

Eurofleets⁺ Infrastructure Catalogue



This project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 824077



Eurofleets⁺

An alliance of European marine research infrastructure to meet the evolving needs of the research and industrial communities

www.eurofleets.eu

Acknowledgements

The Eurofleets+ coordination team would like to thank the infrastructure operators who generously provided the data, photos, feedback and edits in this catalogue.

We wish to also recognize the overall contribution to the project from all Eurofleets+ partners and acknowledge that funding for the project was received from the European Commission's Horizon 2020 programme.

This catalogue is available in PDF from the Eurofleets+ website: www.Eurofleets.eu or by request at: eurofleetsplus@marine.ie

Photo of the RV Belgica kindly provided by Freire Shipyard, Vigo. RV Laura Bassi photo credits: Sedmak@Italian National Antarctic Program – PNRA.

Foreword

The ability to explore remote and challenging areas at sea, across a range of oceanographic disciplines, is becoming increasingly important if we are to understand the complex nature of our oceans and predict future change. For the foreseeable future, research vessels will be the primary method of oceanographic observation, through direct observation and via autonomous vehicles. Research vessels across Europe, and internationally, provide support for complex, multidisciplinary, multi-investigator research, and include state of the art technology and instruments to serve research and innovation needs for a large number of different end user communities.

The oceans are critically important to sustaining the planet and it is essential that we have better collaborative management of marine ecosystems. The oceans also contain vast untapped resources; unexploited mineral resources as well as genes, proteins and other biomolecules of marine life, which may furnish the medicines and industrial materials of the future. Smart management of these natural assets requires knowledge, as do our efforts to ensure the oceans' ongoing species richness and their critical function in maintaining the Earth system. In particular, new technologies will allow us to us to more carefully study and exploit deep-sea environments and discover the vast reserve of still unexplored natural resources.

In the first status report on global ocean science capacity, UNESCO concludes that "Research vessels are an essential component of ocean research infrastructure as they provide access to both the Open Ocean and coastal areas. Evolving science needs, cost pressures and newer technologies, such as advances in autonomous underwater vehicles (AUVs) and remotely operated vehicles (ROVs), have changed ocean science infrastructure. However, this has not lessened the reliance on well-equipped ships. In fact, research vessels are fundamental to deploy and recover new observing technologies and to explore the vast areas of the ocean poorly observed to date." - Global Ocean Science Report (GOSR), UNESCO, 2017

The European research fleet is a key research infrastructure, essential for collecting in-situ marine data sets from global oceans, regional seas and coastal waters. Research vessels carry and operate shipborne observation equipment and facilitate deployment and handling of a large range of observing and sampling instruments. Without them, it would not be possible to deploy or service a wide range of observing systems, including moorings, buoys, seafloor observatories, and highly innovative AUVs and ROVs. The fleet thus provides a major platform for important data collection, increasingly functioning as intelligent data and information hubs, interacting with scientists onshore.



Aodhán Fitzgerald
Eurofleets+ Project Coordinator
Research Vessel Operations Manager
Marine Institute, Ireland.

Introduction

The Eurofleets+ project is a EU Horizon 2020 funded project which facilitates access to the largest advanced research vessel fleet across Europe, Greenland, USA, Canada, Bermuda and New Zealand and is designed to meet the evolving and challenging needs of the Marine Research/Marine Science user community.

The project comprises of a consortium of forty-one organisations; marine research institutes, universities, foundations and SMEs from twenty-two countries across Europe and Oceania with funding of €9.9 million. The project follows on the success of two previous Eurofleets projects.

The project will enable access to a unique fleet of twenty-seven state-of-the-art research vessels, eight Remotely Operated Vehicles (ROVs) and five Autonomous Underwater Vehicles (AUVs) which will enable remote access by researchers and diverse end users including the public. This catalogue describes each piece of infrastructure available in detail and outlines the cruise prerequisites which must be in place prior to a scientific party boarding the research vessels.

Through the competitive calls, researchers will be able to access the entire North Atlantic, Mediterranean, Black Sea, North Sea, Baltic Sea, Pacific Southern Ocean and Ross Sea. Eurofleets+ will prioritise support for research on sustainable, clean and healthy oceans, linking with existing ocean observation infrastructures, and it will support innovation through working closely with industry.

The project will provide European and international researchers with the opportunity to apply for three main access programmes, through a single-entry system:

- SEA (Shiptime and Marine Equipment Application) which provides access to the vessels and/or marine equipment and will have a minimum of 2 calls with possibly a third.
- Co-PI programme is aimed at enabling early researchers to implement their own research together with the SEA Calls – this will be a running call.
- RTA – (Remote Transnational Access) which will enable remote access to samples or data from a Eurofleets+ vessel will be a running call also.

In addition to comprehensive transnational access activities, the project will undertake joint research in challenging and highly relevant areas, including deep ocean research and exploration, data management, and enabling future virtual access. Other key objectives include multiple networking activities, wide stakeholder engagement, and development of a strategic roadmap and sustainability plan. To maximise the impact of the project, Eurofleets+ will implement diverse training and education activities and widespread dissemination and communication actions.

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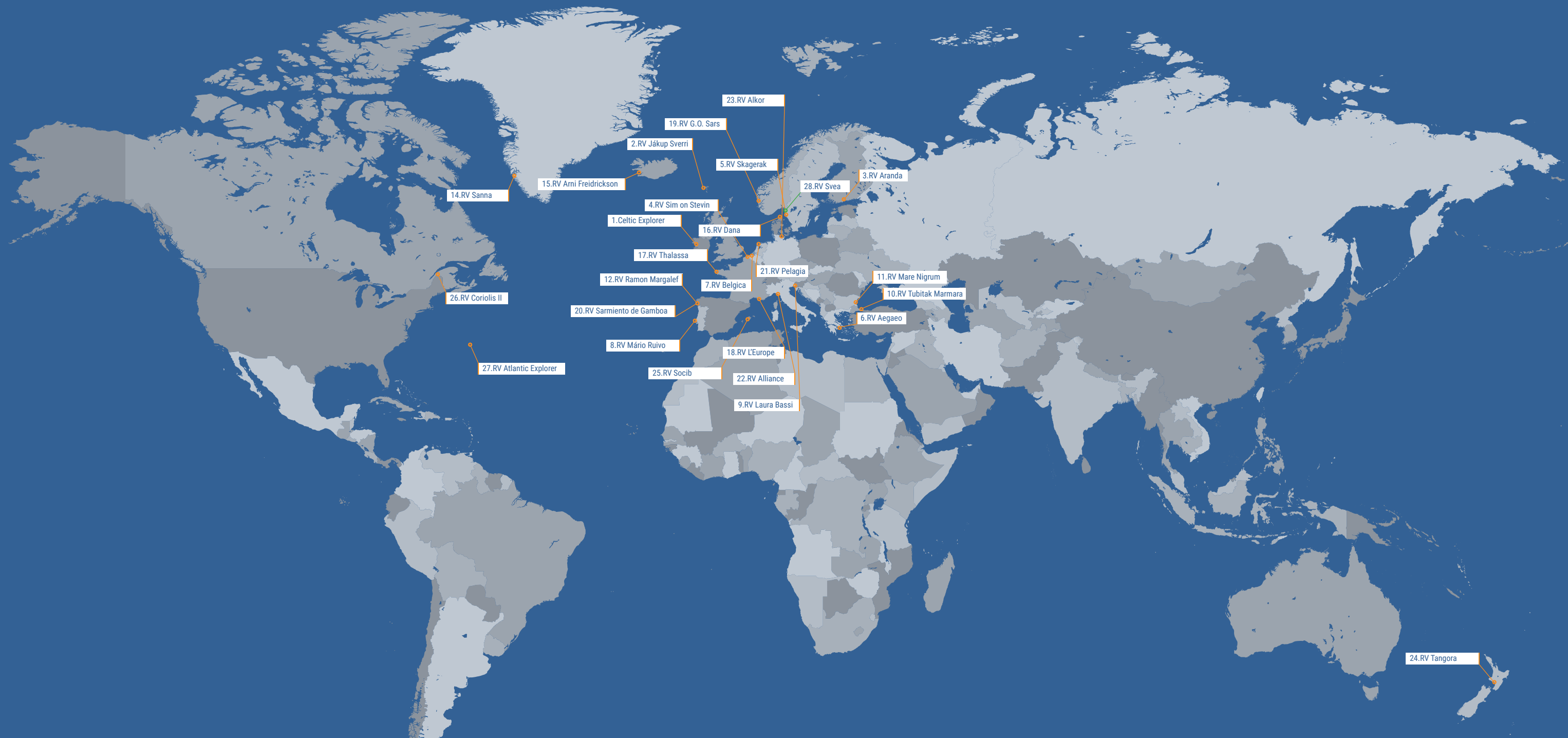
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| 3. RV Aranda | 10. RV Tubitak Marmara |
| 4. RV Simon Stevin | 11. RV Mare Nigrum |
| 5. RV Skagerak | 13. RV Angeles Alvarino |
| 6. RV Aegaeo | 14. RV Sanna |
| 7. RV Belgica | 15. RV Arni Fridriksson |

- | | |
|----------------------------|--------------------------|
| 16. RV Dana | 23. RV Alkor |
| 17. RV Thalassa | 24. RV Tangaroa |
| 18. RV L'Europe | 25. RV SOCIB |
| 19. RV G.O. .SARS | 26. RV Coriolis |
| 20. RV Sarmiento de Gamboa | 27. RV Atlantic Explorer |
| 21. RV Pelagia | Observer Partners |
| 22. RV Alliance | 28. RV Svea* |

* SLU joined Eurofleets+ as 'Observers' in 2021. Access is not currently available through Eurofleets+ - contact the operator directly.

RV Celtic Explorer



- > Ireland's National Research Vessel
- > 65m long, delivered in 2003.
- > Operates >300 days per annum.

www.marine.ie
[Eurofleets+ Vessel profile](#)

Home Port	Galway, Ireland
Home Port Coordinates	Latitude: 53.273800 Longitude: -9.051780
Organisation & Address	Marine Institute, Rinville, Oranmore, Co. Galway, Ireland
Vessel Web Site Address	Link to Vessel Schedules
Normal Area Of Operation	North Atlantic in the area 40-65N, 35W to 10E & on a case by case basis depending on annual operational plan

+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
65.5 m	15 m	5.8 m	2425 T	Yes 1 D +Polar Code(2020)	Yes DP1	10 knots	21

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Large wet, chemistry and water labs, Dry Lab, fitted with a stainless-steel fish sorting system, freezers (-20, 80°C) and refrigeratorsCapacity to carry 7 x 20ft containerized labsUnderway T+S, PC02, Fluorometer, Meteorological sensors
CTD/Plankton sampling	<ul style="list-style-type: none">CTD and Rosette sampler - 2 x SBE 911 CTD with SBE 32 carousel (24 Bottle), 6000m deployment capability. Towed and lowered plankton nets (Including Multi-net)
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Full ocean depth multi-beam system (EM302) to 8000m, Medium and High resolution systems: EM 1002 (1000m), EM2040 (500m)
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">EK 60 @ 18,38, 120, 200 Khz, SU92 Sonar
USBL	<ul style="list-style-type: none">Sonardyne Ranger 2 (4000m)
Coring/Sampling Capabilities	<ul style="list-style-type: none">VibroCore (3/6m), Gravity core (3/6m), user corers max 12m. Max deployment depth 5000m. Box Core and Day Grab

+ TECHNICAL DETAIL - CONTINUED

Winches	<ul style="list-style-type: none">2x 30t Trawl winches (4500m x 26mm wire), 10 T Coring winch(5000m x 14mm Dynex), CTD winch 6000M X 11mm wire, Hydrographic winch 200m x 12mm dynex, Fibre optic winch 2700m x 10mm wire (Drop Camera)
Communications	<ul style="list-style-type: none">Satellite Broadband system, 2056kbps/512 Kbps, Iridium, GSM phone and VOIP system
Special features	<ul style="list-style-type: none">Silent vessel (ICES 209), Large net drums for mooring and buoy deployments
Suitable for	<ul style="list-style-type: none">Multipurpose silent research vessel. Suitable for carrying out a wide variety of scientific survey operations in offshore and deep-sea locations. The vessel is adapted to accommodate a variety of Remotely Operated VehiclesVessel capable of pelagic and demersal trawling to 2200m, Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, Mooring deployments, Seismic surveys, ROV Surveys, Benthic surveys
Scientific Limitations	<ul style="list-style-type: none">Limited to 1500m streamer for seismic
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Yes, capable, has deck space with 500kva power supply, Dynamic positioning, USBL, Crane and A-Frame for Launch and recovery

+ CRUISE PREREQUISITES

Certification requirements	<ul style="list-style-type: none">Up to 12 scientists can be embarked without certificationFor additional scientists the STCW seafarers medical (Known as ENG 11 (Irl) or ENG1 (UK) (Validity 2 Years) is requiredNote: please contact rv@marine.ie for any queries regarding certification, further information available here
Are additional medical checks required?	<ul style="list-style-type: none">None in addition to STCW seafarers medical
Survival training certification required for joining vessel	<ul style="list-style-type: none">STCW Personal survival techniques certificate (5 years' validity)
Additional certification required	<ul style="list-style-type: none">Ships security awareness training for seafarers without designated security duties (Valid for life)
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes, for operation in neighbouring EEZ's e.g. UK, France, Norway, Spain, Denmark/Faroes (and others as applicable). Required to be submitted to RV@marine.ie 6 months prior to cruise
Please indicate any additional clearances required for area or type of activity?	<ul style="list-style-type: none">Other requirements for other jurisdictions to be addressed via Diplomatic clearance process

RV Jákup Sverri



Faroe Islands Research Vessel.

<http://hav.fo/>

[Eurofleets+ Vessel Profile](#)

Home Port	Torshavn, Faroe islands
Home Port Coordinates	Latitude: 62°00 Longitude: -6°45
Organisation & Address	Faroe Marine Research Institute Noatun 1, Torshavn, Faroe Islands
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	North East Atlantic in the area 55-70°N, 25°W-5°E

+ VESSEL DETAILS

Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
54.1m	13.6m	6.4m	1900 GT	BV ICE Polar Cat-C	Yes	11 knots	12

+ TECHNICAL DETAIL

Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">2 dry labs and 2 wet labsSystem for sorting, weighing and length measurement and automatic registration of fish catches. Freezing capacity
CTD/Plankton sampling	<ul style="list-style-type: none">Seabird CTD equipped with rosette sampler, 1.7 and 5 L Niskin bottles, fluorometer and PAR sensor. 3000 m cablePlankton: Multinet, Bongo-net, MIK net and Gulf-net, WP2, Optical plankton recorder, Scanfish Rocio, Chelsea FastOcean APD system
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Simrad EM712 multibeam, TOPAS PS18
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">EK-80 multifreq. (6 freq. from 18 to 333 kHz), EM70 multibeam, Simrad Sonars SU90 & SC90
USBL	<ul style="list-style-type: none">Yes, Kongsberg HiPAP
Coring/Sampling Capabilities	<ul style="list-style-type: none">Temporary Coring winch 4500m. Various grabs

+ TECHNICAL DETAIL - CONTINUED

Winches	<ul style="list-style-type: none">2x 30t Trawl winches (3000m x 28mm wire , CTD winch 3000m X 8.1.8mm coax wire, WP2 winch 200m x 8mm, winch 3000 x 8.18mm coax wire (Drop Camera, Gulf Multinet)
Communications	<ul style="list-style-type: none">Inmarsat C, GSM, Internet satellite connection
Special features	<ul style="list-style-type: none">N/A
Suitable for	<ul style="list-style-type: none">Suitable for carrying out a variety of scientific operations in offshore and shelf locations. Pelagic and demersal trawling, hydrographic and plankton surveys, mooring deployment and benthic surveys. Options for seismic surveys with room for 3 x 20' containers on trawl deck and sufficient power supply
Scientific Limitations	<ul style="list-style-type: none">N/A
Vessel capability to support ROV deployment	<ul style="list-style-type: none">HiPAP guided DP track system, 6T lifting capability for launch over stern

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">Health Certificate for Seafarers (STCW)
Any additional medical checks required	<ul style="list-style-type: none">None in addition to STCW seafarers medical (above)
Personal Survival training certification required	<ul style="list-style-type: none">N/A
Additional certification required	<ul style="list-style-type: none">N/A
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes, for operation in EEZ's other than Faroese. Should be submitted to hav@hav.fo 6 months prior to cruise
Additional clearances required for area or type of activity	<ul style="list-style-type: none">Other requirements for other jurisdictions to be addressed via Diplomatic clearance process

RV Aranda



Finland’s National Research vessel.
Major refit 2017–2018. DNVGL Class 1A
Research Ship E0 Ice(1A) Battery power.

Silent class R (approval in progress at
time of print).

www.syke.fi/en
[Eurofleets+ Vessel Profile](#)

Home Port	Helsinki, Finland
Home Port Coordinates	Latitude: N60 °9,714 Longitude: E024 °54,081996
Organisation & Address	Finnish Environment Institute SYKE, Marine Research Centre. Latokartanonkaari 11 FIN-00790 Helsinki, Finland
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	The Baltic Sea, from N 53 to N66, and E 10 to E30, all conditions and seasons. Oceans with no restrictions, Polar areas in spring, summer and fall.

