

Poul Tørring and Ulrik Jes Hansen:

# Best Available Technology makes Drastic Cuts in Fuel Expenses in Trawl Fisheries

Danmark og EU investerer i bæredygtigt fiskeri og akvakultur

Projektet er støttet af Fødevareministeriet og EU

Ministeriet for Fødevarer,  
Landbrug og Fiskeri



Den  
Europæiske  
Fiskerifond

financed  
by:



Consulting and Training in Fisheries

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# Best Available Technology

3 very different fisheries, 3 very different vessels, 3 similar approaches:

F/V Katrine Kim, 219 HP, 17 m  
Baltic cod,  
2010 – 2012, project completed



F/V Altje Postma, 625 HP, 31 m  
Roundfish, North Sea  
2012, project completed

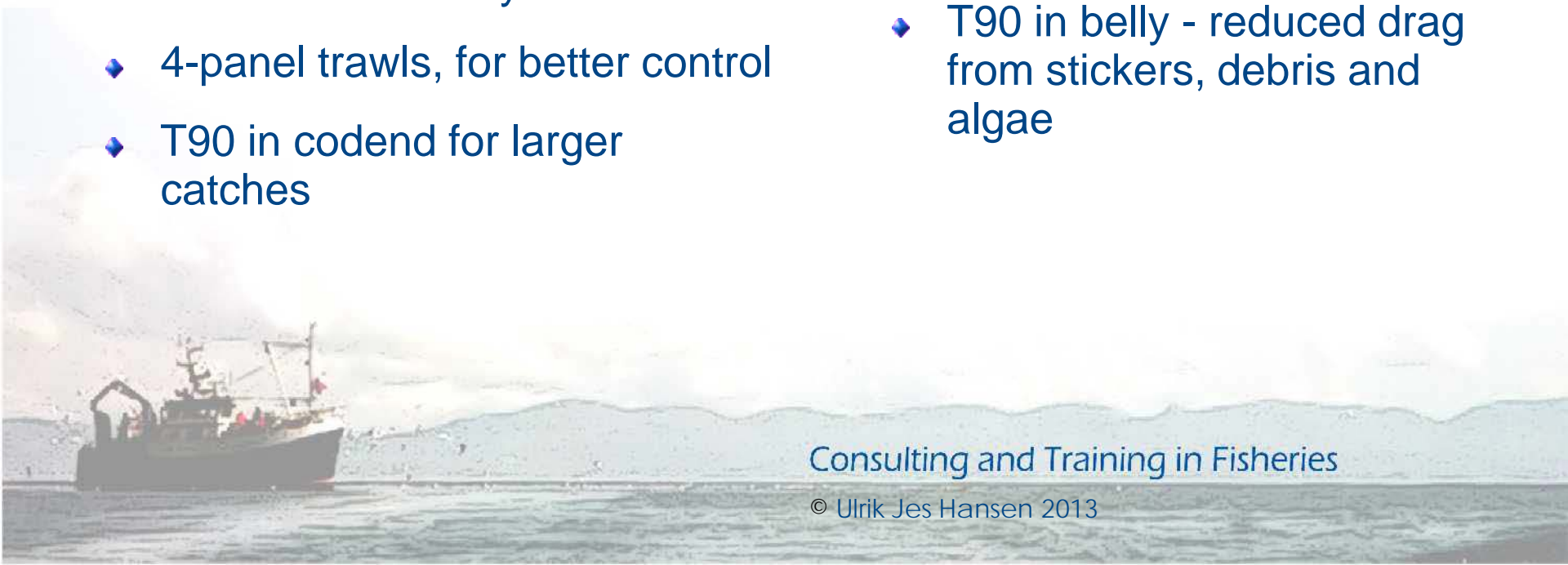


F/V Lonny Hedvig, 734 HP, 45 m  
sand eel, North Sea,  
2012 - 2014

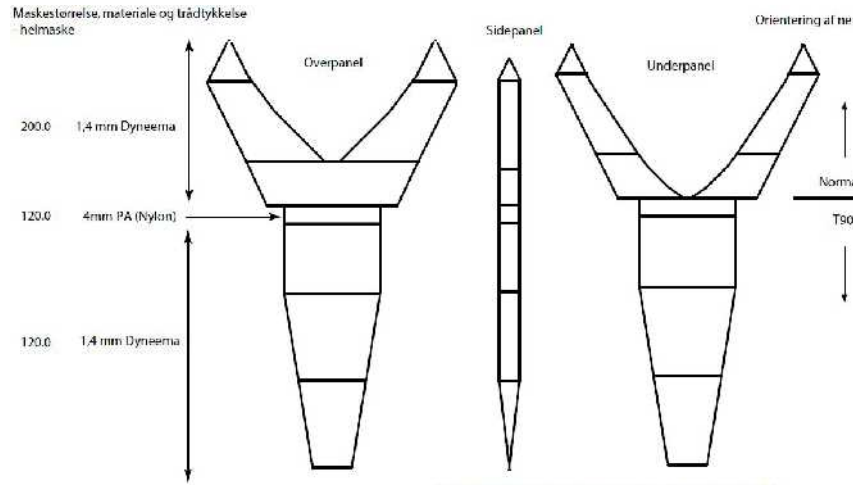


# Best Available Technology

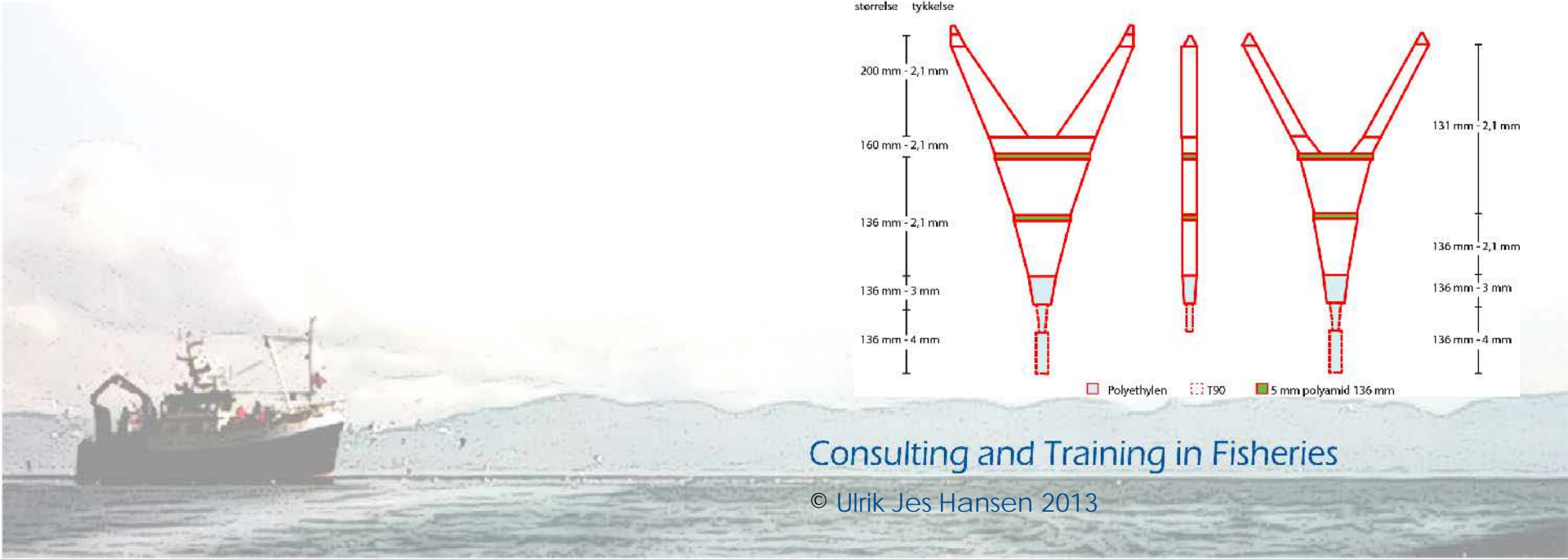
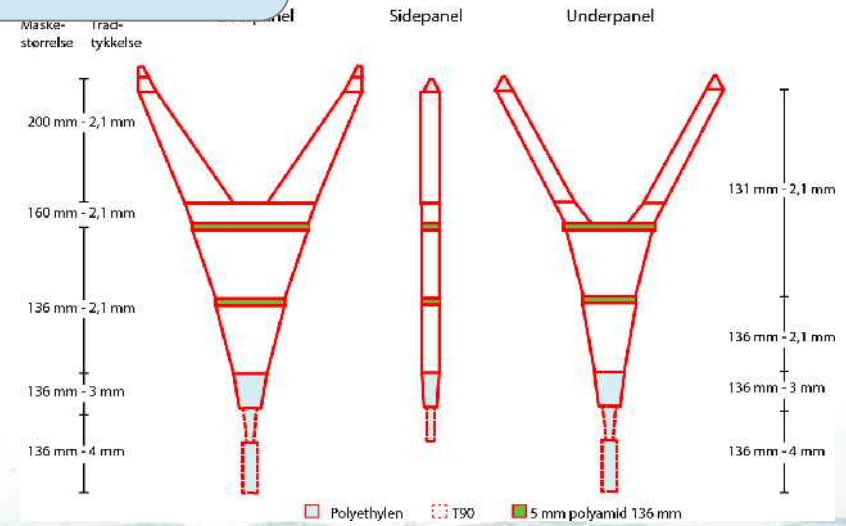
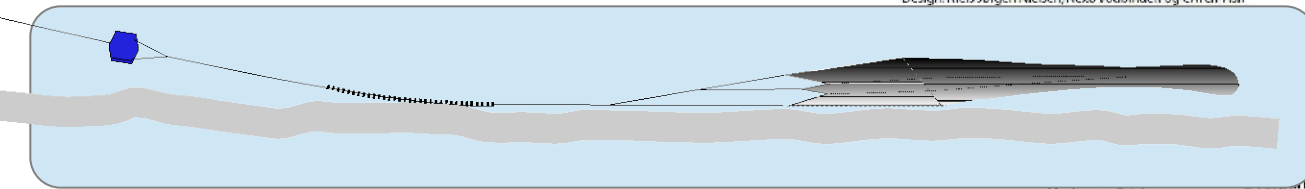
- ◆ Dyneema warps
- ◆ Pelagic Doors w/ sensors
- ◆ Twin rig
- ◆ Dyneema trawls with nylon bands for elasticity
- ◆ 4-panel trawls, for better control
- ◆ T90 in codend for larger catches
- ◆ Redesigned trawls:
  - ◆ Huge trawls to compensate the reduced netting drag
  - ◆ Flymeshes (= drop-meshes) - large spread
  - ◆ T90 in belly - reduced drag from stickers, debris and algae

