# OCEAN AND ENVIRONMENTAL TECHNOLOGIES AND SERVICES

Part 1: Ocean Focus

Wednesday 20 October 9:00 AM to 01:15 PM











# Company Overview





**Seas of Solutions** is a Dutch organisation established in 2021 with the purchase of the Orolia's marine electronics safety brands, **McMurdo**, **Kannad Marine & Netwave**.

Although a new company, the product range has a long history of innovation in search and rescue.

Our Vision:

**Supporting Safer Sailing Anytime - Everywhere** 









## Our Focus

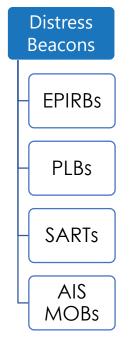
Brands

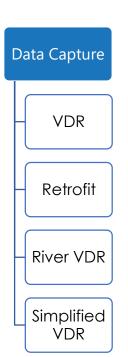






### Technology





#### Sectors

Commercial (SOLAS) **F**ishing

Workboat

Cruise

Leisure

Governmental



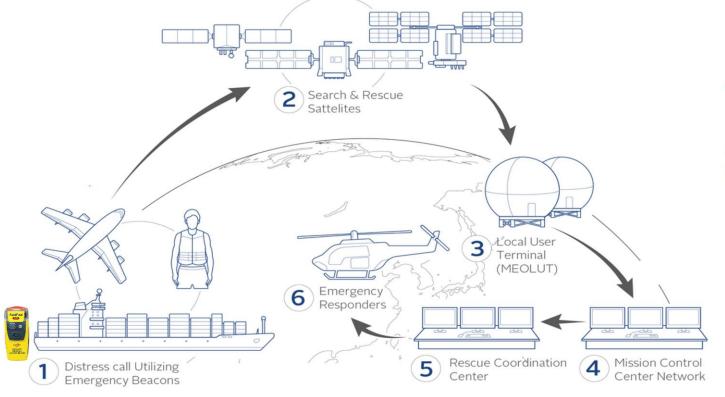








## What is a Person Location Beacon









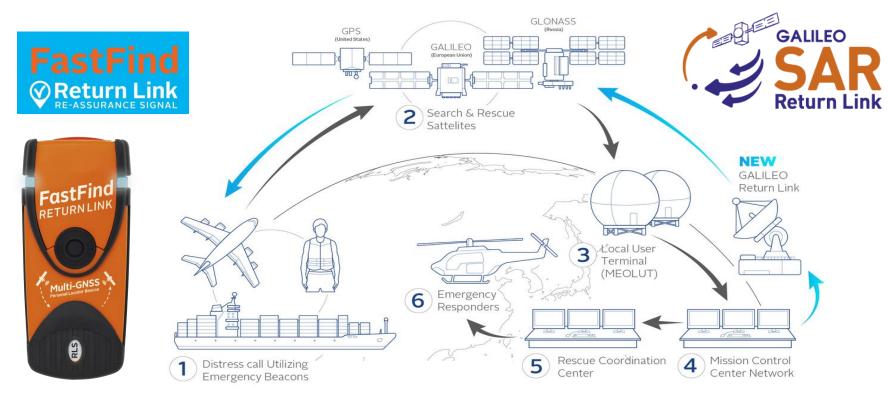
- A PLB is a personal distress beacon using the free to use, Cospas Sarsat 406MHz frequency that was set up in 1982 to alert professional search and rescue that help is needed.
- Available since 2002, PLBs are a one way call for help that will signal for a minimum of 24h when activated and includes a strobe and newer models have GNSS to help locate the person in distress.





# Project Helios & the Return Link Service RLS

The **Return Link Service** allows Galileo satellites; that detect emergency signals emitted on 406MHz distress beacon; to transmit a signal back to RLS capable beacons to activate a blue light that confirms receipt of the distress signal.