+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
66.3m	13.80m	5.00m	1969 RT	Ice 1A*, PC6 or 7 in 2020.	Yes, DP1	12kn	27

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Laboratory space 260m² including 5 labs (biological, nutrient, hydrography, isotope, flex) wet lab, 3 clima rooms. Sampling facility 132m², sampling deck 190m², capacity for 5 20’ containers, or 10 10’ containers, or combination. Specific fish handling container lab. Underway complete flow through system with fluorometers, thermo-salinometers, sampling automatics, underway ADCP, complete meteorological station w/ ceilometer (Vaisala). Freezers (-18, -80), complete nutrient analysis onboard (SEAL)
CTD/Plankton sampling	<ul style="list-style-type: none">SBE 911 CTD w/ 12 bottle Rosette sampler 4000m deployment, HydriBios serial water sampler, Towed plankton and hydrography samplers (Utow, AquaShuttle, MultiNet Midi), complete set of HydroBios vertical plankton nets (Phytoplankton, WP-2)
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Shelf depth (500m) multibeam system and Side Scan Sonar (SSS) in drop keel with separate SSS winch system.. Single-beam chirp 12-22 kHz (drop keel), single-beam12 kHz (hull), both attached to Meridata high-definition sub-bottom profiler system. 28 kHz single-beam for CTD work, 50 kHz single-beam for use in back deck instrument operations/installations (e.g. piston corer), ADCP

+ TECHNICAL DETAIL – CONTINUED

Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">EK60 38kHz, EK80 with 38, 70, 120, 200 and 333kHz; Scanmar trawl control system, Marport trawl control system
USBL	<ul style="list-style-type: none">BATS
Coring/Sampling Capabilities	<ul style="list-style-type: none">Van Veen, box corer, Gemax sediment samplers
Winches	<ul style="list-style-type: none">Deck crane, Aft A-frame + towing winch, CTD winch cables, CTD winch 1 4000 m, CTD winch 2 500 m, Hydrographic winch 1500 mSlipring winch for towed vehicles, 300m, remote controlSlipring winch for SSS towing, 400m, remote control
Communications	<ul style="list-style-type: none">VHF – DSC, MF/HF – DSC, Inmarsat – C, NAVTEX, AIS, EPIRB, SART, Fleet Broad Band (FBB), VHF Aero, VSAT (communication (VOIP), internet, TV)
Special features	<ul style="list-style-type: none">Battery capacity to run at DP or slow manoeuvre mode for 30mins with no diesels running. In 2020 fuel cells will be installed for charging of battery package. Good ice navigation capacity, ice pressure measurement system, possibility to launch a small CTD through moon pool in ice. Easy access to work/dive boat and on ice through a side door. Extensive diving operations facilitated by high capacity compressor, mixed gas capacity and work/dive boats
Suitable for	<ul style="list-style-type: none">Biological, chemical and physical oceanography, pelagic trawling to 300m, Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, Mooring deployments, Benthic surveys, operation of ROV/AUV systems, diving facilities, ice research
Scientific Limitations	<ul style="list-style-type: none">No experience of seismic surveys, no facilities for long corers or streamer systems
Vessel capability to support ROV deployment	<ul style="list-style-type: none">DP-system, a space for maintenance 15 sqrm,A room for ROV operation (Acoustic lab), temporal cable installation, A-frame & crane for deployment/retrieval

+ CRUISE PREREQUISITES	
Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">For scientists joining a cruise, a seafarer’s medical certificate is required. A SAR course (“light” 1-day version) is appreciated, and can be organised for participants
Any additional medical checks required	<ul style="list-style-type: none">Only divers are required to have a valid diver’s health certificate along with professional scientific diver’s certificate
Personal Survival training certification required	<ul style="list-style-type: none">SCTW Personal survival techniques training
Additional certification required	<ul style="list-style-type: none">N/A
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes, when operating in neighbouring countries territorial and EEZ waters. Usually minimum of 6 months handling time required prior to cruise. Clearance is handled by R/V Aranda office
Additional clearances required for area or type of activity	<ul style="list-style-type: none">Additional clearance is required for operation within specific Finnish coastal defensive zones. Aranda office will handle permits, but allow for at least 3 months handling time prior to cruise

RV Simon Stevin



<http://www.vliz.be/en>
Eurofleets+ Vessel Profile

Home Port	Oostende Belgium
Home Port Coordinates	Latitude: 51.237 Longitude: 2.922
Organisation & Address	Flanders Marine Insitute – VLIZ Wandelaarkaai 7 8400 Oostende Belgium
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	Eastern part of English Channel and southern part of the North Sea. AO largely comprised between Le Havre (0E), Hull (54N) and Willemshaven (7E)

+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
36m	9.4m	3.5m	458T	–	DP0	12Kn	10

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">One wetlab of 16m², One dry lab of 12m²
CTD/Plankton sampling	<ul style="list-style-type: none">SBE25 mounted in SBE55 coastal carrousel (6*5L bottle)Standard plankton nets availableVideoplanktonrecorder available
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Kongsberg EM2040Innomar SES Quattro (mobile)
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">N/A
USBL	<ul style="list-style-type: none">GAPS
Coring/Sampling Capabilities	<ul style="list-style-type: none">3m vibrocorer, up to 100m deployment depth capability
Winches	<ul style="list-style-type: none">2x 6t trawl winches, 300m depth capability6m lifting height1t CTD winch, 300m depth capability1t side A-frame, 2.5m lift height

+ TECHNICAL DETAIL – CONTINUED

Communications	<ul style="list-style-type: none">GSM, local Microwave WiFi up to 20km offshoreSatellite 512/512kbps
Special features	<ul style="list-style-type: none">Silent operations ICES209 up to 8Kn
Suitable for	<ul style="list-style-type: none">Suitable for both demersal and pelagic coastal fishing activities1 20ft & 1 10ft containers can taken onboard
Scientific Limitations	<ul style="list-style-type: none">winches allow only up to 100m waterdepth operationsEndurance of vessel is limited to 5days (10 scientists onboard)
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Vessel is capable of operating medium sized ROV's. VLIZ owns and operates ROV Genesis from the vessel. http://www.vliz.be/en/rov-genesis

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">No medical certification needed
Any additional medical checks required	<ul style="list-style-type: none">No
Personal Survival training certification required	<ul style="list-style-type: none">No
Additional certification required	<ul style="list-style-type: none">No
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes when in Dutch, French or UK waters
Additional clearances required for area or type of activity	<ul style="list-style-type: none">Research tasks within offshore windmill parks require approval of WMP operators

RV Skagerak



UNIVERSITY OF GOTHENBURG



[Vessel Web Address](#)

[Eurofleets+ Vessel Profile](#)

Home Port	Nya Varvet Gothenburg
Home Port Coordinates	Latitude: 57.685 Longitude: 11.889
Organisation & Address	University of Gothenburg Box 100 S - 40530 Gothenburg
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	Skagerrak Sea

+ VESSEL DETAILS

Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
49 m	11 m	3,9	1075	Fin-Swe 1B	DP1 equivalent	12 kn	16

+ TECHNICAL DETAIL

Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Place for 20 ft container, Dry lab, Wet lab, Outdoor working area, Atmospheric lab, climate control rooms, scientific freezers and refrigerators
CTD/Plankton sampling	<ul style="list-style-type: none">CTD SeaBird911 with 24 bottles, plankton nets
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Multi-beam bathymetric echo sounder Kongsberg EM2040-07, sub bottom profiler Kongsberg TOPAS PS40, ADCP Ocean Surveyour 75 kHz
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">N/A
USBL	<ul style="list-style-type: none">N/A
Coring/Sampling Capabilities	<ul style="list-style-type: none">A large variety of grabs and core sampling equipment
Winches	<ul style="list-style-type: none">A-frame oceanographic instrument and towing winch, 2 x 8 tonnes SWL general purpose winches, 1 hydrographic/plankton net winch, 1 CTD/ROV winch

+ TECHNICAL DETAIL – CONTINUED

Communications	<ul style="list-style-type: none">N/A
Special features	<ul style="list-style-type: none">The vessel is equipped with a hoistable “Drop-keel” probe allowing deployment of probe-mounted sensors and transponders below boundary layer and bubble sweep down effect
Suitable for	<ul style="list-style-type: none">Research projects in biology, oceanography, geology, chemistry, fisheries
Scientific Limitations	<ul style="list-style-type: none">Larger fishing operations are not possible
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Serves our working class ROV

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">N/A
Any additional medical checks required	<ul style="list-style-type: none">N/A
Personal Survival training certification required	<ul style="list-style-type: none">N/A
Additional certification required	<ul style="list-style-type: none">N/A
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">None in the usual areas of operation
Additional clearances required for area or type of activity	<ul style="list-style-type: none">Permission from Swedish military to perform research with bottom data

RV Aegaeo



www.hcmr.gr
Eurofleets+ Vessel Profile

Home Port	Piraeus Greece. Port of Registry: Chalkis Greece
Home Port Coordinates	Latitude: 37.94745 N Longitude: 23.63708 E
Organisation & Address	HELLENIC CENTRE FOR MARINE RESEARCH 46.7 km Athens-Sounio Avenue, 19013 Anavyssos, Greece
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	Mediterranean Sea, Black Sea

+ VESSEL DETAILS

Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
61,5m	9,6m	2,9m	778T	No	No	11 knots	21

+ TECHNICAL DETAIL

Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Chemistry lab, wet lab, dry lab, freezers (-20°), refrigeratorsCapacity to carry 1x 20ft containerized labsUnderway T+S, Meteorological sensors
CTD/Plankton sampling	<ul style="list-style-type: none">CTD and Rosette sampler - 2 x SBE 911plus CTD with SBE 32 carousel (24 x 10 lt or 12 x 12 lt Niskin Bottles), 6000 m deployment capability CTD equipped with temperature, salinity, pressure, dis. Oxygen, turbidity, fluorescence sensorsTowed and lowered plankton nets (Including Multi-net)
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">2 Multibeam sonars (SEABEAM 2120 & 1180),Side Scan Sonar, Combined Deep Tow Side Scan Sonar & Chirp subbottom ProfilerPinger Sub Bottom ProfilerAirgun Seismic profiler (single channel seismic)Various samplers for benthos and sediment coringGPS Satellite heading
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">N/A

+ TECHNICAL DETAIL – CONTINUED

USBL	<ul style="list-style-type: none">ROV use only
Coring/Sampling Capabilities	<ul style="list-style-type: none">Gravity core (3/5 m). Max deployment depth 4.500 m. Box Corer
Winches	<ul style="list-style-type: none">2 x 5 t Trawl winches (1 X 4500 m x 16 mm wire 1 X 2.500 X 22 mm), CTD winch 6000 m X 6 mm wire, Hydrographic winch 6.000 m x 4mm
Communications	<ul style="list-style-type: none">A3 SOLAS requirements, Mobile phone, Satellite Communications under development. (Reverting)
Special features	<ul style="list-style-type: none">Ship is equipped with 75 kHz RDI Ocean Surveyor hull-mounted Acoustic Doppler Current Profiler (ADCP)
Suitable for:	<ul style="list-style-type: none">Multipurpose research vessel. Suitable for carrying out a wide variety of scientific survey operations in offshore and deep-sea locations. The vessel is adapted to accommodate a variety of Remotely Operated VehiclesVessel capable of Hydrographic survey, Oceanographic surveys, Mooring deployments, Seismic surveys, ROV Surveys, Benthic surveys
Scientific Limitations	<ul style="list-style-type: none">No Fisheries
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Yes, capable, has deck space with 380 V power supply, Positioning is carried out manually by deck officers, USBL, Crane and A-Frame for Launch and recovery

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">No certification required by scientists and or technicians other than seamen
Any additional medical checks required	<ul style="list-style-type: none">No medical check required for personnel other than seamen
Personal Survival training certification required	<ul style="list-style-type: none">None required. The participants are obliged to attend training on board
Additional certification required	<ul style="list-style-type: none">Insurance Certification is required
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">For all research operations, diplomatic clearance required for the Greek EEZ and for neighbouring EEZs as applicable
Additional clearances required for area or type of activity	<ul style="list-style-type: none">Seismic operations require additional permitsOther requirements for other jurisdictions to be addressed via Diplomatic clearance process

RV Belgica



> RV Belgica is a silent multidisciplinary oceanographic & fisheries research vessel built in 2021.

[Organisation Website](#)
[Eurofleets+ Vessel profile](#)

Home Port	Zeebrugge, Belgium
Home Port Coordinates	Latitude: 51.3360 Longitude: 3.1986
Organisation & Address	Royal Belgian Institute of Natural Sciences – Operational Directorate Natural Environment (RBINS-OD Nature) 3de en 23ste Linierregimentsplein, B-8400 Ostend, Belgium
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	80N – 28N & 55W – 36E North Atlantic Ocean, North Sea, Mediterranean Sea, Black & Baltic Sea.

+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
71.4m	16.8m	4.8m	3722	DNV-GL ICE-1	DP2	11 kn	26

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">The ship has 13 labs (e.g. 5 dry labs, 3 wet labs, one scientific coordination and a data acquisition room) with a total lab space of more than 400 m². The fish lab is fitted with a stainless-steel fish sorting system and different freezers (-20°C & 80°C) and refrigerators are available. There is deck space for seven gear and lab containersAUMS (Autonomous Underway Measurement System): An elaborate “ferrybox” system for measuring physical, biological and chemical seawater properties (temperature, conductivity, salinity, dissolved oxygen, pH, turbidity, chlorophyll, algae classes, fluorescence, dissolved organic matter, pCO2, etc.) with position-controlled automatic water sampler
CTD/Plankton sampling	<ul style="list-style-type: none">CTD equipment: Sea-Bird SBE19 CTD (2x), Sea-Bird SBE9plus CTD (2x), Sea-Bird SBE21 thermosalinograph (2x), SBE 911 CTD (2x)Water sampling equipment: Sea-Bird model 32 carousel for 12 10 liter Niskin bottles (2x) and for 24 10 liter Niskin bottles (2x), Various Niskin and Go-Flo water sampling bottlesThermosalinograph Seabird, 2 x SBE21, with 2 x temperature sensor SBE38; Various plankton nets can be deployed

+ TECHNICAL DETAIL – CONTINUED

Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Deep Water Multibeam Echo Sounder Kongsberg EM304, 1x1 Degree System,Parametric Sub-Bottom Profiler TOPAS PS18 System;Shallow Water Multibeam Echo Sounder Kongsberg EM2040-04 Dual SX, Single Swath System;
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">Omnidirectional fishery Sonar Simrad SU90 System;Multibeam Echo Sounder Simrad ME70 System;Split Beam Echo Sounders Simrad EK80, 6 Channel System
USBL	<ul style="list-style-type: none">Kongsberg HiPAP 502 system
Coring/Sampling Capabilities	<ul style="list-style-type: none">Coring and sampling capability up to 5000 m water depth. MeBo70 drill rig & BGS RD2 rock drill can be deployed, as well as a 15 m piston corer. All smaller coring and sampling gear can be deployed as well
Winches	<ul style="list-style-type: none">3 Cranes (FWD, MID, AFT) – 1.5t, 4t, 8t, 2 CTD Winches (STBD) – AHC – 5500m, Multifunctional Winch (STBD) – 5500m, Hydrographic Winch (AFT/STBD) – 5500m, 2 Trawl Winches – 40t – 5500m, Net Drum Winch – 30t – 10m², Split Net Drum Winch – 30t – 8 m² each, Net Sonde Winch – 4.2t – 5500m, 2 Gilson Winches – 10t – 200m, CTD Gantry & LARS (STBD), 2 STBD T-frame Gantries – MBL 15t, AFT A-Frame – MBL 30t
Communications	<ul style="list-style-type: none">VSAT: MIR: 6144 kbps (downlink)/1536 kbps (uplink) CIR: 1536 kbps (downlink)/ 512 kbps (uplink) CR: 1:4 (maximum CR)
Special features	<ul style="list-style-type: none">Silent (DNV-GL Silent-R) & ice-strengthened multidisciplinary research vessel that is purposely build to deploy all large (and small) existing European marine research equipment (ROVs, AUVs, drill rigs, etc.). ICOS AUMS underway system
Suitable for	<ul style="list-style-type: none">Suitable for all kinds of research campaigns from the shelf (10 m water depth) to “full” ocean depth (5000 m water depth):Oceanographic & Fishery surveys, ROV, AUV, USV & UAV surveys,Geologic incl. seismic, Biological & Hydrographic surveys,Chemistry surveys
Scientific Limitations	<ul style="list-style-type: none">All systems up to 105 ton total deck load can be deployed
Vessel capability to support ROV deployment	<ul style="list-style-type: none">All large EU research ROVs can be deployed (ROV Victor, ROV Quest, ROV Kiel 6000, ROV Holland I, etc.)

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">No certification required. Any possible health issues should be discussed prior to the campaign with the Coordinator RV Belgica and the Commander RV Belgica
Any additional medical checks required	<ul style="list-style-type: none">No medical checks required. Any possible health issues should be discussed prior to the campaign with the Coordinator RV Belgica and the Commander RV Belgica
Personal Survival training certification required	<ul style="list-style-type: none">No certification requirements
Additional certification required	<ul style="list-style-type: none">No additional certification requirements
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes, for operation in neighbouring EEZ's e.g. UK, France, Netherlands, Spain, Ireland (and others as applicable). Required to be submitted to MSO@naturalsciences.be 6 months prior to cruise
Additional clearances required for area or type of activity	<ul style="list-style-type: none">Requirements for other jurisdictions to be addressed via the diplomatic clearance process

RV Mário Ruivo



› Research vessel RV Mário Ruivo, a 75.6 m multi-purpose platform allowing supporting multidisciplinary oceanographic campaigns.