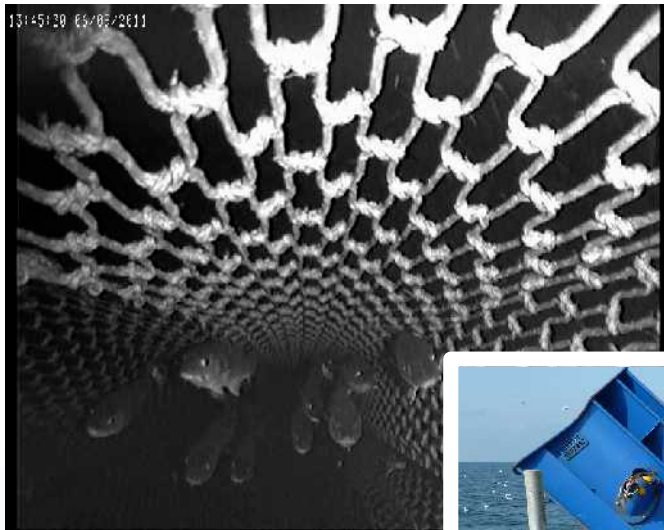


# Specs



Design: Niels Jørgen Nielsen, Nexa Vodbinderi og CATCH fish





T90



# Results

## Vessel 17 m - Baltic cod

- ◆ Fuel cons. - 7.5%
- ◆ Catch per hour +17%
- ◆ Catch per litre +26%
- ◆ Combined effect +40%
- ◆ Investment 52,000 €
- ◆ Payback time 11 months
- ◆ Profitability +48%

## Vessel 31 m - whitefish in the North Sea

- ◆ Catch +18%
- ◆ Gross earnings +13%
- ◆ Investment 120,000 €
- ◆ Payback time 18 weeks



# Thank you!

Aquamind, project leader

Thyborøn Trawl Doors

CATch-Fish, gear design

Danish Technological Institute  
(energy consumption measurements)

Local skippers, net manufacturers and  
fishermen associations



Contact:

Ulrik Jes Hansen – [ujh@catch-fish.net](mailto:ujh@catch-fish.net)

Poul Tørring – [pt@aquamind.dk](mailto:pt@aquamind.dk)

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