# The Impact of RLS





Galileo powered RLS re-assurance signal



Multi GNSS for accelerated location detection

- The FastFind Return Link developed via project Polaris, utilises the Return Link Service to send a signal back to the beacon confirming the PLB users 406MHz 'distress' alert has been received and their location coordinates are captured.
- Return Links reassurance signal will also reduce the chances of rash decisions taken by those who feel they have nothing to lose, like leaving the life raft or attempting to swim to safety.
- Knowing that SAR professionals know your situation and location will be an invaluable support and makes the PLB beacon a two-way communication tool for the first time.
- The RLS signal also confirms that you have activated your beacon and it is working correctly









# Helios: New Fitting Options



Aim to encourage users to carry a PLB

- Antennae friendly Flotation pouch
- Belt / Bag Clip
- Oral Tube Clip















## Markets for RLS PLB

#### Fishing

 Nos of national initiatives to mandate PLBs in smaller vessels – trying to upgrade to RLS in 6 year cycle

#### Search & Rescue

- Engage in training program to ensure technology Knowledge
- Irish Coast Guard are supplying all of there crews

#### **Outdoor Market**

- Solo workers in remote locations are key market
- Sweden for their forestry workers

#### Leisure Market

- Huge growth market in part due to covid travel restrictions
- Exhibitions are key to engaging this market
- US world's largest market not yet open to RLS

#### Aviation

Attractive market for small leisure users

#### **Resellers Inc**

GTC - Global

https://gtc.co.uk/fastfindreturnlink-plb

#### Navicom - France

https://www.navicom.fr/securite-enmer/balises-de-localisation-etdetresse/fastfind-returnlink-balisepersonnellemanuel?cnt=7729601&scc=0&seg=0

#### Germany

https://www.svb24.com/en/fastfind-returnlink-plb.html

https://mullionpfd.com/en/technical/plb















## Product Introduction

Promoting RLS technology since 2019 as a leading innovator and distress beacon brand

FastFind PLB went on the market in January 2021

RLS declared globally operational March 21

Entire production run sold immediately, we are pushing to meet demand 400 /500 a month– France, Ireland, Sweden, UK biggest markets so far

Exhibitions key promotional tool Southampton /

Europort / Annpolis boat shows

- Entered into the Dame Awards – Marine Leisure Electronics biggest award National Restrictions on PLBs need to use MMSI protocols limit access to some markets such as Germany, Norway, Spain but this is coming soon

US is world's largest Leisure market, FCC has carried out extensive market research on views on RLS technology with conclusion imminent

EPIRB variant developed but awaiting Cospas ability to utilise MMSI protocols before going to final approvals



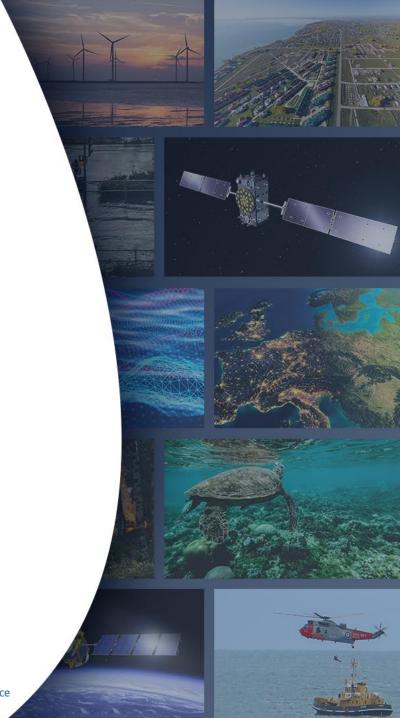












# Life Saving Impact



**2019** Addition of Galileo GNSS

+Multi GNSS (Galileo)

Faster, more accurate, location detection, time under 10min

GALILEO



2018

406 + AIS alerts nearby vessels

+AIS Beacons

AIS also alerts local vessels to distress



2017

MEOSAR upgrade of Cospas Sarsat

Faster 406 Detection

Beacon detection accelerates, Average detection under 45mins









1998

**GNSS** 

Beacons

Addition of GNSS (GPS) reduces search area

Addition of GNSS (GPS) reduces search area to O.1NM, location updates possible.



Cospas Sarsat SAR system starts

406MHz Beacons

Powerful, global satellite distress signal to SAR professionals, supported over 45,000 rescues. 3NM search area, average 1.5h detection

















+Return Link (RLS)

Addition of ReturnLink Service

RLS Sends signal back to the beacon to confirm reeipt & location known