[Organisation Website](#)
[Eurofleets+ Vessel profile](#)

Home Port	Lisboa, Portugal
Home Port Coordinates	Latitude: 38.6974 Longitude: -9.2307
Organisation & Address	Instituto Português do Mar e da Atmosfera (PT) Portuguese Institute for the Ocean and Atmosphere (EN)
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	North Atlantic

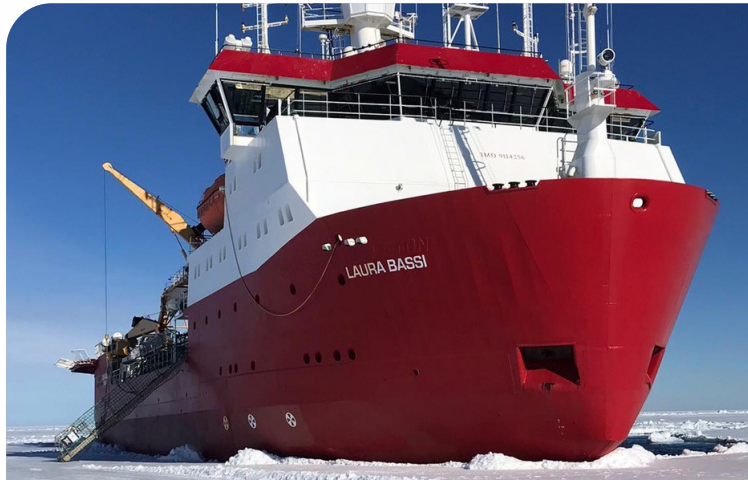
+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
75.60m	14.80m	4.50m	2290 T	No	YES DPO	10 kn	30

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Fisheries, geology and multi-purpose (dry) laboratoriesTunnel freezer: capacity: 6 m³, -40°CChambers refrigerator: capacity: 10m³,temperature ranging from -30°C to +4°C-80°C Lab freezerRefrigeratorsCapacity to carry containerized labs<ul style="list-style-type: none">Bow: 1 x LARS position (ROV Luso), 1x20ft or 2x10ftMiddle ship: 1 x 20ft or 2 x 10ft (6T max capacity)'Stern: 1 x 10ft or 1 x 8ft
CTD/Plankton sampling	<ul style="list-style-type: none">CTD and Rosette sampler, 6000m deployment capabilityTowed and lowered plankton nets
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Multibeam echosounder (to be acquired soon)
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">EK80 @ 5 frequencies (to be acquired soon)

+ TECHNICAL DETAIL – CONTINUED	
USBL	<ul style="list-style-type: none">HiPAP (to be installed soon)
Coring/Sampling Capabilities	<ul style="list-style-type: none">Gravity corer (to be installed)
Winches	<ul style="list-style-type: none">2 x Trawl winches pull traction: 1st layer 17t and last layer: 8t (3000m x 24mm wire)1 x CTD winch 6000m x 11 mm wire1 x Hydrographic (reference to be available soon)2 x Gilson winches pull traction: 1st layer 7.6 and last layer: 2 x Auxiliary winches: 1st layer 0,7t and last layer 0.5t (70m x 8mm wire)2 x Net drum winchesDrum 1: 10 m³, pull traction: 1st layer 28t and last layer 5.6tDrum 2: 4.6 m³, pull traction: 1st layer 14.1t and last layer 2.8t1 x Electric Oceanographic winch: 1st layer 2.2t 0-95m/min (6000 m x 12 mm dynice rope) (to be installed soon)1 x Electric CTD winch: 1st layer 9t 0-57m/min (1500 m x 18 mm coaxial wire) (to be installed soon)
Communications	<ul style="list-style-type: none">INMARSAT C, FleetXpress 4Mbps/1Mbps, FBB250 backup, Iridium (only voice), LTE land service near shore, Wi-Fi infrastructure to allow IP connectivity
Special features	<ul style="list-style-type: none">MoonpoolDynamic position 0 (DPO)
Suitable for	<ul style="list-style-type: none">Multipurpose research vessel. Suitable for carrying out a wide variety of scientific survey operation in offshore and deep-sea locationsVessel capable of pelagic and demersal trawling to 1000m, Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, Mooring deployments, Benthic surveys and ROV surveys and AUV deployment
Scientific Limitations	<ul style="list-style-type: none">Streamer for seismic inoperational
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Yes, capable

+ CRUISE PREREQUISITES	
Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">Up to 12 scientists can be embarked without certificationFor more than 12 scientists the following certification is required:STCW seafarers medical
Any additional medical checks required	<ul style="list-style-type: none">None
Personal Survival training certification required	<ul style="list-style-type: none">STCW personal survival techniques training for more than 12 scientists
Additional certification required	<ul style="list-style-type: none">For more than 12 scientists - ships security awareness training for seafarers without designated security duties
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes, for operation in neighbouring EEZ’s. Required to be submitted to info. info.marioruivo@ipma.pt
Additional clearances required for area or type of activity	<ul style="list-style-type: none">N/A

RV Laura Bassi



[Organisation Website](#)
[Eurofleets+ Vessel profile](#)

Home Port	Trieste
Home Port Coordinates	Latitude: 45.65N Longitude: 013.75E
Organisation & Address	OGS- Istituto Nazionale di Oceanografia e di Geofisica Sperimentale Borgo Grotta Gigante 42/c – 34010 Sgonico (Trieste) ITALY
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	Antarctica(Ross Sea), Indian Ocean, Arctic Sea and Mediterranean Sea

+ VESSEL DETAILS

Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
80m	17m	7,5m	4028 GT	ICE05 icebreaker	YES	12 Kts	50

+ TECHNICAL DETAIL

Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">1 Wet lab, 1 Dry Lab
CTD/Plankton sampling	<ul style="list-style-type: none">CTD and Rosette sampler, SBE911 CTD with 12 bottles
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Kongsberg EM2040c and Kongsberg EM304Kongsberg TOPAS PS18 parametric sub-bottom profiler
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">SBES Simrad EA600 – hull mountedSIMRAD EK80 high-precision scientific echo sounderADCP 38 and 150 kHz
USBL	<ul style="list-style-type: none">1 HiPAP
Coring/Sampling Capabilities	<ul style="list-style-type: none">Piston corer 15m, Grab

+ TECHNICAL DETAIL – CONTINUED

Winches	<ul style="list-style-type: none">CTD winch w/t 6000m cable (suitable for SSS)Coring 6000m cableGOFlow dedicated clean winch (6000m kevlar cable)Seismic streamer (2000m)Fishing winch
Communications	<ul style="list-style-type: none">Satellite VSAT C and Ku band system for internet connection. Fleet 77 and Iridium (voice only)
Special features	<ul style="list-style-type: none">Multi Channel SeismicACQUISITION: Geometrics CNT-2 recording system with 300m long digital streamer (96 channels) on requestSeismic solid state streamer Sercel 428 Sentinel 1500mSOURCES: Sercel GI Guns 4x210cu.in., Sercel G guns 4x250cu.in., Sercel Mini GI Gun 1x60cu.inCOMPRESSOR: BAUER electric up to 2500 l/min (Container 20 feet)PAM - Passive Acoustic Monitoring
Suitable for:	<ul style="list-style-type: none">Seismic, Bathymetric, Oceanographic and Multipurpose
Scientific Limitations	<ul style="list-style-type: none">None specified
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Yes

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates:	<ul style="list-style-type: none">STCW seafarers medical is required
Any additional medical checks required	<ul style="list-style-type: none">No
Personal Survival training certification required	<ul style="list-style-type: none">STCW Personal survival techniques certificate not needed unless involved in active deck operations
Additional certification required	<ul style="list-style-type: none">N/A
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes, for operation in Territorial Waters and neighbouring EEZ's when applicable). Required to be submitted by Chief Scientist
Additional clearances required for area or type of activity	<ul style="list-style-type: none">For Seismic operations refer to local authorities regulations



RV Tubitak Marmara



[Organisation Website](#)
[Eurofleets+ Vessel profile](#)

Home Port	Viaport Marina / Tuzla / ISTANBUL
Home Port Coordinates	Latitude: 40° 48' 51" N Longitude: 29° 19' 12" E
Organisation & Address	Tubitak Marmara Research Centre, Baris mah. Dr. Zeki acar cad. No: 1 41470 Gebze Kocaeli Turkiye
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	Mediterranean (AEgean Sea & Marmara Sea) & Black Sea

+ VESSEL DETAILS

Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
41.2m	9.55m	3.4m	495 GRT	-	DP1	12	12

+ TECHNICAL DETAIL

Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Wet LaboratoryDry LaboratoryBiological LaboratoryIncubation LaboratoryComputer LaboratoryAutoanalyzerFlorimeter
CTD/Plankton sampling	<ul style="list-style-type: none">2500m Depth / Surface & Midwater Plankton Sampling
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">50 kHz/180 kHz Dual Freq. MBES / 2-16 kHz CHIRP SBP
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">No
USBL	<ul style="list-style-type: none">1000m Rated Acoustic Releaser
Coring/Sampling Capabilities	<ul style="list-style-type: none">N/A

+ TECHNICAL DETAIL – CONTINUED

Winches	<ul style="list-style-type: none">Winch #1 Coaxial Cable - 3000m Coax 8.2mm Outer DiameterCable, Dual Use of CTD & SSS/SBP TowfishWinch #2 Steel Wire - 2000m 10mm OD Outer Diameter Steel Wire for Seafloor / Sea Surface SamplingWinch #3 Umbilical - 1000m 21mm Outer Diameter OD for ROV Deployment
Communications	<ul style="list-style-type: none">Coastal Communication (Limitless Access)Land Based GPRS/3G/LTE in Harbours & Coastal CruisesSatellite Communication (Messaging & Data Access)Thuraya MarineVOIP Satellite Phone
Special features	<ul style="list-style-type: none">N/A
Suitable for:	<ul style="list-style-type: none">Oceanography Surveys, Hydrographic Surveys
Scientific Limitations	<ul style="list-style-type: none">Fisheries Infrastructure N/A,Coring Equipment N/A (Piston/Gravity/Box Corer (Van Veen Grab only))
Vessel capability to support ROV deployment	<ul style="list-style-type: none">The vessel is fitted with DP1 supported by USBL Acoustic Positioning System, the vessel is available for free swimming ROVs, winch is dedicated for own ROV system

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates:	<ul style="list-style-type: none">Personal Statements will be negotiated accordingly
Any additional medical checks required:	<ul style="list-style-type: none">Personal Statements will be negotiated accordingly
Personal Survival training certification required:	<ul style="list-style-type: none">N/A
Additional certification required	<ul style="list-style-type: none">Familiarisation Briefing applied
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes, the vessel is owned by Turkish Ministry of Science & Technology and Governmental permissions required for all processes
Additional clearances required for area or type of activity:	<ul style="list-style-type: none">Turkish Ministry of Science & Technology and Governmental permissions (Ministry of Foreign Affairs) required for all processes

RV Mare Nigrum



› Romania’s National Research Vessel, 82m long, delivered 1971. Operates 100 days per annum.

[Organisation Website](#)

[Eurofleets+ Vessel profile](#)

Home Port	Constanta, Romania
Home Port Coordinates	Latitude: 44°10'13.38"N Longitude: 28°39'13.57"E
Organisation & Address	GeoEcoMar Institute Dimitrie Onciul street, 23-25 No, Sector 2, Bucharest, Romania
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	Black Sea

+ VESSEL DETAILS

Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
82m	13,6m	5,2m	2495 T	No	No	10 knots	20

+ TECHNICAL DETAIL

Laboratory Facilities (fixed and temporary)	• Large wet, chemistry and water labs, Dry Lab, freezers (- 20°C) and refrigerators, Geophysics, geology, seismic, biology
CTD/Plankton sampling	• CTD Rosette system: SBE 32C Carousel water Sampler with 12 five liters bottles;
Multi-Beam(s)/ Sub Bottom profiling	• Multi-beam Elac Nautik Seabeam 1050 D, 50Khz,180Khz;
Fisheries Echo Sounders/Sonar	• N/A
USBL	• N/A
Coring/Sampling Capabilities	• Gravity Corer and piston Corer, 6M length; MIDICORER MARK II-400with 4 tubes, 60cm length,10cm ID;
Winches	• Steel Wire Length: 2 500 m, safe working load: 7,2 tons • Conducting Cable Length: 2 000 m, safe working load: 8 tons • Other Winches: CTD Length: 2 500
Communications	• GMDSS, VHF radiotelephone FM 8500, faximile Furuno D, Flit 55 (fax, phone, E-mail)

+ TECHNICAL DETAIL – CONTINUED

Special features	• N/A
Suitable for:	• Multipurpose research vessel which carries out a wide variety of survey operations in offshore as well as deep sea locations, acoustic and oceanographic surveys, buoy handling operations, environmental sampling, and geological and hydrographic surveying
Scientific Limitations	• Limited to 2400m streamer for seismic
Vessel capability to support ROV deployment	• No, dynamic positioning system

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates:	• All scientific staff can be embarked without a certificate. Everyone will sign a statement on their own responsibility that they are medically fit
Any additional medical checks required:	• None
Personal Survival training certification required:	• SCTW Personal survival techniques training
Additional certification required	• None
Diplomatic clearance required for area of operation?	• Yes, for operation in neighbouring EEZs e.g. Ukraine, Bulgaria, Turkey, Russian Federation, Georgia
Additional clearances required for area or type of activity:	• N/A

RV Ramon Margalef



[Organisation Website](#)
[Eurofleets+ Vessel profile](#)

Home Port	Vigo (Spain)
Home Port Coordinates	Latitude: 42.217 Longitude: -8.700
Organisation & Address	Instituto Español de Oceanografía (IEO) C/Corazón de Maria, 8 28002-Madrid (Spain)
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	Iberian Peninsula waters, (Bay of Biscay, NE Atlantic Ocean, Gulf of Cadiz, Strait of Gibraltar, Alborán Sea, Western Mediterranean), Balearic + Canary Island waters. On a case by case basis depending on annual operational plan.

+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
46.7m	10.5m	5.20m	988 Tm	No	Yes	12 kn	11

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	Wet and Dry labs. Underway Continuous Recorders <ul style="list-style-type: none">Meteo. Station AANDERAA 3660, CUFES 600 l/min, Termosalinographer SB21, Fluorometer TURNER 10AU and VM-ADCP (150kHz). All of them are linked to the MDM (Marine Data Management System) working onboard Mobile scientific equipment on request: (pending on availability) <ul style="list-style-type: none">Grabs: Box corer, Van-Veen and Shipeck; Phyto & zooplankton nets; Demersal and pelagic trawls; CTD: SB911, SB25; Rosette sampler 12 bottles
CTD/Plankton sampling	<ul style="list-style-type: none">CTD (on request): SB911, SB25; Rosette sampler 12 bottles
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">EM710, TOPAS PS18, ME70
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">EK80. Net monitoring SCANMARHigh Precision Acoustic Positioning and underwater navigation system HiPAP 500, Net sounder FS20/25

+ TECHNICAL DETAIL – CONTINUED

USBL	<ul style="list-style-type: none">Not specified
Coring/Sampling Capabilities	<ul style="list-style-type: none">Not specified
Winches	<ul style="list-style-type: none">Hydrographic Multipurpose Winch. Length 4000m; Diameter 8mm;1 Coaxial Winch. Length 6000m; Diameter 8mm;2 Trawl Winches: Length 3000m; Diameter 18mm (below main deck);2 Net Winches: Length 120m; Capability 2.8m³;1 Coaxial Winch. Length 1500m; Diameter 11mm
Communications	<ul style="list-style-type: none">Satellite Broadband, GSM, VSAT Ku Band, INMARSAT
Special features	<ul style="list-style-type: none">This silent design Research Vessel (ICES 209) will be able to carry out surveys that involve the use of a wide range of oceanographic techniques; fisheries, physics, chemistry and geology. Her tackle is designed to operate CTD, rosette sampler, grab, corer, trawl fishing, SSS, ROV, etc
Suitable for	<ul style="list-style-type: none">Multipurpose research vessel which carries out a wide variety of survey operations in offshore as well as deep sea locations, acoustic and oceanographic surveys, buoy handling operations, environmental sampling, and geological and hydrographic surveying
Scientific Limitations	<ul style="list-style-type: none">Equipment should fit on deck availability
Vessel capability to support ROV deployment	<ul style="list-style-type: none">It allows decking a 20' container on port side and two 10' containers on starboard side. The vessel has Dynamic positioning K-POS (DP 1) for corer, grab and ROV operations

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">None
Any additional medical checks required	<ul style="list-style-type: none">No
Personal Survival training certification required	<ul style="list-style-type: none">N/A
Additional certification required	<ul style="list-style-type: none">N/A
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes, if not in Spanish waters
Additional clearances required for area or type of activity	<ul style="list-style-type: none">None

RV Angeles Alvarino



[Organisation Website](#)

[Eurofleets+ Vessel profile](#)

Home Port	Vigo (Spain)
Home Port Coordinates	Latitude: 42.217 Longitude: -8.700
Organisation & Address	Instituto Español de Oceanografía (IEO) C/Corazón de Maria, 8 28002-Madrid (Spain)
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	Iberian Peninsula waters, (Bay of Biscay, NE Atlantic Ocean, Gulf of Cadiz, Strait of Gibraltar, Alborán Sea, Western Mediterranean), Balearic + Canary Island waters. On a case by case basis depending on annual operational plan.

