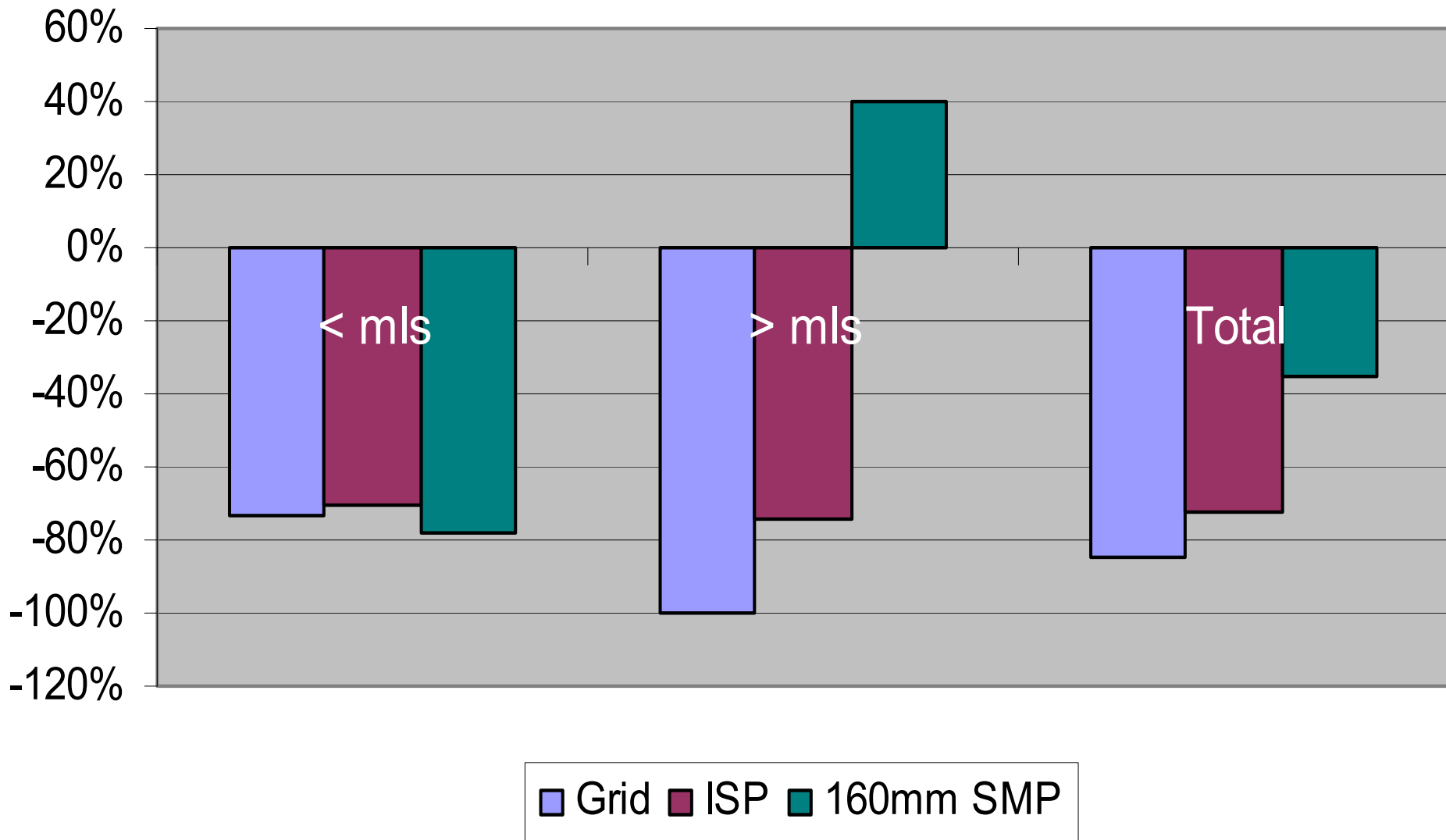


Inclined Separator Panel

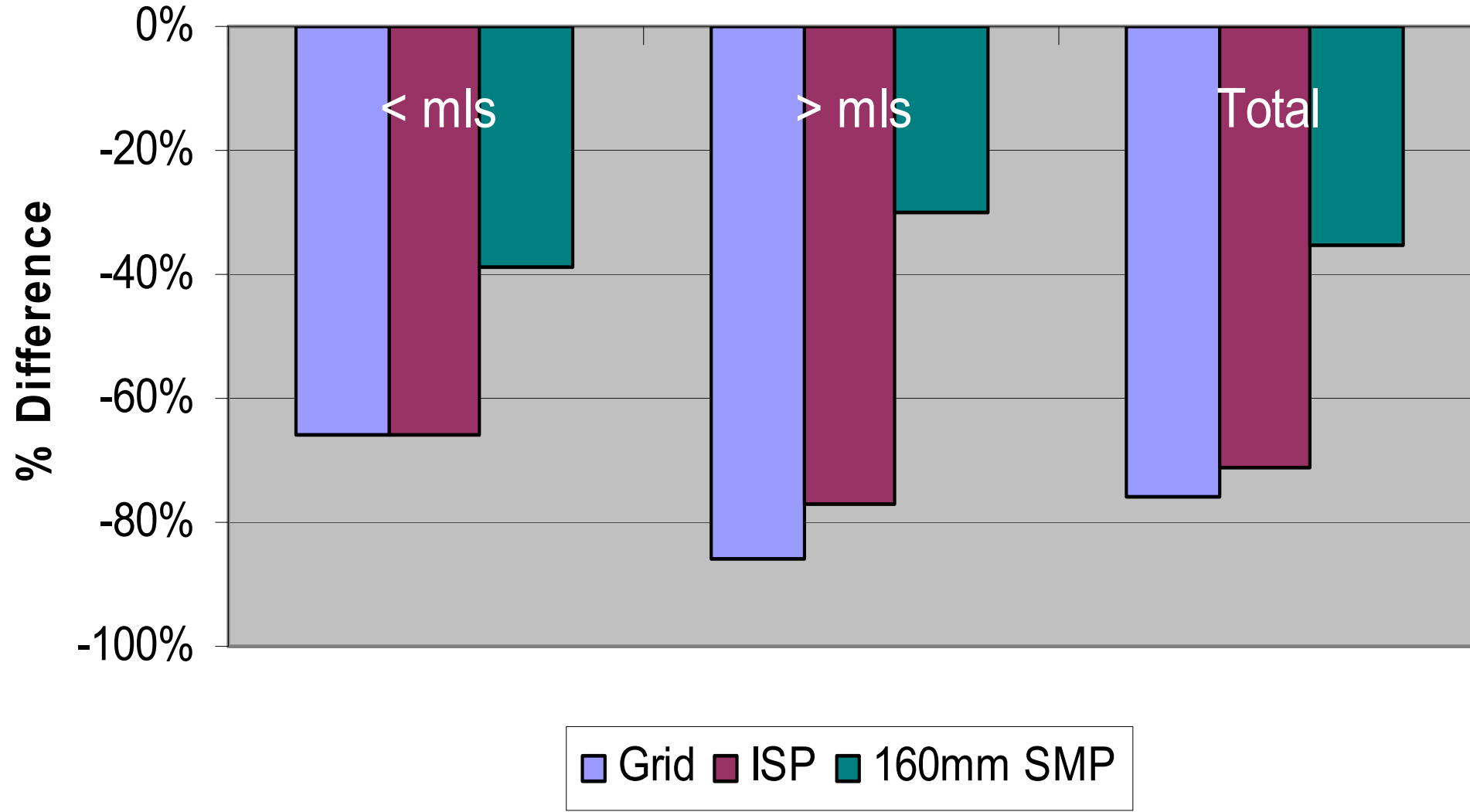


160mm SMP

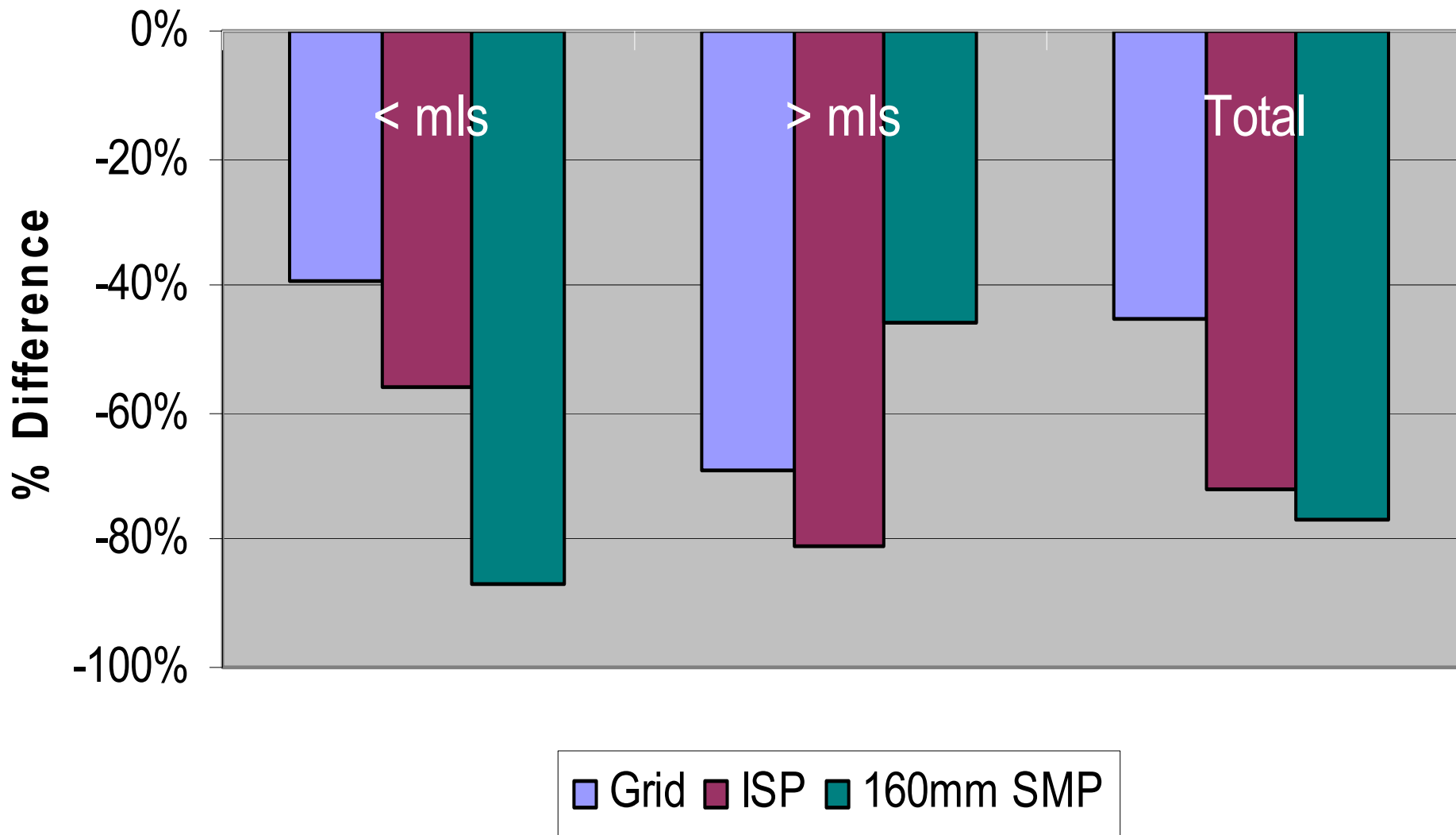
% Differences in Cod Catches with the 3 gear options



% Difference in Haddock catches with the 3 gear options



% Difference in Whiting catches with the 3 gear options



Cod as % of Total Catch

Gear Type	Experimental	Control
Grid	0.3%	7.7%
ISP	3.7%	12%
160mm smp	5.6%	3%

Economic Analysis

Gear Type	% Reduction in Total Value	% Reduction in Fish Catch value	Value of <i>Nephrops</i> as % of Total Catch
Grid	30%	86%	93%
