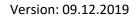




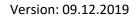
 Table 1: Research vessels scheduled for SEA-Programme Call 1 "OCEANS"

Regions	Research Vessels (& operator)	# of days	# of scientists	AREA	DATES	Suitable for:	Year Built	Country
	RV Arni Freidrickson (HAFRA)	9	17	North Atlantic	2020 – 2022, all year according to annual plan	Fisheries research, pelagic and demersal trawling to 2200m and fisheries acoustic surveys. New multibeam and subbottom profiler. Whale observations	2000	Iceland
North Atlantic Ocean	RV Celtic Explorer (MI)	12	21	North Atlantic	- 2 weeks July 2020 - 2-3 weeks May, July, August 2021 - 2-3 weeks July – August 2022	Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, Mooring deployments, Seismic surveys, ROV surveys, Benthic surveys	2003	Ireland
	RV DANA (DTU)	7	22	Baltic, North Atlantic	- Months 6-12 in 2020 - Months 1, 4, 6-12 in 2021 & 2022	Pelagic and demersal trawling to 1200m, Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, Bottom coring surveys	1981	Denmark



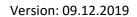


Regions	Research Vessels (& operator)	# of days	# of scientists	AREA	DATES	Suitable for:	Year Built	Country
	RV Magnus Heinason (HAVST)	10	5	North Atlantic	January, July, October 2020 (1-2 weeks)	Pelagic and demersal trawling, Hydrographic and plankton surveys, Mooring deployment and benthic surveys	1978	Faroe Islands
	RV Mar Portugal (IPMA)	15	30	North Atlantic	3 weeks July/August 2020, 2021,2022 (tbc)	Pelagic and demersal trawling to 1000m, Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, Mooring deployments, Benthic surveys and ROV surveys	1986	Portugal
Arctic Ocean,	RV Sanna (GRONLANDS)	14	7	West Greenland	1-2 weeks May – September 2021, 2022	Pelagic and demersal trawling to 1000 m, Fishery acoustic surveys, Hydrographic surveys, Mooring deployments, Benthic surveys	2009	Greenland
Atlantic Ocean	RV G.O. SARS	10	29	North Sea, Norwegian Sea, Barents Sea	- Months 6, 7, 8, 11, 12 in 2020 - Months 4, 6, 9, 11, 12 in 2021	All types including ROV and AUV operations	2002	Norway





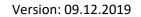
Regions	Research Vessels (& operator)	# of days	# of scientists	AREA	DATES	Suitable for:	Year Built	Country
					- Months 6, 11, 12 in 2022			
	RV Alliance (NATO-CMRE)	7	25	North Atlantic, Mediterranean	Fitting in the vessel annual schedule	Oceanographic surveys, acoustics	1984	Italy
Mediterr anean Sea, Atlantic	RV Pelagia (NIOZ)	17	12	Atlantic/Medit erranean	Tbd	Hydrographic and oceanographic surveys, Mooring and lander deployments, Sediment sampling, ROV & AUV surveys	1991	Netherlan ds
	RV Ramon Margalef (IEO)	10	11	Western Mediterranean .Balearic & Canary Islands	Tbd	Oceanographic parameters, Pelagic and demersal trawling, box corer	2011	Spain
Ocean	RV Thalassa (IFREMER)	11	25	North Atlantic, Mediterranean Sea	July, August, first mid September 2020, 2021, 2022	Pelagic and demersal trawling to 2200m, Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, Mooring deployments, Seismic surveys, ROV surveys, Benthic surveys	1996	France





Regions	Research Vessels (& operator)	# of days	# of scientists	AREA	DATES	Suitable for:	Year Built	Country
North- west	RV Coriolis II (UQAR)	9	14	Eastern Canada	April – November 2020, 2021, 2022	Hydrographic Survey, Oceanographic Survey, Geophysical Survey, Geotechnical Survey, Environmental and geological research	1991	Canada
Atlantic Ocean	RV Atlantic Explorer (BIOS)	15	20	Western Atlantic	Year round	CTD sampling, Net tows, Bottom surveys, Deep water mooring deployment and recoveries, Underway water sampling, Gravity and multi-coring	1982	Bermuda
Pacific Ocean	RV Tangaroa (NIWA)	12	25	New Zealand/Pacific /Southern Ocean	Fitting in the vessel annual schedule	Pelagic and demersal trawling to 2200m, Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, Mooring deployments, Seismic surveys, ROV Surveys, Benthic surveys	1991	New Zealand

Tbd=to be determined. Please contact operator or <a href="mailto:Euroflees.Plus@Marine.ie"><u>Euroflees.Plus@Marine.ie</u></a> to request precise information.