+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
46.7 m	10.5 m	5.20m	951 Tm	No	Yes	12 kn	13

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	Wet and Dry labs. Underway Continuous Recorders <ul style="list-style-type: none">• Meteo. Station AANDERAA 3660, CUFES 600 l/min, Termosalinographer SB21, Fluorometer TURNER 10AU and VM-ADCP (150kHz). All of them are linked to the MDM (Marine Data Management System) working onboard Mobile scientific equipment on request: (pending on availability) <ul style="list-style-type: none">• Grabs: Box corer, Van-Veen and Shipeck; Phyto & zooplankton nets; Demersal and pelagic trawls; CTD: SB911, SB25; Rosette sampler 12 bottles
CTD/Plankton sampling	<ul style="list-style-type: none">• CTD (on request): SB911, SB25; Rosette sampler 12 bottles
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">• EM710, TOPAS PS18, MS70
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">• EK80. Net monitoring SCANMAR• High Precision Acoustic Positioning and underwater navigation system HiPAP 500, Net sounder FS20/25

+ TECHNICAL DETAIL – CONTINUED

USBL	<ul style="list-style-type: none">• N/A
Coring/Sampling Capabilities	<ul style="list-style-type: none">• Not specified
Winches	<ul style="list-style-type: none">• 1 Hydrographic Multipurpose Winch. Length 4000m; Diameter 8mm;• 1 Coaxial Winch. Length 6000m; Diameter 8mm;• 2 Trawl Winches: Length 3000m; Diameter 18mm (below main deck);• 2 Net Winches: Length 120m; Capability 2.8m³;• 1 Coaxial Winch. Length 1500m; Diameter 11mm
Communications	<ul style="list-style-type: none">• Satellite Broadband, GSM, VSAT Ku Band, INMARSAT
Special features	<ul style="list-style-type: none">• This silent design Research Vessel (ICES 209) will be able to carry out surveys that involve the use of a wide range of oceanographic techniques; fisheries, physics, chemistry and geology. Her tackle is designed to operate CTD, rosette sampler, grab, corer, trawl fishing, SSS, ROV, etc
Suitable for	<ul style="list-style-type: none">• The vessel is a multipurpose research vessel that works from fisheries research to marine geology/hydrographic and oceanographic surveys
Scientific Limitations	<ul style="list-style-type: none">• Equipment should fit on deck availability
Vessel capability to support ROV deployment	<ul style="list-style-type: none">• It allows decking a 20' container on port side and two 10' containers on starboard side. The vessel has Dynamic Positioning K-POS (DP 1) for corer, grab and ROV operations

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">• None
Any additional medical checks required	<ul style="list-style-type: none">• No
Personal Survival training certification required	<ul style="list-style-type: none">• N/A
Additional certification required	<ul style="list-style-type: none">• N/A
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">• Yes, if not in Spanish waters
Additional clearances required for area or type of activity	<ul style="list-style-type: none">• None

RV Sanna



> Greenland National Coastal Research Vessel. 32,3m long, delivered in 2012. Operates >160 days per annum.

[Organisation Website](#)
[Eurofleets+ Vessel profile](#)

Home Port	Nuuk, Greenland
Home Port Coordinates	Latitude: 64°10 N Longitude: 51°44 W
Organisation & Address	Greenland Institute of Natural Resources, Nuuk, Greenland
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	Coastal area in West Greenland

+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
32,3m	10,m	4,88m	548T	*ice-reinforced	No	10 knots	7

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Two wet and one dry laboratories with fume hood, a chemical laboratory, cold and freezer laboratory and a 80C freezer
CTD/Plankton sampling	<ul style="list-style-type: none">Hydrographical instrument and water sampler (CTD-Rosette)
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Shallow/medium water depth multi-beam system (Reson SeaBat T50-‘Extended Range’), high resolution system (1000m)
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">EK80 38, 120, 333 KHz
USBL	<ul style="list-style-type: none">No
Coring/Sampling Capabilities	<ul style="list-style-type: none">Gravity core (3/6m), user corers max 6m. Max deployment depth 600m (better performance inshore). Box Core and Day Grab
Winches	<ul style="list-style-type: none">Trawl winches are equipped with 2000m wire, CTD winches 1500 m
Communications	<ul style="list-style-type: none">Satellite broadband system 222kbps/yyy kbps, Iridium, GDM phone
Special features	<ul style="list-style-type: none">No

+ TECHNICAL DETAIL – CONTINUED

Suitable for: (list the type of surveys)	<ul style="list-style-type: none">Suitable for carrying out a wide variety of scientific surveys operations in inshore coastal water and near coastal water. Vessel capable of pelagic and demersal trawling to 1000 m, Fishery acoustic surveys, Hydrographic surveys, Mooring deployments, Benthic surveys
Scientific Limitations	<ul style="list-style-type: none">None specified
Vessel capability to support ROV deployment	<ul style="list-style-type: none">None

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">Up to 7 scientific scientists can embark without certification
Any additional medical checks required	<ul style="list-style-type: none">None
Personal Survival training certification required	<ul style="list-style-type: none">None
Additional certification required	<ul style="list-style-type: none">None
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">No
Additional clearances required for area or type of activity	<ul style="list-style-type: none">N/A

RV Arni Freidrickson



> Marine and Freshwater Research Institute in Iceland. 70 m long, delivered in 2000. Operates >200 days a year.

[Organisation Website](#)

[Eurofleets+ Vessel profile](#)

Home Port	Reykjavik, Iceland
Home Port Coordinates	Latitude: 64,13548 Longitude: -21.89541
Organisation & Address	Marine and Freshwater Research Institute, Skulagata 4, 101 Reykjavik, Iceland
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	North Atlantic in the area 50 – 70N, 30 – 10W

+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
69,9 m	14,0 m	6,8 m	2.233	LR 1B	no	11 knots	17

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	• Large wet lab (fisheries lab), biological, salinity, chemical and phytoplankton laboratory
CTD/Plankton sampling	• Towed and lowered plankton nets (Including Multi-net)
Multi-Beam(s)/ Sub Bottom profiling	• Kongsberg Maritime EM302(1*2 degree resolution), 30 kHz / Kongsberg Maritime TOPAS PS18
Fisheries Echo Sounders/Sonar	• Simrad EK60 and EK80 at 18, 38, 120 and 200 kHz
USBL	• No USBL system onboard
Coring/Sampling Capabilities	• No
Winches	• Not specified
Communications	• GMDSS, Inmarsat, Internet through satellite
Special features	• Silent vessel (ICES 209)

+ TECHNICAL DETAIL – CONTINUED

Suitable for: (list the type of surveys)	• Multipurpose silent research vessel. Suitable for all kinds of fisheries research, pelagic and demersal trawling to 2200m and fisheries acoustic surveys. New multi-beam and sub-bottom profiler. Look-out tower for whale observations
Scientific Limitations	• Coring
Vessel capability to support ROV deployment	• No special capabilities to support ROV deployment
+ CRUISE PREREQUISITES	
Medical certification required for joining the vessel and the list of acceptable certificates	• None
Any additional medical checks required	• None
Personal Survival training certification required	• SCTW survival training certification
Additional certification required	• No
Diplomatic clearance required for area of operation?	• Yes, for operation in neighbouring EEZ's e.g. Greenland, Faroes, Norway, (and others as applicable). Required to prepare with MFRI at least 6 months in advance
Additional clearances required for area or type of activity	• N/A

RV Dana



> Ocean going 78m long Research Vessel.

Organisation Website

Eurofleets+ Vessel profile

Home Port	Hirtshals, Denmark
Home Port Coordinates	Latitude: 57° 36' N Longitude: 9° 58' E
Organisation & Address	Technical University of Denmark DTU AQUA, Kemitovet, Bygning 202, DK 2800 Kgs Lyngby
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	North Sea, Skagerak, Kattegat, Bothnian Sea, Norh Atlantic Ocean

+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
78,43	14,7	5,6	2483	Ice – 1A* (PC-C on request)	N/A	12	22

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Large wet lab with fish sorting system, Chemistry and water labs, Dry Lab, C14 lab, temperature controlled labs (range 1°-30°C)Freezers (Large 11m² -20°C, tunnel freezer -28°C, -80°C) and refrigerators
CTD/Plankton sampling	<ul style="list-style-type: none">CTD and Rosette sampler - SBE 911 CTD carousel 12 bottles, 3000m deployment capabilityTowed and lowered plankton nets (Including Multi-net)
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">N/A
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">EK 60's (18-38-70-120kHz)
USBL	<ul style="list-style-type: none">N/A
Coring/Sampling Capabilities	<ul style="list-style-type: none">Van Veen, gravity coring, piston coring 3000m deployment capability

+ TECHNICAL DETAIL – CONTINUED

Winches	<ul style="list-style-type: none">2x 30t Trawl winches (3000m x 20mm wire), 2t plankton winch (1800m Ø8,18 coax cable for vertical deployment and towing) 8t winch (600m Ø14mm wire for vertical deployment and towing) CTD winches (1 x 3000m Ø 8,18 coax cable + 1 x 700m 8,18mm coax cable), 2t winch (3000m Ø 6mm dyneema for vertical deployment of small grabs and nets)
Communications	<ul style="list-style-type: none">Inmarsat VSAT (1 mb data, 3 phone lines) SEVSAT KU-band+ Fleet Broadband FB500., Iridium, Inmarsat C
Special features	<ul style="list-style-type: none">High ice class. High experience of navigating in arctic waters
Suitable for: (list the type of surveys)	<ul style="list-style-type: none">Vessel capable of pelagic and demersal trawling to 1200m, Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, bottom coring surveys
Scientific Limitations	<ul style="list-style-type: none">Deployment of gear limited to 3000m
Vessel capability to support ROV deployment	<ul style="list-style-type: none">N/A

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">Health Certificate for Seafarers and Fishermen; Danish Maritime Authority (or Health certificate MLC and STCW compliant)
Any additional medical checks required	<ul style="list-style-type: none">N/A
Personal Survival training certification required	<ul style="list-style-type: none">Basic Firefighting: STCW: A-code, sec VI/1, par. 2, table A-VI/1-3Personal Surviving Techniques, STCW: A-code, sec VI/1, par. 2, table A-VI/1-1
Additional certification required	<ul style="list-style-type: none">First aid STCW A-V1/4-1Security awareness A-V1/6-1
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes, 3-5 months in advance
Additional clearances required for area or type of activity	<ul style="list-style-type: none">N/A

RV Thalassa



› Fisheries research vessel, 73 m long, delivered in 1996.

[Organisation Website](#)
[Eurofleets+ Vessel profile](#)

Home Port	Brest, France
Home Port Coordinates	Latitude: 48° 23' 60.00" N Longitude: 4° 28' 59.99" W
Organisation & Address	French Oceanographic Fleet Management, Ifremer Brest, 165 Sainte Anne Road, CS 10070, 29280 Plouzané, France
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	North Atlantic and Mediterranean Sea in the area 10-60 N, 40W-35E and on a case by case basis depending on annual operation plan.

+ VESSEL DETAILS

Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
73.65	14.90	6.1	2803 UMS	Ice II + Polar Code	Yes	11 knots	25

+ TECHNICAL DETAIL

Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Scientific room (35 m²) + scientific control room (70 m²), Automated sorting room (130m²), 4 laboratories, 84 m² (hydrology: 24 m² ; physics: 18 m² ; chemistry: 15 m²& biology: 27 m²)Conservation dock fish 0°C (33 m²), Freezingdock fish -20°C (23 m²), Freezing tunnel -40°C, Mission docks, Capacity to carry 5 x 20ft containerized labs, Underway T+S, Thermosalinometer, Ferry box with PC02, Fluorometer, thermosalinometer, pH Meteorological sensors
CTD/Plankton sampling	<ul style="list-style-type: none">CTD and Rosette sampler - 6000m deployment capabilityTowed and lowered plankton nets (Including Multi-net)
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Full ocean depth multi-beam system (EM302) to 8000m, Medium and High resolution systems: EM2040 (500m)ADCP 38, 150 kHzSBP IxSea
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">EK 80 @ 18,38, 70, 120, 200, 333 Khz, ME70

+ TECHNICAL DETAIL – CONTINUED

USBL	<ul style="list-style-type: none">N/A
Coring/Sampling Capabilities	<ul style="list-style-type: none">Max deployment depth 6000m. Box Core and Day Grab
Winches	<ul style="list-style-type: none">2 winches for trawl ropes: L 4500 mCTD winch (8000 m x 10.85 mm)Hydrographic winch: 8000 m x 6 mmNetsonde winch L 2000 mDredging winch L 600 m
Communications	<ul style="list-style-type: none">Satellite Broadband system, 2056kbps/512 Kbps, Iridium, GSM phone and VOIP system
Special features	<ul style="list-style-type: none">Silent vessel (ICES 209)Trav ocean Tubes for mobile acoustic equipment
Suitable for: (list the type of surveys)	<ul style="list-style-type: none">Vessel capable of pelagic and demersal trawling to 2200m, Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, Mooring deployments, Seismic surveys, ROV Surveys, Benthic surveys
Scientific Limitations	<ul style="list-style-type: none">No gravitational coring
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Yes

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<p>The following certification is required:</p> <ul style="list-style-type: none">Confidential medical informationFurther information here http://www.flotteoceanographique.fr/campagnesscient/Aptitude-medicale
Any additional medical checks required	<ul style="list-style-type: none">Yes if additional diving activity during the cruise
Personal Survival training certification required	<ul style="list-style-type: none">None but SCTW personal survival techniques training is recommended
Additional certification required	<ul style="list-style-type: none">None but ships security awareness knowledge is recommended
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes, for operations in neighbouring states' EEZs. Required to be submitted 8 months prior to the cruise. Link to the form: http://www.flotteoceanographique.fr/campagnesscient/Demande-de-travaux-dans-les-eaux-etrangeres
Additional clearances required for area or type of activity	<p>Additional clearances for operations:</p> <ul style="list-style-type: none">in special areas of Conservation (Marine Natural parks, protected marine areas, ...)seismic operations: Required to be submitted 8 months prior to the cruise.Other requirements for other jurisdictions to be addressed via diplomatic clearance process.

RV L'Europe



[Organisation Website](#)
[Eurofleets+ Vessel profile](#)

Home Port	La Seyne sur Mer, France
Home Port Coordinates	Latitude: 43° 6' 10.714" N Longitude: 5° 52' 41.588" E
Organisation & Address	French Oceanographic Fleet Management, Ifremer Brest, 165 Sainte Anne Road, CS 10070, 29280 Plouzané, France
Vessel Web Site Address	Link to Vessel Schedule
Normal Area Of Operation	Mediterranean Sea

+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
29.60	10.60	3.45	335 UMS	No	Yes	9 knots	8

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Scientific control room and laboratory wet and dry (50 m²), Freezing dock fish -20°C , Freezing tunnel -40°C, Capacity to carry 1 x 20ft containerized labs. Underway T+S, Thermosalinometer, Meteorological sensors
CTD/Plankton sampling	<ul style="list-style-type: none">CTD and Rosette samplerTowed and lowered plankton nets (Including Multi-net)
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Medium and High resolution systems: EM2040 (500m)
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">EK 80 @ 18,38, 70, 120, 200, 333 Khz, ME70
USBL	<ul style="list-style-type: none">N/A
Coring/Sampling Capabilities	<ul style="list-style-type: none">Max deployment depth 6000m. Box Core and Day Grab
Winches	<ul style="list-style-type: none">2 winches for trawl ropes: L 2700 m, Hydrographic winch : 5000 m x 10.8 mm, Netsonde winch 1500 m x 10 mm, Gilson winch 50 m x 20 mm

+ TECHNICAL DETAIL – CONTINUED

Communications	<ul style="list-style-type: none">1x Station SMDSM,1 x Inmarsat M Nera, Itineris 8 W, GSM Itinérís, Inmarsat M, Télécopie InmarsatT M, Télex Inmarsat C
Special features	<ul style="list-style-type: none">Silent vessel (ICES 209)
Suitable for: (list the type of surveys)	<ul style="list-style-type: none">Pelagic and demersal trawling to 2000m, Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, Mooring deployments, Seismic surveys, AUV/HROV Surveys, Benthic surveys
Scientific Limitations	<ul style="list-style-type: none">None specified
Vessel capability to support ROV deployment	<ul style="list-style-type: none">No

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">The following certification is required:Confidential medical informationFurther information here
Any additional medical checks required	<ul style="list-style-type: none">Yes if additional diving activity during the cruise
Personal Survival training certification required	<ul style="list-style-type: none">None but SCTW personal survival techniques training is recommended
Additional certification required	<ul style="list-style-type: none">None but ships security awareness knowledge is recommended
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes, for operations in the states EEZ's. Required to be submitted 8 months prior to the cruise. Link to the form
Additional clearances required for area or type of activity	<p>Additional clearances for operations:</p> <ul style="list-style-type: none">in special areas of Conservation (Marine Natural parks, protected marine areas, ...)seismic operations: Required to be submitted 8 months prior to the cruiseLink to information concerning risks for marine mammalsOther requirements for other jurisdictions to be addressed via diplomatic clearance process

