Eduardo Grimaldo / Manu Sistiaga

# Development of catch control devices

Results from:

- □ Industral project (FHF) " Development of a selection system for mid-water trawls"
- □ SINTEF project "Catch controls for trawls"
- □ NFR project "Development of catch control devices for trawls"



# Developmet of catch control devices for mid-water trawls

#### Bacground

One of the problems by fishing with mid-water trawls is the risk of taking too big catches. High densities of fish means that large quantities of fish enter the trawl in few minutes, and this is difficult to control even with a lot of electronic monitoring sensors in the trawl.





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# Developmet of catch control devices for mid-water trawls

#### Working principle:

- The codend closes and partially detaches from the rest of the trawl when it has been filled with a certain amount of fish.
- The fish that is still inside the trawl have the chance to escape unharmed.





#### Acoustic releaser - ring-ring – flitting of rope





Acoustic releaser - ring-ring – flitting of rope



Video: Prototype testing in Hirtshals



#### Acoustic releaser - ring-ring – flitting of rope





The codend has just partialy detached from the extension piece and lots of fish start to og

The codend with 3 tonns of fish hangs from two ropes. The trawl is now in its way to the



#### Video: R/V Jan Mayen nr 3



#### Acoustic releaser - ring-ring – flitting of rope



Photographs which shows a detached codend in its way to the boat (left) and the same codend with a 3 tons cod catch. The released mechanism which was used in this test was the "acoustic release based system". The experiments were performed on board the RV Jan Mayen in May 2011. (Photographs: Manus Sistiaga, SINTEF)



#### Acoustic releaser – weak link – supporting rope

B)

Acoustic releaser

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44 # circunference

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Much simpler system that eliminates risk of assembling failure....







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### Teknikk nr. 3

#### Svaklink-fangstsensor teknikk





#### Teknikk nr. 3

#### Svaklink-fangstsensor teknikk



#### Fullskalaforsøk om bord F/F Jan Mayen, mars 2012

Video:R/V Jan Mayen nr 8

#### In collaboration with:

- SINTEF F&H
- Norges Fiskerihøgskole
- NTNU
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