



**Symposium on Catch
Identification Technologies**
Bergen 02-03 September 2022

Innomar Ocean Technology

Presented by :

Bernt W Asbjørnsen CMO

© Innomar Ocean Technology



- Optical fish identification and measurement
- Realtime reporting
- Autonomous reporting
- Instant information to buyers
- Pre sale before entering port

A detailed view of a fish processing conveyor system on a boat deck. The system consists of a grey metal hopper on the left that feeds fish onto a stainless steel conveyor belt. The fish are moving from left to right. Above the conveyor, a vertical metal frame supports a camera or sensor unit. The background shows the blue water of the sea. A semi-transparent grey box on the left contains text about FISH AI technology.

FISH AI

- Artificial Intelligence opens up for automated classification and measurement of individual species as they enter the vessel
- Machine learning will improve classification over time

Innomar Transducer

- Subsea connectivity transducer enabling wireless communication through water
- Measuring catch in the pots by camera or echo sounders
- Communicating with the data platform via smart buoys
- One-off purchase for fishermen
- Fishermen can plan routes based on catch levels
- Increasing fishing time
- Reducing fuel consumption
- Transducer can provide valuable insights for regulators and NGOs

1 Increased revenue

2 Reduced OPEX

3 Improved fish welfare



Reducing lost fishing gear and ghost fishing



Safe & Sustainable fishing

~4,000 tonnes plastic pollution savings ¹

Ocean Data Analytics

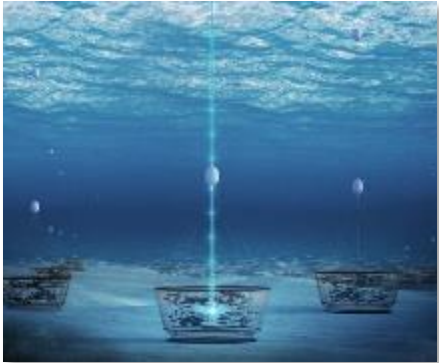
Equipment Control

Economic savings from reduced loss of gear and fuel use



~145,000 tonnes CO₂ savings from reduced trip durations (reduced fuel consumption) ¹

~130,000 tonnes reduction of bycatch¹



Catch Control

~7,200 tonnes ghost fish savings ¹

~6,570,000 tonnes² additional CO₂ savings from replacement of trawlers¹

Increased profitability for fishermen

Potential to increase value-cost ratio from **8x-107x** as a result of time savings per haul vs. AIS-buoys per year³

Source: SINTEF 2022, PWC Market Study 2022

note: 1) Based on SINTEF's estimated savings from Innomar's offering compared to traditional fishing gear and forecasted units sold of Innomar's smart buoys (66k) and fishing traps (50k) in 2026 with a respective lifetime of 3 years for both products. Additional upside from savings of marine mammals and birds, estimated to ~4k individuals in 2026; 2) 20% of fish traps sold by Innomar replaces bottom trawlers; 3) Range depending on size of vessel. Case study based on medium to big size vessel (50-200 feet)

Sunfish Smart Buoy

- The Sunfish smart buoy communicates with 4G in coastal areas and satellite in remote locations
- Sunfish 4G launched recently and satellite in 1Q23
- Robust construction; life expectancy of ~5 years
- Fisher can save time, reduce loss of gear, save fuel and reduce environmental impact
- Through the DigiCatch App you will have
 - Full control of gear in the ocean
 - Movement
 - Geofence
 - Alarms (Push notifications)

* Subscription applies

- 1 Time saved**
- 2 Robustness of solution**
- 3 Reduced equipment cost**

Sunfish Satellite



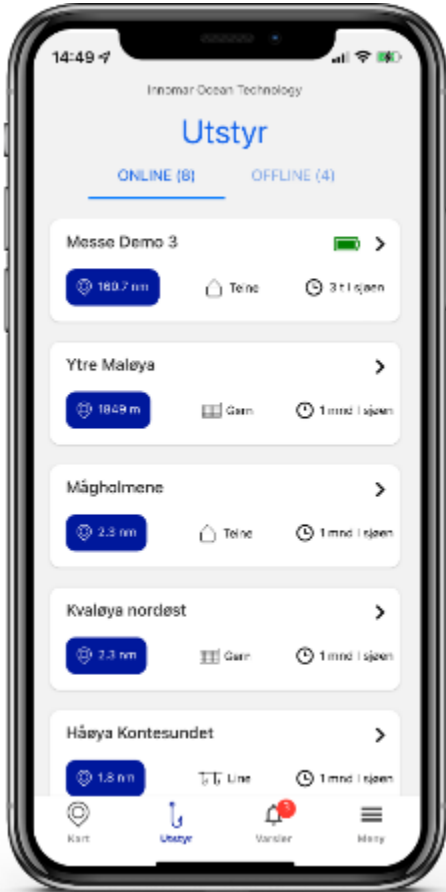
- Priced at € 990*
- Watertight at 19 bars
- Global coverage
- Easy to use

Sunfish 4G/5G



- Priced at € 349*
- Connect to any fishing gear
- Affordable also for leisure fishermen





✓ Locate gear

✓ Direction of currents

✓ Set a geofence ✓ Monitor assets ✓ Ocean data



Monitoring of passive fishing gear in the ocean!

- Authorities and fisheries
- Save time and cost with autonomous control of passive fishing gear
- Deployment date
- Owner and type of gear
- Overdue from harvesting
- Lost or abandoned fishing gear
- Restricted and closed areas
- Analyses and patterns

DigiCatch

Kart

FORFALT MISTET ALLE

🔍 ID, eiers navn, telefon, e-post, bøyenavn osv...

🔽 Filter

- 🏠 NJ3QQ7
- 🏠 78CG3Y
- 🏠 JV5V54

📍 Fjordbåen

🕒 Satt ut 3 måneder siden
08.08.2022, 11:02

📶 Siste signal 5 minutter siden
31.10.2022, 13:23

📄 Eierinfo 📧 Send SMS 📍 Finn på kart

- 🏠 T7TN8H
- 🏠 DT3CA3

Norway

Bergen

Hardangervidda National Park

Oslo

4 nautiske mil

10 nautiske mil

Avtalt avgrensningslinje Norge-Sverige

Avtalt avgrensningslinje Norge-Danmark

Skagerrak

Innomar Ocean Technology

JV5V54

🏠 Forfalt

📍 Fjordbåen

🕒 Satt ut 3 måneder siden
08.08.2022, 11:02

📶 Siste signal 4 minutter siden
31.10.2022, 13:23

Eierinfo Send SMS



THANK YOU..

- FOR LEGISLATING SMART BUOYS AND SAVING THE OCEAN!!!