G.O. Sars



> About the G.O. Sars

[Organisation Website](#)

[Eurofleets+ Vessel profile](#)

Home Port Bergen, Norway

Home Port Coordinates Latitude: 60,5N Longitude: 5,2E

Organisation & Address Institute of Marine Research
P. O. Box 1870 Nordnes, 5817 Bergen, Norway

Vessel Web Site Address [Link to Vessel Information](#)

Normal Area Of Operation North Sea, Norwegian Sea and Barents Sea

+ VESSEL DETAILS

Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
77,5m	16,4m	7,5m	4067	ICE C	DP1	10 knots	29

+ TECHNICAL DETAIL

Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Wet, fish sampling, Dry, chemistry / physics / biology, Chilled, climate controlled room, Cold store / freezer compartmentWet plankton / geology / sampling, Dry, analysis of plankton samples, Wet / chemical sampling lab, Organic / inorganic chemistry lab, Tracer metal / radio activity labMounting lab. electronic equipment, Clean seawater sampling room, ROV Operating center, Seismic operating center, Acoustic operation center
CTD/Plankton sampling	<ul style="list-style-type: none">CTD and Rosette Sampler – Seabird SBE 911 w/12 bottle carousel and 4500m cable, Seabird SBE 911 w/24 bottle carousel and 6000m cableVarious types Plankton nets and Hydro-Bios Multinet Mammoth
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">M 302, ME70, EM710, Topas PS 18
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">EK 80 18,38,70,120, 300 and 333kHz and SU90 sonar
USBL	<ul style="list-style-type: none">Simrad HIPAP
Coring/Sampling Capabilities	<ul style="list-style-type: none">Calypso Giant piston corer, gravity corer, box corer, video assisted Multi Sampler (VAMS)

+ TECHNICAL DETAIL – CONTINUED

Winches	<ul style="list-style-type: none">Hangar midship:1 x Mocness winch, 5 tons, 2 x CTD winches, 5 / 2 tons, Multi purpose sounder winch, 5 tons, Multinet/Mocness winch, 5 tons, Hydrographic/plankton winch, 1 ton, Deep operation winch Dynema rope 10 tonsStern: Deep tow winch, 12 tons, Deep tow winch, 5 tons, Deep tow winch, optical cable 7 tons, Mobile Focus Winch, Mobile winches
Communications	<ul style="list-style-type: none">VSAT 512 MBPS, GMDSS, Iridium, GSM phone
Special features	<ul style="list-style-type: none">Silent vessel (ICES 209)
Suitable for: (list the type of surveys)	<ul style="list-style-type: none">All types including ROV and AUV operations
Scientific Limitations	<ul style="list-style-type: none">N/A
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Both ROV Ægir 6000 deep sea ROV and smaller portable ROVs

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">Mandatory: Valid health certificate from a seafarers doctor approved by Norwegian Maritime Authority
Any additional medical checks required	<ul style="list-style-type: none">N/A
Personal Survival training certification required	<ul style="list-style-type: none">Desirable: Basic safety training (survival suit use, entering life raft etc)
Additional certification required	<ul style="list-style-type: none">N/A
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes, for operation in neighbouring EEZ's e.g. UK, Denmark, Sweden, Russia, Iceland, Faroes (and others as applicable). Required to be submitted at least 6 months prior to cruise
Additional clearances required for area or type of activity	<ul style="list-style-type: none">N/A

RV Sarmiento de Gamboa



> Spanish Research Council (CSIC),
70.5m long, delivered in 2006.
Operates >300 days per annum.

[Organisation Website](#)
[Eurofleets+ Vessel profile](#)

Home Port	Vigo (Spain)
Home Port Coordinates	Latitude: N 42°13'58.15" Longitude: W 8°43'21.5"
Organisation & Address	CMIMA, Pg Marítim de la Barceloneta 37-49, 08003 BARCELONA - Spain
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	North Atlantic on a case by case basis depending on annual operational plan

+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
70,5m	15,5m	4,6m	1979T	Polar Code 2018 (C class)	DP1	10	25

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Main laboratory, Wet Lab / Hangar, Analysis laboratory, chemical laboratory, Thermoregulated laboratory andDissection laboratory2 Keels retractable up to 4 m deep, Acoustic gondola 9 x 9 m in bow & Fishing park of 71 m²Laboratory containers: Container for incubations - ISO 20 feet, 2 X Clean laboratory container - ISO 20 feet, Laboratory container - ISO 20 feet, Laboratory container for work with radioisotopes - ISO 20 feet
CTD/Plankton sampling	<ul style="list-style-type: none">2 x CTD SeaBird SBE911 plus, CTD Sea-Bird SBE 25MOCNESS net, Chelsea Technologies Group SeaSoar
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Atlas Hydrosweep DS-3 1º x 1º multibeam deep-water echosounder, Atlas FS-20-100 Fansweep Shallow water multibeam echosounder, Parasound P-35 parametric echosounder
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">Kongsberg EK 60 hydrographic echo sounder with 5 frequencies of 18, 38, 70, 120 and 200 KHz

+ TECHNICAL DETAIL – CONTINUED

USBL	<ul style="list-style-type: none">HIPAP 452 High precision Acoustic positioning System
Coring/Sampling Capabilities	<ul style="list-style-type: none">OSU (Oregon State University) Piston sediment coreInstrument used to collect sediment columns. Rock dredge, Gravity core, KC Denmark Multisampler Multicorer 6 x ø100 x 600 mm
Winches	<ul style="list-style-type: none">Stern & Starboard folding gantry, Telescopic CTD gantry, Retractable keels (2)Plankton winch: traction cable of 6,000 m and 6 mm in diameter, CTD winch: coaxial cable of 8000 m and 11 mm diameter. Electronic nets winch: coaxial cable of 7000 m and 14 mm in diameter. Corer winch: traction cable of 8,000 m cable and 16 mm diameter. Net drum winch: for a 15 m³ net, pelagic nets capacity: 2 x 250 m 2x Mobile multipurpose winches: for 8000 m
Communications	<ul style="list-style-type: none">C Band512 Kbps up/512 down
Special features	<ul style="list-style-type: none">Silent vessel (ICES 209), Facilities for large ROV and Sub deployments
Suitable for: (list the type of surveys)	<ul style="list-style-type: none">Multipurpose silent research vessel. The vessel is adapted to accommodate a variety of Remotely Operated Vehicles. Vessel capable of pelagic and demersal trawling to 2200m, Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, Mooring deployments, Seismic surveys, ROV Surveys, Benthic surveys
Scientific Limitations	<ul style="list-style-type: none">Limited to 3000m streamer for seismic.
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Yes, capable, Dynamic positioning, USBL, Crane and A-Frame for Launch and recovery

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">A medical questionnaire provided by UTM should be filled and required for joiningAny medical certification will be accepted but not mandatoryNote please contact info@utm.csic.es for any queries regarding certification
Any additional medical checks required	<ul style="list-style-type: none">None
Personal Survival training certification required	<ul style="list-style-type: none">No certification in survival training is required but SCTW personal survival techniques training will be welcome
Additional certification required	<ul style="list-style-type: none">None
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes, for operation in neighbouring EEZ's. Required to be submitted to info@utm.csic.es 6 months prior to cruise
Additional clearances required for area or type of activity	<ul style="list-style-type: none">Additional clearances for operations in Spanish Special areas of Conservation if applicableSeismic operations require additional permitsOther requirements for other jurisdictions to be addressed via Diplomatic clearance process

RV Pelagia



> RV Pelagia – National Marine Research Facilities of the Netherlands

[Organisation Website](#)

[Eurofleets+ Vessel profile](#)

Home Port	Texel, Netherlands
Home Port Coordinates	Latitude: 53.00683 Longitude: 4.796167
Organisation & Address	NIOZ – Royal Netherlands Institute for Sea Research Landsdiep 4, 1797 SZ Den Hoorn, Texel, Netherlands
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	Atlantic Ocean, Caribbean, Mediterranean. Other areas (Black Sea, Red Sea, Southern Indian Ocean, Eastern Pacific) depending on national science demand

+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
66m	12.8m	4.2m	1615	none	no	10kn	12

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Fixed: wet lab, dry lab, wet chemical lab, CTD measuring labTemporary: maximum 9 containerised laboratories, including 1 Ultra Clean CTD container
CTD/Plankton sampling	<ul style="list-style-type: none">CTD and Rosette sampler - 2 x SBE 911 CTD with SBE 32 carousel (24 Bottle, 12L), 7000m deployment capabilityRosette sampler (24 bottle, 25L), Ultra Clean CTD frame (24 bottles, 24L) with sampling container, 8000m deployment capabilityTowed and lowered plankton nets (Including Multi-net)
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Full ocean depth multi-beam system (EM302) to 8000mOretech 3010 10kW Echo sounder 3.5 kHz
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">K500
USBL	<ul style="list-style-type: none">Kongsberg HiPAP 100, 12kHz, range 10km

+ TECHNICAL DETAIL – CONTINUED

Coring/Sampling Capabilities	<ul style="list-style-type: none">VibroCore (3/6m), Gravity core (3/6m), piston cores max 24m. Multicores (12x 100mm; 8x60mm + 4x100mm). Box Core (including video guided box core. Max deployment depth 8000m
Winches	<ul style="list-style-type: none">2x 30t Trawl winches (4500m x 26mm wire), Deep Sea Winch (20mm Opto Electrical Mechanical Aramide Cable, 8500m); side winch, 3000m X 14mm steel; CTD winch 8000m X 11mm wire; Hydrographic winch 500m x 6mm steel. Stern towing winches
Communications	<ul style="list-style-type: none">VSAT Broadband system, 512kbps/256 Kbps, Fleet 33 satellite comm. backup, GSM phone
Special features	<ul style="list-style-type: none">N/A
Suitable for: (list the type of surveys)	<ul style="list-style-type: none">Multipurpose research vessel. Suitable for carrying out a wide variety of scientific survey operations in offshore and deep-sea locations. The vessel can accommodate certain AUVs and ROVs, but NIOZ doesn't own anyVessel capable of hydrographic and oceanographic surveys, Mooring and lander deployments, Sediment sampling. Limited seismics
Scientific Limitations	<ul style="list-style-type: none">No fisheries
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Yes, depending on size and type

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates:	<ul style="list-style-type: none">ENG1 or equivalent (not older than 2yrs)
Any additional medical checks required:	<ul style="list-style-type: none">No
Personal Survival training certification required:	<ul style="list-style-type: none">PST (<5yrs), equivalent STCW training TBD
Additional certification required	<ul style="list-style-type: none">None
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">If <200nm offshore, yes
Additional clearances required for area or type of activity:	<ul style="list-style-type: none">N/A

RV Alliance



> NATO Research Vessel, 93 m long, delivered in 1988. Operates >200 days per annum.

[Organisation Website](#)

[Eurofleets+ Vessel profile](#)

Home Port	La Spezia, Italy
Home Port Coordinates	Latitude: 44.101570 Longitude: 9.819950
Organisation & Address	Centre for Maritime Research and Experimentation, NATO La Spezia, Italy
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	RV Alliance primarily operates in the Mediterranean Sea and the North Atlantic Ocean, ABS Ice Class C

+ VESSEL DETAILS

Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
93 m	15 m	6 m	3.180 t	ABS C	Yes, DP0	16.3 kn	25

+ TECHNICAL DETAIL

Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Main Scientific Laboratory, Tactical Coordinator’s Office, Programmers’ Office, an Environmental Equipment Maintenance Laboratory, an Acoustic Equipment Maintenance Workshop, and an Amplifier Room. Forward Deck Wet Laboratory and an Oceanographic Winch Room along with various smaller labs. Capacity to carry 5 x 20 ft ISO containers and 3 x 10 ft ISO containers. Thermosalinometer- Seabird SBE45, can be installed on request Fluorometer – Turner Design 10-AU can be installed on request
CTD/Plankton sampling	<ul style="list-style-type: none">CTD installed upon request and a second deployable with A-Frame
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Kongsberg EM 302: nominal sonar frequency 30kHz, maximum sound intensity 214dB re 1 mpa in the gondola. Edgetech 3200/XSI Subbottom profiling system (300 m max)
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">Atlas Deso 35 (210kHz & 12KHz), Atlas Deso 25 (210Khz & 33 KHz)
USBL	<ul style="list-style-type: none">HiPaP 500 Series

+ TECHNICAL DETAIL – CONTINUED

Coring/Sampling Capabilities	<ul style="list-style-type: none">Not fitted, CMRE equipment
Winches	<ul style="list-style-type: none">Towing winches: double drum (3000m x 50mm wire); towed body (5000 kg); data winch with split drum (16,000 kg); large drum winch (3000 kg); oceanographic winch (1000 kg, with side reach 5m for sensors); and chum winch (2000 kg, for acoustic sources, operated by a CMRE technician only)Deck cranes: four electro-hydraulic cranes with articulated and/or telescopic jibs on the Focsle, Quarterdeck and the Boat Deck (SWLs of 2t-5t) as well as a U-frame (SWL 10t) on the Quarterdeck and an A-frame (peak loading 32,000kg) on the Focsle
Communications	<ul style="list-style-type: none">Ship system: VSAT and InmarsatScience system: VSAT. All science stations in the main lab are networked and it is configurable. There is also a Marine Data Management System installed enabling precision positioning
Special features	<ul style="list-style-type: none">Vessel designed to operate in various noise states and is one of the quietest ships in the world
Suitable for	<ul style="list-style-type: none">The variety of deck equipment allows a large variety of launch and recovery of scientific and engineering sensors, oceanographic instruments, autonomous vehicles and tethered devices
Scientific Limitations	<ul style="list-style-type: none">Not suitable for fisheries
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Yes, capable

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">CMRE medical form will be provided
Any additional medical checks required	<ul style="list-style-type: none">No
Personal Survival training certification required	<ul style="list-style-type: none">N/A
Additional certification required	<ul style="list-style-type: none">Safety and Security briefings will be provided on board the vessel
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes
Additional clearances required for area or type of activity	<ul style="list-style-type: none">Possibly depending on operational area (e.g. protected/restricted areas)



› The R/V ALKOR was commissioned in 1990 and is owned by the federal state of Schleswig-Holstein.

[Organisation Website](#)

[Eurofleets+ Vessel profile](#)

Home Port	Kiel, Germany
Home Port Coordinates	Latitude: 54.3300340 N Longitude: 10.148203 E
Organisation & Address	GEOMAR Helmholtz Centre for Ocean Research, Wischhofstr. 1-3, D-24148 Kiel, Germany
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	Baltic Sea and North Sea

+ VESSEL DETAILS

Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
54.6	12.5	4.16	999.8	No	No	11 knots	12

+ TECHNICAL DETAIL

Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Dry, wet, chemistry and cold labs, wet lab (15-52 sqm), fitted with a stainless-steel fish sorting system, 3 freezers (up to -40°C) and refrigeratorsCapacity to carry 2 x 20ft containerized labs.Thermosalinograph
CTD/Plankton sampling	<ul style="list-style-type: none">CTD and Rosette sampler 1 x SBE 911 CTD with Hydrobios carousel (12 Bottle), 1000m deployment capability
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Mobile multibeam-system Seabeam 1000 with 180 kHz transducers / sediment echosounder SES 2000
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">EK 60 @ 38, 70, 120, 200 Khz
USBL	<ul style="list-style-type: none">Not available
Coring/Sampling Capabilities	<ul style="list-style-type: none">Not available

+ TECHNICAL DETAIL – CONTINUED

Winches	<ul style="list-style-type: none">There are 6 winches for scientific operation driven by a central hydraulic system. At starboard, there is a 4-drum winch on the midships forecastle, at the stern there is a single-conductor towing winch (W5), and on the main deck stern there are two trawl line winches (W6a and W6b). A lateral boom (A-frame) is located midships stern on the main deck
Communications	<ul style="list-style-type: none">Satellite Broadband system, 3072kbps/1024 Kbits, Iridium, GSM phone and VOIP system
Special features	<ul style="list-style-type: none">Hangar at starboard
Suitable for	<ul style="list-style-type: none">Multipurpose research vessel. Suitable for carrying out a wide variety of scientific survey operations in coastal and shelf areas. The vessel is adapted to accommodate a variety of Remotely Operated VehiclesVessel capable of trawling to 500m, fisheries acoustic surveys, hydrographic survey, oceanographic surveys, mooring deployments, seismic surveys, ROV and AUV deployments
Scientific Limitations	<ul style="list-style-type: none">Coring is limited to 6m and the vessel has no DP
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Yes, capable, has deck space with 500kva power supply, A-Frame for Launch and recovery

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">None
Any additional medical checks required	<ul style="list-style-type: none">None
Personal Survival training certification required	<ul style="list-style-type: none">None
Additional certification required	<ul style="list-style-type: none">N/A
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes, for operation in neighbouring EEZ's e.g. UK, Netherlands, Norway, Denmark, Sweden, Finland, Poland, Livonia, Latvia, Estonia (and others as applicable). Required to be submitted to forschungsschiffe@geomar.de 6 months prior to cruise
Additional clearances required for area or type of activity	<ul style="list-style-type: none">Additional clearances for operations in Special areas of Conservation if applicableSeismic operations require additional permitsOther requirements for other jurisdictions to be addressed via Diplomatic clearance process

RV Tangaroa



[Organisation Website](#)
[Eurofleets+ Vessel profile](#)