ISP	28%	68%	84%
160mm SMP	12%	11%	60%

Follow-up Trials

- 3 trips (June-August)
- Irish Sea
- Estimate Economic losses
- Practical issues
- *Nephrops* catches stable
- Fish catch reduced by 75%
- 1% threshold met



PROS & CONS

	Grid	ISP	SMP
Maintain <i>Nephrops</i> Catches	√√	√√	√√√
Juvenile areas	√	√√	√
Practicality	X	√	√√√
Economic Losses	X	X	√√
Circumvention	√√√	X	√
Meets thresholds	√√√	√√	X

Conclusions

- Grid & ISP immediate solutions
- Meet STECF guidelines
- Burden of proof
- Single species fishery
- Is this necessarily good?
- Trade off between effort and fish catch
- Modify design to match gear and vessels

Conclusions

- SMP has good points
- Needs to be close to codend for cod
- Other gears?
- *What about Nephrops selectivity?*

A photograph of a fish swimming in a net. The fish is positioned in the upper left quadrant, partially obscured by the net's mesh. The net is a light-colored, diamond-shaped mesh that extends across the frame. The background is a dark, slightly hazy blue-green color, suggesting an underwater environment. The text "Thank You!" is centered in the middle of the image in a white, sans-serif font.

Thank You!