Home Port	Wellington, New Zealand
Home Port Coordinates	Latitude: 41°18'42 Longitude: 174°48'42
Organisation & Address	NIWA Vessel Management Ltd 301 Evans Bay Parade, Greta Point, Wellington 6021 New Zealand
Vessel Web Site Address	Vessel schedules available on request
Normal Area Of Operation	NZ EEZ predominantly. North and East into Pacific Basin, West Australia, Southern Ocean to Ross Sea Antarctica 77S

+ VESSEL DETAILS

Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
70m LOA	13.8m	7.0m	2291 T	1 C	DP2	10.5 Knots	25

+ TECHNICAL DETAIL

Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Wet and dry labs, chem lab with fume hood, freezers (-20, -80°C), temp controlled labCapacity for 3 x 20ft container labs
CTD/Plankton sampling	<ul style="list-style-type: none">12 & 24 bottle SBE CTD, 6000m capability, towed plankton nets and plankton recorder
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Kongsberg EM302 (7000m depth), EM2040 (500m), TOPAS 18 Sub Bottom Profiler
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">Simrad ES60, EK60, 18,38,70,120 & 200kHzRDI Ocean Surveyor ADCP (75 kHz)
USBL	<ul style="list-style-type: none">Kongsberg HiPAP 500 USBL
Coring/Sampling Capabilities	<ul style="list-style-type: none">Gravity and piston cores to 6m, box corer, multicorer, rock dredges, grabs. max depth 10,000m

+ TECHNICAL DETAIL – CONTINUED

Winches	<ul style="list-style-type: none">Trawl winches (4000m 28mm, 40T pull), full fishing winch system (Gilson, Sweep, Outhaul, Codend)Scientific winches;Deep Ocean (10,000m, 16mm steel cable)CTD (8000m, 10.5mm Rochester conducting cable)Camera Winch (3000m, 10.5mm Rochester conducting cable)
Communications	<ul style="list-style-type: none">V-SAT, Inmarsat FBB500, Iridium Openport
Special features	<ul style="list-style-type: none">N/A
Suitable for	<ul style="list-style-type: none">Multipurpose research vessel. The vessel has accommodated a variety of specialised equipment; ROV, AUV, CPT, Vibrocorer, benthic sleds, corers, cameras etcOffshore Engineering Support, Fisheries Stock Assessment, Exploratory Fishing Studies, Seabed Investigations, Environmental Protection Studies, High Resolution Seismic Acquisition and Antarctic StudiesDeployment of current and wave measuring instrumentsVessel capable of pelagic and demersal trawling to 2200m, fisheries acoustic surveys, bathymetric and hydrographic survey, oceanographic surveys & mooring deployments
Scientific Limitations	<ul style="list-style-type: none">Coring limited to 6m core lengthSeismic Streamer Geometrics GeoEel, 48 channel activeSection, length 600 metresContainerised Compressor - 185 cuft/min @ 2,000 psi
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Can accommodate smaller work class ROV, 400kVA power supply. DP2, USBL, 10T A-Frame, ships crane midships

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">Maritime NZ Seafarers Medical CertificateMCA seafarers medical (UK)AMSA seafarers medical (Aust) or equivalentSTCW Certification accepted also (<2 years)
Any additional medical checks required	<ul style="list-style-type: none">NIWA (enhanced) Antarctic medical required for Antarctic voyages
Personal Survival training certification required	<ul style="list-style-type: none">STCW Personal survival techniques training
Additional certification required	<ul style="list-style-type: none">No certification for security is required/just an awareness of what is consider normal security measures
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes for some Pacific regions
Additional clearances required for area or type of activity	<ul style="list-style-type: none">Environmental Protection Act (EPA) application required for seabed sampling. NZ Biosecurity Act – permits required for landing of biological samplesMarine scientific activities that interact with the seabed, subsoil or marine life may require notification to the EPA as a permitted activitySamples obtained may need MPI clearanceAny items that are intended to be dumped in the EEZ or extended continental shelf as part of marine scientific research may require a marine dumping consent from the EPAIf the vessel is to leave the EEZ you will be responsible for organising Customs clearance

RV SOCIB



› Balearic Islands Coastal Observing and Forecasting System. 24m long, delivered in September 2012. Operates <150 days per annum

[Organisation Website](#)
[Eurofleets+ Vessel profile](#)

Home Port	Palma de Mallorca
Home Port Coordinates	Latitude: 39° 33' 47.42" N Longitude: 2° 38' 10.34" E
Organisation & Address	ICTS SOCIB - Balearic Islands Coastal Observing and Forecasting System. Parc Bit, Naorte, Bloc A 2ºp. pta. 3 Palma de Mallorca SPAIN. E-07121. Tel: +034 971 43 99 98. CIF: Q0700535H.
Vessel Web Site Address	Link to Vessel Information
Normal Area Of Operation	Western Mediterranean

+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
23m	9m	1.75	172	-	Yes DP0	12 kts	8h: 13 12h: 10 16h: 9 24h: 7

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Large wet, chemistry and water labs, Dry LabFridgeFreezer: -20
CTD/Plankton sampling	<ul style="list-style-type: none">SeaBird SBE21 THERMOSALINOMETER: Continuous sea surface layer temperature and salinity data
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">-2 side poles are available to install seismic/acoustic instrumentation-TELEDYNE 150 KHz ADCP
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">SIMRAD EK60 120 KHz scientific probe Echosounder
USBL	<ul style="list-style-type: none">2 side poles are available to install seismic/acoustic/other instrumentation
Coring/Sampling Capabilities	<ul style="list-style-type: none">A-Frame: 4 m wide x 4.76 m high. 2Tn Max

+ TECHNICAL DETAIL – CONTINUED

Winches	<ul style="list-style-type: none">IBERCISA MO-H / 30 / 3000-8: 1,900 kg with bare drum, and 1,050 kg with full drum. Coaxial Rochester 8mmIBERCISA MO-H / 30 / 3500-6: 800 kg with bare drum and 500 kg with full drum
Communications	<ul style="list-style-type: none">Satellite Broadband system, Iridium, GSM phone and VOIP system
Special features	<ul style="list-style-type: none">Ashtec 3D GPS 800 ADU
Suitable for	<ul style="list-style-type: none">Hydrography
Scientific Limitations	<ul style="list-style-type: none">Multipurpose research vessel. Suitable for carrying out a wide variety of scientific survey operations in coastal and offshore sea locations. The vessel is adapted to accommodate a variety of small (800 Kg) Remotely Operated Vehicles
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Yes, for small ROVs (800Kg max)

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">None
Any additional medical checks required	<ul style="list-style-type: none">None
Personal Survival training certification required	<ul style="list-style-type: none">None
Additional certification required	<ul style="list-style-type: none">None
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Not in Spanish EEZ
Additional clearances required for area or type of activity	<ul style="list-style-type: none">Depending on the location and type of work to develop

RV Coriolis II



[Organisation Website](#)
[Eurofleets+ Vessel profile](#)

Home Port	Rimouski, Québec, Canada (April till Nov) Halifax, Nova-Scotia, Canada (Dec till March)
Home Port Coordinates	Rimouski - Latitude: 48.4792° Longitude: -68.5153° Halifax - Latitude: 44.6603° Longitude: -63.5571°
Organisation & Address	Reformar, 310, allée des Ursulines Rimouski, Québec, Canada, G5L A1
Vessel Web Site Address	Vessel Schedules available on request
Normal Area Of Operation	St. Lawrence River and Seaway, including Estuary and the Gulf regions along the East Coast of Canada. Vessel is certified for Unlimited Voyage Certification, but not Ice Class Certified. In previous years the vessel has operated in Argentina and French Guyana

+ VESSEL DETAILS

Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
49.95m	11m	5.5m	836	N/A	Kongsberg C-POS	10 kts	14

+ TECHNICAL DETAIL

Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Vessel dry lab: 21m², Vessel wet lab: 21m²20 ft containerized lab available upon request
CTD/Plankton sampling	<ul style="list-style-type: none">CTD – Sea-Bird SB-911Rosette Carousels 12 and 24 bottlesPlankton net (2 x 202 um) with flowmeter and stroboscopeZooplankton multinet
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Hull mounted EM2040 multibeam (Kongsberg)Hull mounted EM302 multibeam (Kongsberg)Hull mounted Sub-Bottom Profiler: 3x3 transducer array (Edgetech X-Star / KT-216H)
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">Hull mounted EK60: 38 kHz, 120 kHz and 200 kHz (Simrad/Kongsberg)

+ TECHNICAL DETAIL – CONTINUED

USBL	<ul style="list-style-type: none">HiPAP 352P (Kongsberg)
Coring/Sampling Capabilities	<ul style="list-style-type: none">Piston corer (max 9m)Gravity corer (1.5 and 3m)Box corer
Winches	<ul style="list-style-type: none">Coring winchesHawboldt 5t research winchSampling winchData transfer winchesDt marine 3025 ehlwrDt marine 3020 ehlwrDt marine 210 ehlwr – qty 2
Communications	<ul style="list-style-type: none">KVH – TracPhone V7ip
Special features	<ul style="list-style-type: none">Hull mounted 75kHz ADCP (Teledyne)Hull mounted 150 kHz ADCP (Teledyne)
Suitable for	<ul style="list-style-type: none">Hydrographic SurveyOceanographic SurveyGeophysical SurveyGeotechnical SurveyEnvironmental impact, assessment and monitoringCoastal zone & benthic habitat mappingEnvironmental and geological research
Scientific Limitations	<ul style="list-style-type: none">No specific restriction other than deck space
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Yes, but depends on ROV size. Please contact REFORMAR

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">No medical required
Any additional medical checks required	<ul style="list-style-type: none">N/A
Personal Survival training certification required:	<ul style="list-style-type: none">N/A
Additional certification required	<ul style="list-style-type: none">Workplace Hazardous Materials Information System (WHMIS)
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">No
Additional clearances required for area or type of activity	<ul style="list-style-type: none">None

RV Atlantic Explorer



[Organisation Website](#)
[Eurofleets+ Vessel profile](#)

Home Port	New York, New York (Based In Ferry Reach, Bermuda)
Home Port Coordinates	Latitude: 32-20N Longitude: 064-40W
Organisation & Address	Bermuda Institute of Ocean Sciences 17 Biological Lane St. Georges, Bermuda GE01
Vessel Web Site Address	Vessel Schedule available on request
Normal Area Of Operation	Atlantic Basin – Primarily: Gulf of Maine to Gulf of Mexico, Bahamas, U.S. East Coast, Bermuda

+ VESSEL DETAILS							
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths
170 feet	38 feet	12 feet	299 (US), 861 ITC	N/A	N/A	10 kts.	22

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Aft Lab – 250 sq ft, Fwd Lab – 230 sq ft, Main Lab – 325 sq ft, Teaching Lab – 250 sq ft, Environmental Room – 30 sq ft, CTD garage – 120 sq ft, Marine Tech Lab – 160 sq ft
CTD/Plankton sampling	<ul style="list-style-type: none">Markey DUSH-5 winch with 9,500m 0.322 EM cable, and full suite of Seabird instrumentation. Rosette with 30-12 liter Niskin bottles. DUSH-4 hydrographic winch with 9,500m 0.25: hydro wire for science-supplied nets and cores
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Not available
Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">Knudsen single beam 12Khz and 3.5Khz echo sounder
USBL	<ul style="list-style-type: none">No
Coring/Sampling Capabilities	<ul style="list-style-type: none">Science provided, on 0.250" hydro wire

+ TECHNICAL DETAIL – CONTINUED

Winches	<ul style="list-style-type: none">Markey DUSH-5 CTD winch, Markey DUSH-4 Hydrographic winch, Markey COM7 EM winch for MOCNESS tows
Communications	<ul style="list-style-type: none">INMARSAT C, Fleet Xpress, Iridium, Cellular
Special features	<ul style="list-style-type: none">Radioactive isotope van; environmental sampling van; multi-purpose research activities
Suitable for	<ul style="list-style-type: none">CTD sampling, net tows, bottom surveys, deep water mooring deployment and recoveries, underway water sampling, gravity and multi-coring
Scientific Limitations	<ul style="list-style-type: none">Large-scale coring activities, such as piston coring
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Yes

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">BIOS Medical History and Waiver forms required prior to departure
Any additional medical checks required	<ul style="list-style-type: none">None
Personal Survival training certification required	<ul style="list-style-type: none">STCW PST preferred, but not required
Additional certification required	<ul style="list-style-type: none">None
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">None for Bermuda or US waters, all others require clearance through US State Department
Additional clearances required for area or type of activity	<ul style="list-style-type: none">Use of radioactive isotopes requires completion and approval of BIOS isotope application, available on BIOS website

RV SVEA^{*}



[Organisation Website](#)
[Eurofleets+ Vessel profile](#)

Home Port	Lysekil Sweden
Home Port Coordinates	Latitude: 58°16' Longitude: 11°26'
Organisation & Address	Swedish University of Agricultural Sciences, Ship Management Unit, P.O. Box 7021, 750 07 UPPSALA, Sweden
Vessel Web Site Address	Vessel Schedule
Normal Area Of Operation	North Sea, Skagerrak, Kattegat, Baltic Sea, Bothnian Sea

+ VESSEL DETAILS								
Length	Breadth	Draught	Gross Tonnage	Ice class	DP	Service speed	Max Scientific Berths	No. of EF+ Scientific Berths
69,5 m	15,8 m	5,4 m	3148	1B	1	11 Knot	21	18

* SLU joined Eurofleets+ as 'Observers' in 2021. Access is not currently available through Eurofleets+ - contact the operator directly.

+ TECHNICAL DETAIL	
Laboratory Facilities (fixed and temporary)	<ul style="list-style-type: none">Fish lab, MIK labInstrument workshop & oceanographic workshopWet lab, CTD Hangar, Chemical LabNutrient analysis lab, Isotope lab, Ferrybox roomAdditional laboratories, equipment etc can be taken onboard in containers - maximum container capacity is three 20 feet containers
CTD/Plankton sampling	<ul style="list-style-type: none">CTD Rosette with 24, 5L water bottles on a rotatable rack. A SBE 9+ and HD video camera via fiberoptic multiplexer with several free serial and ethernet ports
Multi-Beam(s)/ Sub Bottom profiling	<ul style="list-style-type: none">Scientific echo sounder (EK80, 10-500 kHz), in drop keel and in ROTV (Focus 2), remotely operated towed vehicleMultibeam sonars - MS70 and ME70 in drop keel

+ TECHNICAL DETAIL - CONTINUED

Fisheries Echo Sounders/Sonar	<ul style="list-style-type: none">Long range, low frequency fish finding sonar SX90 (20-30 kHz)High resolution, high frequency fishery sonar SH90 (110-120 kHz)
USBL	<ul style="list-style-type: none">HI-PAP and underwater navigation system for acoustic positioning and navigation
Coring/Sampling Capabilities	<ul style="list-style-type: none">No
Winches	<ul style="list-style-type: none">CTD winch, Multi-purpose winch, Bow towing winch, Hydrographic winch, Net towing/Coring winch, Movable deck winch2 x trawl winches, 2 x net drums, Auxiliary winch, Net sounder winch, 2 x trawl door winches
Communications	<ul style="list-style-type: none">Dual Ku band VSAT systems, various speed profiles offeredDual 4G systems
Special features	<ul style="list-style-type: none">Silent vessel (ICES 209). iSYM Autotrawl system from Scantrol gives full control of the trawls' geometryTwo aft cranes, A-frame and large net drums for mooring and buoy deploymentsMoving Vessel Profiler (MVP 200) for underway profiles of CTD, oxygen and Chl-a fluorescenceThree identical, movable fiber optic multiplexers to be used with the three fiber optic oceanographic winches to serve as agile instrument platforms for usersTwo ROTV's (Remotely Operated Towed Vehicles)Fully equipped weather stationRadiation: PAR, global solar irradiance, radiation for ocean colour (sea thruthing for remote sensing)
Suitable for	<ul style="list-style-type: none">Pelagic and demersal trawling to 2200m, Fisheries acoustic, Hydrographic & Oceanographic surveys, Mooring deployments, Seismic, ROV & Benthic surveys
Scientific Limitations	<ul style="list-style-type: none">Deployment of gear limited to 2500mCoring
Vessel capability to support ROV deployment	<ul style="list-style-type: none">Yes - to a depth of 3,000m meters

+ CRUISE PREREQUISITES

Medical certification required for joining the vessel and the list of acceptable certificates	<ul style="list-style-type: none">No certification required
Any additional medical checks required	<ul style="list-style-type: none">No medical checks required
Personal Survival training certification required	<ul style="list-style-type: none">No certification requirements
Additional certification required	<ul style="list-style-type: none">N/A
Diplomatic clearance required for area of operation?	<ul style="list-style-type: none">Yes occasionally depending on territorial waters entered
Additional clearances required for area or type of activity	<ul style="list-style-type: none">No

ROV Holland I



› The Holland 1 Remotely Operated Vehicle (ROV) system is a scientific deep-water ROV system. The system is designed for deployment from the MI vessel RV Celtic Explorer as well as other vessels of opportunity

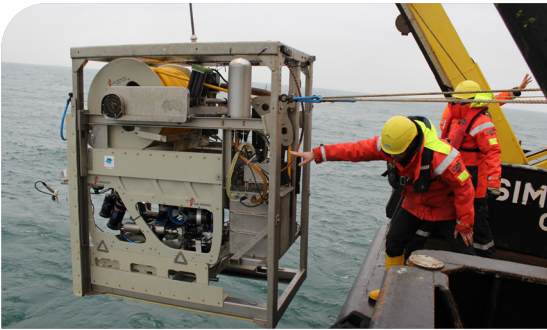
[Eurofleets+ profile](#)

Home Port	Galway, Ireland 53.270962, -9.062691
Organisation & Address	Marine Institute, Rinville, Oranmore, Co Galway
Infrastructure Web Site Address	https://www.marine.ie/Home/site-area/infrastructure-facilities/infrastructure-facilities

+ VESSEL DETAILS							
Depth Rating	Length	Width	Height	Weight in Air	Total System Weight	Payload	Endurance (AUV)
3000m	3018mm	1810mm	1790mm	3240kgs	75T	312kgs	n/a

+ TECHNICAL DETAIL	
General Information	<ul style="list-style-type: none">The Holland 1 Remotely Operated Vehicle (ROV) system is a scientific deep-water ROV system. The system is designed for deployment from the MI vessel RV Celtic Explorer as well as other vessels of opportunity. The system consists of a SMD Quasar work class Hydraulic ROV, Tether management system (optional), A- frame launch and recovery system and a deepwater (3000m) winch. The system is controlled from a 20' control container and comes with a fully equipped 20' workshop container
Vessel Requirements	<ul style="list-style-type: none">Dynamic positioning , Deck capacity for 2 x 20' containers, 9m x 4.5m A-frame and winch, 380-480vac power supply 200kva for control Van (with high startup load), 70kva for umbilical winch and A Frame , USBL system, Total system weight; 75Tonnes
Thrusters	<ul style="list-style-type: none">Horizontal & Vertical thrustersForward, Vertical and lateral bollard pullsAuto Features: Depth, Altitude, Heading, Position
Cameras	<ul style="list-style-type: none">Stills and video high definition camera system
Positioning (USBL etc)	<ul style="list-style-type: none">1 x IXSEA GAPS USBL and 1 x Sonardyne Ranger 2 USBL5 x MT8 2 x MT 9, 3 x WTM 8190 beacons
Instruments	<ul style="list-style-type: none">Gyro, DVL, Altitude, Depth, Sonar
Optional Items	<ul style="list-style-type: none">Multi-beam - configured to accommodate SeaBat 7125 with Octans subsea Gyro Spare Electrical/ Electronic Ports - 8 x RS485/232 Ports, 10 x Analogue I/O Ports 12, 24 & 48 VDC, 110VAC PSU's available
Manipulators	<ul style="list-style-type: none">2 x long reach 7F Schilling Orion (Normally fitted), 1x Rigmaster 2, 5F Grabber, 75mm slurp sampler with single chamber sample container, 2 x retractable Bio Boxes 535mm (w) x 400m (l) x 260mm (H) Additional sampling boxes can be fitted. Hydraulic cable cutters, Sediment corers
TMS	<ul style="list-style-type: none">SMD Tophat TMS, 400metres max tether length3 x cameras (1 downwards facing)

ROV GENESIS



› (ROV) "Genesis" with Tether Management System (TMS) is a medium sized observation/light work ROV (Cherokee-type built by Sub-Atlantic).

[Eurofleets+ profile](#)

Home Port	Oostende, Belgium 51.2303 Lat 2.92 Long
Organisation & Address	Vlaams Instituut voor de Zee, Wandelaarkaai 7 8400 Oostende
Infrastructure Web Site Address	http://www.vliz.be/en/rov-genesis

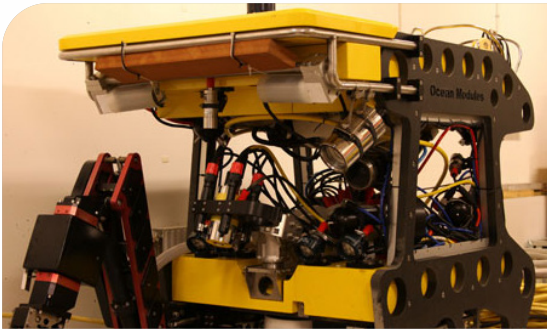
+ VESSEL DETAILS							
Depth Rating	Length	Width	Height	Weight in Air	Total System Weight	Payload	Endurance (AUV)
2000/1400	1400mm	870mm	1100mm	1700kg	7500kg	N/A	N/A

+ TECHNICAL DETAIL	
General Information	<ul style="list-style-type: none">The Remotely Operating Vehicle (ROV) "Genesis" with Tether Management System (TMS) is a medium sized observation/light work ROV (Cherokee-type built by Sub-Atlantic). It can be operated from any vessel capable of accommodating a winch and a control/workshop 20ft-container. An A-frame is used for launch and recovery of the ROV-systemThe ROV can be used for observation work and a 5-function manipulator allows handling smaller equipment. The ROV Genesis is part of the associated equipment of the RV Simon Stevin and can be operated from this 36m coastal/regional research platform. The ROV Genesis has also been deployed around the globe from a total of 7 different research vessels in international campaigns. The ROV is operated yearly during minimum 4 campaigns: two onboard the Simon Stevin in Belgian coastal waters and two during international campaigns. The ROV has a depth rating of 2000m but operations are limited to 1400m due to umbilical-length
Vessel Requirements	<ul style="list-style-type: none">Ability to accommodate two 20 ft-containers on deck and lifting capacity preferably A-frame or crane
Thrusters	<ul style="list-style-type: none">6 vectorized thrusters, powered by 440 VAC
Cameras	<ul style="list-style-type: none">Luxus High Definition Cameras, colour, black/white, stills
Positioning (USBL etc)	<ul style="list-style-type: none">A GAPS USBL-system is standard installed during ROV operations to achieve sub-meter scale positioning and navigation
Instruments	<ul style="list-style-type: none">Hydraulic HLK-EH5 5f arm; medium work, lift cap.: 25 kg, Drawer in skid for e.g. sample stowage, Obstacle avoidance: Trittech Super SeaKing 325/673 kHzCTD: Sea & Sun CTD 48m, Small coring system, Sediment temperature: THP temp probe from micrel, Niskin bottles, Gassampler system (from NIOZ)Installation of client sensors on request
Manipulators	<ul style="list-style-type: none">5-function manipulator

UGOT Ocean Modules V8 Offshore ROV



UNIVERSITY OF GOTHENBURG



› The Remotely Operated Vehicle (ROV) “Ocean Modules V8 Offshore” is in service since 2010/2011 and has been used primarily in Swedish territorial waters but also onboard the German research icebreaker “Polarstern” in southern summer season 2015/2016 in the south-eastern Weddell Sea, Antarctica.

[Eurofleets+ profile](#)

Home Port Gothenburg, Sweden | Latitude: 57.70 Longitude 11.96

Organisation & Address University of Gothenburg, Sweden

Infrastructure Web Site Address <https://www.loven.gu.se/>

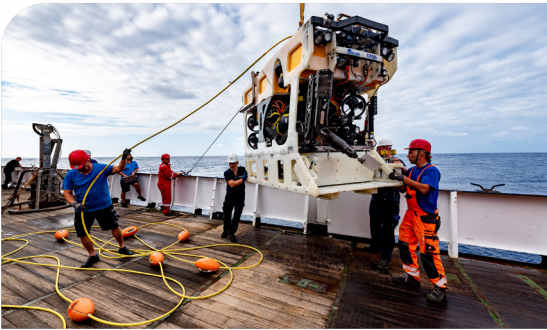
+ VESSEL DETAILS

Depth Rating	Length	Width	Height	Weight in Air	Total System Weight	Payload	Endurance (AUV)
2000m	1100mm	800mm	900mm		270kg (without equipment)	40kg	n/a

+ TECHNICAL DETAIL

General Information	<ul style="list-style-type: none">In 2015 the ROV system was upgraded with a 20 foot HC Control and Transport container together with a mobile winch (MacArtney type MERMAC R10 / 2125/16, 2-23.5 AHC)The ROV was primarily used for marine biological research projects (monitoring, visual inspection of cold water coral reefs, Antarctic benthos communities, in situ experimentation). But the system may also be used for projects in physical/chemical oceanography and marine geology
Vessel Requirements	<ul style="list-style-type: none">The ROV system is mobile and containerized, thus operations are possible world-wide including the Arctic and Antarctic depending on sea-ice conditions
Cameras	<ul style="list-style-type: none">HD Video cameraOsprey Trittech cameras (2), Still camera Imenco Digital SDS1210
Instruments	<ul style="list-style-type: none">Trittech altimeter, CTD with optode (oxygen) type SAIV, Scientific payload tool skid, Deep Sea LED lamps (Oceanlight Wide Flood)4 green laser scaler
Optional Items	<ul style="list-style-type: none">None Specified
Manipulators	<ul style="list-style-type: none">Advanced manipulator ECA 5 – function electric

ROV Marum Squid



› MARUM-SQUID is a powerful, light Work-Class ROV for operations down to 2000 meter water depth. The system was designed to be deployed even from smaller vessels. The ROV is operated by three to four Pilots/Technicians and the entire system can be shipped in a single 20' ISO container.

[Eurofleets+ profile](#)

Home Port Bremen, Germany | Lat 53.074982 Long 8.807080

Organisation & Address University of Bremen, MARUM - Center for Marine Environmental Sciences

Infrastructure Web Site Address <https://www.marum.de/en/Infrastructure/ROV-MARUM-SQUID.html>

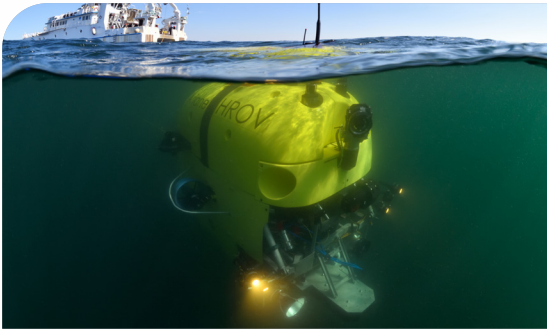
+ VESSEL DETAILS

Depth Rating	Length	Width	Height	Weight in Air	Total System Weight	Payload	Endurance (AUV)
2000	2.1	1.2	1.8	1.3t	<10T	20kg	n/a

+ TECHNICAL DETAIL

General Information	<ul style="list-style-type: none">ROV MARUM-Squid is a SAAB-Seaeye Leopard type compact, small work-class ROV system for operations down to 2000 m water depth, designed to operate from small research vessels with limited deck spaceThe vehicle has the possibility to maintain position in the water column (midwater station-keeping) without acoustic link to the seafloor via DVL or similar. The advanced sensor package also allows accurate track following necessary to perform e.g. photo-mosaicking tasks
Vessel Requirements	<ul style="list-style-type: none">Suitable for smaller vessels with limited deck space. The waiving of an additional 20" control container results in a very small footprint of <10m² for winch and ROV on deck, making the system well suited for operations from small platforms
Thrusters	<ul style="list-style-type: none">The above-average thruster power (>3 knots forward speed) allows operations in high current areas, denied to systems with comparably lower thruster-power
Cameras	<ul style="list-style-type: none">HD video camera, 14 megapixel stills, PAL overview camera1 pair of green line lasers, Videorecording on hard-disk
Positioning (USBL etc)	<ul style="list-style-type: none">For positioning, ROV-Squid uses the Posidonia or GAPS USBL systems from IXBLUE. Due to the advanced navigational sensor package of the ROV, positioning and displacement within 10cm is possible. The system can fly along given patterns within this accuracy to create photo-mosaics on small scale structures such as bacterial matsStation-keeping in the water column is also possible which can be of interest to scientists studying midwater biota. The vehicle can maintain its position, acting as a stable, non-drifting platform anywhere between the surface and the seafloor
Instruments	<ul style="list-style-type: none">Attitude heading and reference unit (laser gyro, 3-axis accelerometers, DVL), Dual frequency sonar; 325/675kHz, Depth sensor, Altimeter, Magnetic compass, CTD Probe
Optional Items	<ul style="list-style-type: none">Free interfaces for additional scientific sensors:2 x serial links (RS232), 1 x Gigabit Ethernet port, 1 x PAL cam
Manipulators	<ul style="list-style-type: none">Seven function manipulator, Sample drawer-box for sample storage and payload installation
TMS	<ul style="list-style-type: none">The vehicle is a free-flyer without TMS or LARS to be deployed over the side of the vessel via the ship’s crane

ROV Ariane



› The hybrid ROV Ariane is a new generation of remote underwater system operated through an optical fibre link, where energy is supplied by on-board lithium-ion batteries.

[Eurofleets+ profile](#)

Home Port	Toulon, France Lat 43.125191 Long 5.931040
Organisation & Address	Ifremer, Centre de Méditerranée, Zone Portuaire de Brégaillon, CS20330, 83500 La Seyne sur Mer, France
Infrastructure Web Site Address	https://www.ifremer.fr/Recherche/Direction-Flotte-Oceanographique/Unite-Systemes-sous-marins

+ VESSEL DETAILS

Depth Rating	Length	Width	Height	Weight in Air	Total System Weight	Payload	Endurance (AUV)
2500m	2.2m	1.85m	2.13m	1800kg	1.5T	220kg	6 -10 hour

+ TECHNICAL DETAIL

General Information	<p>Two payload configurations are possible:</p> <ul style="list-style-type: none">• exploration and sampling* integrating two 5 and 7-function manipulator arms, one basket, one directional camera, sampling tools• cartography* including an EM2040 multi-beam echo sounder and a directional camera <p>The system design is especially attractive in the following aspects:</p> <ul style="list-style-type: none">• propulsion architecture and navigation system especially designed for work on strong cliffs and canyons;• high-end payload devices for manipulation, mapping and sampling;• all major scientific ROV functions in a compact package operated at optimized cost and fast access from 25m+ coastal ships
Vessel Requirements	<ul style="list-style-type: none">• Deployments are possible from small vessels without dynamic positioning
Thrusters	<ul style="list-style-type: none">• Its propulsive architecture and navigation sensors offer to work on any type of seabed, including very rugged operational areas such as canyons
Cameras	<ul style="list-style-type: none">• HD video, a tilted 24Mp still photo camera with synchronized flash lighting, image are stored in raw format with wide meta-data (view parameters, vehicle navigation data Etc.);
Positioning (USBL etc)	<ul style="list-style-type: none">• GAPS – USBL box
Instruments	<ul style="list-style-type: none">• Vacuum fauna sampling, sediment coring, sampling basket;• CTD, ADCP, interfaces for simple scientific sensors;• Kongsberg 2040 multi-beam echo-sounder in vertical, 45° and horizontal orientations, water column recording;• Full software GIS compatibility and data visualization tools
Optional Items	<ul style="list-style-type: none">• Possibility of adding sensors or specialised tools
Manipulators	<ul style="list-style-type: none">• 2 electric manipulators with respectively 5 and 7 functions
TMS	<ul style="list-style-type: none">• ROV Ariane can be operated in tele-operated mode (ROV), via a light optic fibre cable deployed from a depressor or a cage. This tether management system allows the vehicle to operate from vessels without dynamic positioning. It can also be operated in autonomous mode (AUV), with an optional acoustic communication link

ROV Ægir 6000



› Work-class ROV specially equipped for science with samplers and sensors.

[Eurofleets+ profile](#)

Home Port	Bergen, Norway Lat 60.391262 Long 5.322054
Organisation & Address	University of Bergen, Postboks 7803, N-5020 Bergen, Norway
Infrastructure Web Site Address	https://www.uib.no/geo

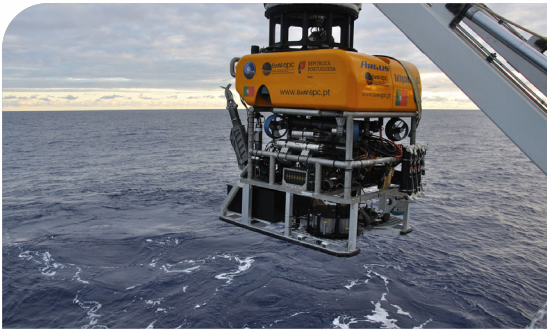
+ VESSEL DETAILS

Depth Rating	Length	Width	Height	Weight in Air	Total System Weight	Payload	Endurance (AUV)
6000m	2,75m	1,7m	1,65m	3600 kg			

+ TECHNICAL DETAIL

General Information	<ul style="list-style-type: none">• Sufficiently powered to operate seafloor drilling systems and to install and maintain seafloor observatories• Designed for operation from both RVs G.O. Sars and Kronprins Haakon (using the latter's moon-pool when operating in ice-covered water)
Vessel Requirements	<ul style="list-style-type: none">• To be used on G.O. Sars only in Eurofleets+
Cameras	<ul style="list-style-type: none">• The ROV is equipped with a high-quality camera and navigation systems, and comes standard with a range of sensors and sampling equipment
Instruments	<ul style="list-style-type: none">• Gas sampler, Fluid, Sediment, Bio and Rock samplers, Microbiology, Macro biology, Methane sensor, CO2 sensor, Multi-beam echo sounder
Manipulators	<ul style="list-style-type: none">• Equipped with delicate pincers for taking targeted samples
TMS	<ul style="list-style-type: none">• 1000m+

ROV Luso



› ROV Luso is capable of diving to depths of 6000m adapted for scientific purposes aimed at collecting various types of sample (geological and biological - with different requirements in samples packaging)

[Eurofleets+ profile](#)

Home Port Paço de Arcos, Portugal | Latitude: 38.6938 Longitude: -9.2953

Organisation & Address EMEPC – Estrutura de Missão para a Extensão da Plataforma Continental

Infrastructure Web Site Address <https://www.emepc.pt/rov-luso?lang=en>

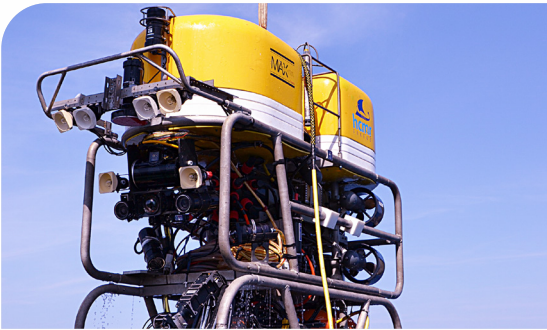
+ VESSEL DETAILS

Depth Rating	Length	Width	Height	Weight in Air	Total System Weight	Payload	Endurance (AUV)
6000m	2.0m	1.6m	2.2	2300kg	35T (including control container)	100kg	n/a

+ TECHNICAL DETAIL

General Information	<ul style="list-style-type: none">ROV Luso is capable of diving to depths of 6000m adapted for scientific purposes aimed at collecting various types of sample (geological and biological - with different requirements in samples packaging), and is equipped with an HD camera and several sensors that aim to collect and provide real time information concerning the physical and chemical characteristics of the water in which the ROV Luso is operatingROV Luso incorporates a larger sample box, the incorporation of a suction sampler with 5 individual chambers and an area for storing a group of corers and several sensors targeting different parametersSpecific tools are also integrated in the ROV Luso, such as a rock saw for sampling in situ and new corers with internally designed restraint systems
Vessel Requirements	<ul style="list-style-type: none">Deck space to accommodate 1 x 20” control container and 1 x 10” workshop container
Thrusters	<ul style="list-style-type: none">7 x 5.5 kW, 20A, 4 Horizontal, 3 Vertical
Cameras	<ul style="list-style-type: none">1 x Sony Argus RS, 1 FocusZoom HDTV camera, 1 Kongsberg Still camera 10 Mpx + flashgun, 1 DSPL lowlight Black & White camera and 5 DSPL other cameras
Positioning (USBL etc)	<ul style="list-style-type: none">Linkquest USBL
Instruments	<ul style="list-style-type: none">Mini-Drill unit, Push Corers, Suction sampler with 5 chambers, Biologic and geologic sample boxes, 2 x Imenco green scaling lasers
Optional Items	<ul style="list-style-type: none">Teledyne DVL, Contros CH4 Sensor, Contros CO2 SensorSAIV CTD SD204 with additional sensors: Dissolved Oxygen, Fluorescence, Turbidity,Idronaut CTD with additional sensors: Dissolved oxygen, turbidity, pH, redox potential
Manipulators	<ul style="list-style-type: none">1 x 5 function and 1 x 7 function
TMS	<ul style="list-style-type: none">Deployment Method: Free Flying LatchLaunch Method: LARS (Launch and Recovery System)

ROV MAX ROVER MARK II



› ROV MAX ROVER MARK II is a light work class ROV which reaches depths of 2000m and is easily deployed from most vessels.

[Eurofleets+ profile](#)

Home Port Piraeus, Greece | Latitude: 37.964 Longitude: 23.632367

Organisation & Address Hellenic Centre For Marine Research 46.7 km Athens-Sounio Avenue, 19013 Anavyssos, Greece.

Infrastructure Web Site Address https://www.hcmr.gr/en/equipment/researchvessels_underwatervehicles/rovs/

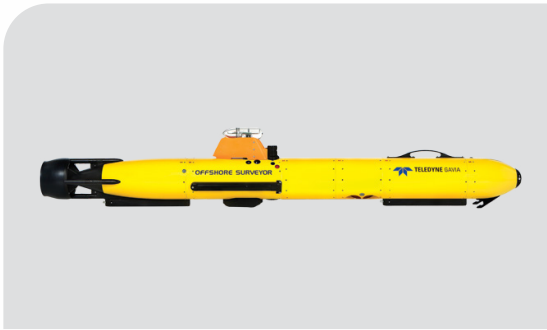
+ VESSEL DETAILS

Depth Rating	Length	Width	Height	Weight in Air	Total System Weight	Payload	Endurance (AUV)
2000m	2.2m	0.9m	2.0m	1300Kg	<6.5 Tons	68kg	n/a

+ TECHNICAL DETAIL

General Information	<p>ROV Max Rover Mark II is suitable for;</p> <ul style="list-style-type: none">Deployment and recovery of instruments (e.g. Sediment traps, Logging devices, seismographs and samplers all over Mediterranean and Red Sea)Biological and geological sampling (e.g. sampling with special made tools, push cores, rock sampling, coral sampling)Making videos, mosaicking (e.g. Scientific videos recording and mosaicking, archaeological site video)Marine Archaeology (e.g. video recording, mosaicking and recovery of artefacts)Installing and repairing of sea deep infrastructures (deep observatories, power and communication cables.)Assistance in recovering large objects at sea (e.g. Recovering of a F16 airplane from 850m depth)Our ROV & team has already been used by Spanish, German, Israeli, American and Saudi scientific teams at many sites in the Mediterranean Sea (South Alboran Basin, and Balearic Sea, north of Alexandria, Egypt, Cyprus Basin), all over the Red Sea and the Aegean Sea
Vessel Requirements	<ul style="list-style-type: none">Due to the ROV’s system not being permanently installed on a ship and its control consoles not being installed in a container, it has been used from many different ships and is easily deployed
Thrusters	<ul style="list-style-type: none">Underwater speed: 2.5 knots (fwd/rev), 1.5 knots (vert/lat), bollard pull: 160 kg;
Cameras	<ul style="list-style-type: none">3 x Colour CCD video camera (30x HQ zoom camera), 2x HD cameras (1920x1080),1xDigital Still Photo Camera with 4 green lasers; Lights: 4 x 100 W HID lights and 2 x 150 W Quartz lights;
Positioning (USBL etc)	<ul style="list-style-type: none">Accurate positioning using 1x Workhorse DVL; 1 x Tracklink 10000 USBL system with 3 pingers (max 4000 m depth), 1x Tracklink 1500 system with 8 pingers (max 1000 m depth)
Instruments	<ul style="list-style-type: none">Sonars: Tritech Dual Frequency Scanning Sonar (675/1200 KHz) , Tritech Side Scan Sonar (910 KHz); Tritech Sub bottom profiler (10Khz)
Optional Items	<ul style="list-style-type: none">Extras: 1xSM 9/125 optical Fiber for general use,1xEthernet 10/100 port, 5 RS232/RS485 ports available for extra instrument connection
Manipulators	<ul style="list-style-type: none">1x Hydrolek electro-hydraulic 5 function manipulator; 1x Hydrolek electro-hydraulic 6 function manipulator, 1xHydrolek 18mm cable cutter
TMS	<ul style="list-style-type: none">The vehicle is a free-flyer without TMS or LARS to be deployed over the side of the vessel via the ship’s crane

AUV VLIZ



› The AUV has a depth range up to 1000 meters and is equipped with a multitude of sensors including a multi-beam echo sounder, a sub-bottom profiler, a synthetic aperture sonar and an environmental module.

[Eurofleets+ profile](#)

Home Port	Oostende, Belgium 51.2303 Lat 2.92 Long
Organisation & Address	Vlaams Instituut voor de Zee, Wandelaarkaai 7 8400 Oostende
Infrastructure Web Site Address	http://www.vliz.be/en/auv-barabas

+ VESSEL DETAILS

Depth Rating	Length	Diameter	Total System Weight	Endurance (AUV)
1000m	1.6m - 4.2m and	0.2m	60kg - 120kg	4-7 hours

+ TECHNICAL DETAIL

General Information	<ul style="list-style-type: none">The AUV has a depth range up to 1000 meters and is equipped with a multitude of sensors including a multi-beam echo sounder, a sub-bottom profiler, a synthetic aperture sonar and an environmental module. This allows seawater, seabed and sub-seafloor measurements related to chemical, biological, physical, geological and historical research from shelves to continental slopesThe AUV has a maximum speed of 5.5knots, 480GB memory and comes with its own transport case, LARS (launch and recovery system) and portable cageCommunication & GPS:Ethernet: till 100 Mbit/s, Wifi: till 54 Mbit/s, Acoustic modem (Benthos): till 2 kbaud, Iridium satellite communication, Gps with RTK-corrections, GAPS-transponder enables USBL-updatesKlein 3500 Side Scan Sonar with swath bathymetryTeledyne Sub-Bottom Profiler <p>Science bay with the following optional sensors</p> <ul style="list-style-type: none">3.1. RBR CTD3.2. Aanderaa O23.3. Wetlabs Triplet-w3.4. Suna Nitrate sensor3.5. Pro-Oceanus, PCo2 sensor3.6. USBL for high accuracy underwater navigation- requires GAPS on the support vesselRTK capable navigation (through NTRIP)Bottom facing black and white cameraVehicle is equipped with a Launch and Recovery System (LARS) which is suitable for deployment and recovery off a large research vessel (A-Frame (preferably) or over side)
Vessel Requirements	<ul style="list-style-type: none">Minimal deck space; 10m² (minimal 5m long)Storage room approx. 2m³Dry lab/workshop to work with electronic equipment minimal workbenches for two surveyorsOver-the-Side crane of A-Frame for lifting AUV LARSWorkboat for recovery/launch (preferred way of operation, other recovery methods available)

AUV Hugin (UGOT)



UNIVERSITY OF GOTHENBURG



› HUGIN's modular construction and versatile payload suite enable operators to conduct a wide variety of missions with a single AUV.

[Eurofleets+ profile](#)

Home Port	Gothenburg, Sweden Latitude: 57.70 Longitude 11.96
Organisation & Address	University of Gothenburg, Sweden
Infrastructure Web Site Address	https://www.loven.gu.se/

+ VESSEL DETAILS

Depth Rating	Length	Diameter	Weight in Air	Total System Weight	Payload	Endurance
3000m	6.3m	875mm	1.7T			61 hrs max

+ TECHNICAL DETAIL

General Information	<ul style="list-style-type: none">HUGIN's modular construction and versatile payload suite enable operators to conduct a wide variety of missions with a single AUV. The ability to carry a large array of sensors including a full suite of geophysical and environmental options provides the capability to collect a comprehensive data set in a single diveOne of the key strengths of this AUV is the tight integration of payload sensors with vehicle systems. This means HUGIN can operate all of the sensors on board concurrentlyThe AUV is equipped with four (4) (but offers space for up to six (6) Kongsberg Maritime K235 Series batteries with 8 kWh each)). With 4 batteries the AUV can operate at 3 knots speed simultaneously the Multi-beam Echo Sounder, the Side Scan Sonar System, the Sub-Bottom Profiler and a camera for 41 hoursAt 4 knots cruising speed the total mission period can last for 26 hours. With a full set of batteries this may increase mission periods to 61 and 40 hours, respectively. The Navigation accuracy in autonomous mode of operation (no position updates, straight line) in real-time has an estimated navigation error of 0.08% of distance travelled, less than that after post-processing of data
Vessel Requirements	<ul style="list-style-type: none">DP1 and LARS approved by the infrastructure provider

Glider Teresa



Consiglio Nazionale delle Ricerche



› Glider “Teresa” is a Slocum Deep Glider G2, operating in the Mediterranean Sea along vertical sawtooth sections, monitoring the water column up to 1000m depth.

[Eurofleets+ profile](#)

Home Port Lerici (La Spezia), ITALY | Lat 44.106700 Long 9.829260

Organisation & Address CNR ISMAR – Institute of Marine Science, Arsenale - Tesa 104, Castello 2737/F, 30122 Venezia, Italy

Infrastructure Web Site Address http://www.ismar.cnr.it/infrastructures/instrumentation-and-equipments/Slocum-Glider-Teresa/index_html?set_language=en&cl=en

+ VESSEL DETAILS

Depth Rating	Length	Diameter	Total System Weight	Endurance (AUV)
1000m	1.5m	22cm	55-70kg	15-40 days depending on the sampling frequency and communications.

+ TECHNICAL DETAIL

General Information

- Glider “Teresa” is a Slocum Deep Glider G2, moves both horizontally and vertically thanks to density variations and center of mass displacement
- It is equipped with a CTD probe, dissolved oxygen optode and a set of fine-structure sensors; it measures vertical profiles of hydrological properties, dissolved oxygen and turbulence through continuous cycles of immersion-emersion. High precision turbulence measurements can be obtained due to the shear sensors and high-frequency thermistors
- During the mission, and when the glider comes to the surface for positioning, part of the data will be transmitted via satellite to the data center
- Glider “Teresa”, as most of the Glider vehicles, is modular, allowing for rapid sensor reconfiguration to respond to emergency conditions
- The fast-response shear probes for fine structure measurements of hydrological properties is a very peculiar payload, deserving to be handled with care during glider deployment and recovery
- Payloads:
 1. CTD: Seabird Electronic SGP (Slocum Glider Payload)
 2. Dissolved Oxygen Sensor: Optode mod.4330 from Aanderaa
 3. Microstructure Sensor: MicroRider (MR) from Rockland Scientific

AUV Hugin (IMR)

FFI Forsvarets
forskningsinstitutt
Norwegian Defence Research Establishment



› The Hugin AUV is designed for military and civilian scientific use, it is of a modular design, container based and can easily be equipped with temporary sensors.

[Eurofleets+ profile](#)

Home Port Horten, Norway | Lat 59.412470 Long 10.485530

Organisation & Address Norwegian Defense Research Establishment (NDRE), Forsvarets forskningsinstitutt (FFI), PB 25, 2027 Kjeller, Norway

Infrastructure Web Site Address www.ffi.no

+ VESSEL DETAILS

Depth Rating	Length	Diameter	Total System Weight	Endurance (AUV)
3000m max	5.6m	75cm	1000kg	15-25hours

+ TECHNICAL DETAIL

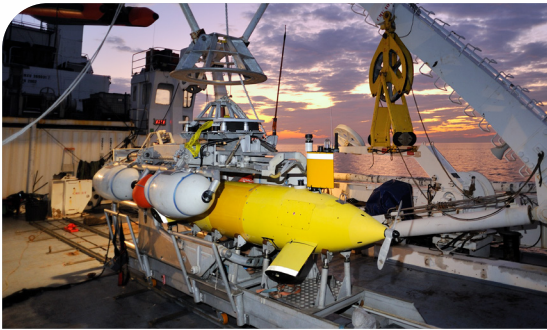
General Information

- The Hugin AUV is designed for military and civilian scientific use, it is of a modular design, container based and can easily be equipped with temporary sensors
- Safe launch and recovery up to seastate 5-6
- Payloads: Synthetic Aperture Sonar, Multi-beam echo sounder, sub-bottom profiler, cameras, oceanographic sensors, Ch4 detector, Magnetometer, turbidity sensor, fishery sonar, acoustic towed array

Vessel Requirements

- N/A

AUV AsterX or IDEFx



› The AUVs are autonomous underwater vehicles dedicated to scientific studies on the continental margins down to 2,850 m.

[Eurofleets+ profile](#)

Home Port	Toulon, France Lat 43.125191 Long 5.931040
Organisation & Address	Ifremer, Centre de Bretagne, Zone Industrielle de la Pointe du Diable, CS10070, 29280 Plouzané, France
Infrastructure Web Site Address	https://www.flotteoceanographique.fr/La-Flotte/Systemes-sous-marins/AsterX-et-IdefX

+ VESSEL DETAILS

Depth Rating	Length	Diameter	Total System Weight	Endurance (AUV)
2850m	4.5m	0.7m	800kg	16h max

+ TECHNICAL DETAIL

General Information	<ul style="list-style-type: none">The AUVs can operate payloads such as multi-beam echo sounders, sub bottom profilers and specific scientific sensor packages on up to 100 km length profileThey are able to study sea bottoms and water column for multiple scientific objectives thanks to their payload modularity. As open systems, Ifremer has complete knowledge and capability to modify/adapt/integrate sub-systems to answer new requests (ex. HO fuel cell integration, experimental payloads such as Raman spectrometer, gravi-meter etc.)Their operability on coastal vessels allows fast and efficient mobilisation at a reasonable costStandard Payloads:<ul style="list-style-type: none">Multibeam echosounder: EM2040 (Kongsberg)Sub Bottom Profiler: ECHOES 5000 (Ixblue)Magnetometer: 3 axis FluxgateFisheries echosounder: EK60 - 70 kHz, 200 kHz (Kongsberg)Current profiler: ADCP WH 300/600/1200 KHz (RDI)Physical sensors: CTD SBE49 (Seabird)Spectrometer UV ISUS V3 (Satalantic)Modular electrical and mechanical interfaces for user scientific equipment, engineering capabilities for specific integration or functional adaptation
Vessel Requirements	<ul style="list-style-type: none">Deck space for AUV and recovery system (Caliste), USBL positioning system compatible with iXBLUE Posidonia (LF) or GAPS (MF) and acoustic modem transducer, or moon-pool or pole for installation of such. Crane or A-frame for deployment with clearance of at least 3m from the vessel stern. A detailed study of AUV -installation and deployment is necessary