**Table 2**: Marine Equipment: Remotely Operated Vehicles (ROVs) and Autonomous Underwater Vehicle (AUVs) scheduled for SEA-Programme Call 1 <u>"OCEANS"</u>

Marine Equipment	# of days	# of technicians required	DATES	Country
ROV Ægir 6000 (UiB)	10	Tbd	Tbd. Part of annual cruise planning	Norway
ROV LUSO (IPMA)	8	Tbd	Months 06-12 2020, Months 01-12 2021, 2022	Portugal
ROV Holland1 (MI)	10	Tbd	Jan – Dec 2020, 2021, 2022	Ireland
AUV Hugin (FFI)	10	Tbd	Tbd. Part of annual cruise planning	Norway
VSAT Satellite System (Telepresence Unit) (GFOE)	14	Tbd	Any month, minimum 6 months' notice	USA
ROV Genesis (VLIZ)	10	Tbd	TBD	Belgium
ROV Ocean Modules V8 offshore (UGOT)	20	Tbd	Jan – Dec 2020 - 2022	Sweden



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Marine Equipment	# of days	# of technicians required	DATES	Country
ROV Marum Squid (UB)	10	4	Not specified	Germany
AUV Hugin (UGOT)	20	Tbd	Year-round, according to annual cruise plan	Sweden

Tbd=to be determined. Please contact operator or <a href="mailto:Euroflees.Plus@Marine.ie"><u>Euroflees.Plus@Marine.ie</u></a> to request precise information.

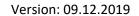
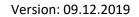




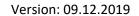
Table 3: Research vessels scheduled for SEA-Programme Call 2 "REGIONAL"

Regions	Research Vessels	# of days	# of EF+ scientists	AREA	DATES	Suitable for:	Year built	Country
	RV Belgica	11	16	North Atlantic	2020: tbd 2021 – 2022: see RV Belgica II	Oceanographic surveys, Fishery surveys, ROV, AUV, USV & UAV surveys, Biological surveys, Hydrographic surveys, Chemistry surveys	1984	Belgium
North	RV Belgica II	11	28	North Atlantic, North Sea, Mediterranea n, Baltic Sea	See RV Belgica. 2021 -2022: Tbd	Oceanographic surveys, Fishery surveys, ROV, AUV, USV & UAV surveys, Biological surveys, Hydrographic surveys, Chemistry surveys	2020	Belgium
Atlantic Ocean	RV Magnus Heinason (HAVST)	10	5	North Atlantic	January, July, October 2020 (1-2 weeks)	Pelagic and demersal trawling, Hydrographic and plankton surveys, Mooring deployment and benthic surveys	1978	Faroe Islands
	RV Sarmiento de Gamboa	10	18	North Atlantic	2 weeks March 2020, July – October 2021, 2022: Tbd	Pelagic and demersal trawling to 2200m, Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, Mooring deployments, Seismic surveys, ROV Surveys, Benthic surveys	2007	Spain



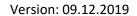


Regions	Research Vessels	# of days	# of EF+ scientists	AREA	DATES	Suitable for:	Year built	Country
North- west	RV Atlantic Explorer (BIOS)	5	20	Western Atlantic	Year round	CTD sampling, Net tows, Bottom surveys, Deep water mooring deployment and recoveries, Underway water sampling, Gravity and multi-coring	1982	Bermuda
Atlantic Ocean	RV Coriolis II (UQAR)	9	14	Eastern Canada	April – November 2020, 2021, 2022	Hydrographic Survey, Oceanographic Survey, Geophysical Survey, Geotechnical Survey, Environmental and geological research	1991	Canada
Baltic Sea, North Sea	RV Alkor	7	12	Baltic and North Sea	On request/Fitti ng in the vessel annual schedule	Trawling, Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, Mooring deployments, Seismic surveys, ROV and AUV deployments.	1990	Germany





Regions	Research Vessels	# of days	# of EF+ scientists	AREA	DATES	Suitable for:	Year built	Country
	RV Aranda	8	25	Baltic Sea, Atlantic	1-2 week slots available around the whole year 2020, 2021, 2022	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 facilities	1989	Finland
	RV Simon Stevin	5	10	North Sea, English Channel	Fitting in the vessel annual schedule	Demersal and pelagic coastal fishing	2012	Belgium
	RV Skagerak	7	15	Baltic Sea, Kattegatt, Skagerrack	2021, 2022	Biology, Oceanography, Geology, Chemistry, Fisheries	2016	Sweden
Mediterr anean Sea,	RV Angeles Alvarino	10	13	E Atlantic, W Mediterranea n	Tbd	Fisheries research, Marine Geology/hydrographic surveys, Oceanographic surveys	2012	Spain





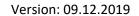
Regions	Research Vessels	# of days	# of EF+ scientists	AREA	DATES	Suitable for:	Year built	Country
Atlantic Ocean	RV L'Europe	7	8	Mediterranea n	March, April, mid- September – mid-October 2020, 2021, 2022	Pelagic and demersal trawling to 2000m, Fisheries acoustic surveys, Hydrographic survey, Oceanographic surveys, Mooring deployments, Seismic surveys, AUV/HROV Surveys, Benthic surveys	1993	France
	RV SOCIB	7	8h: 13 12h: 10 16h: 9 24h: 7	Western Mediterranea n	Any		2012	Spain
	RV Mare Nigrum	7	20	Black Sea	2-3 weeks, July-August 2020, 2021, 2022	Acoustic and oceanographic surveys, Buoy handling operations, Environmental sampling, Geological and hydrographic surveying	1971	Romania
Mediterr anean, Black Sea	RV Aegeo	12	18-20	Mediterranea n Sea, Black Sea	2-3 weeks, April – October 2020, 2021, 2022	Hydrographic survey, Oceanographic surveys, Mooring deployments, Seismic surveys, ROV Surveys, Benthic surveys	1985	Greece
	RV Tubitak Marmara	6	10	Mediterranea n, Black Sea	June & September 2020, 2021, 2022	Oceanographic ins., hull- mounted ADCPs, single and multibeam echosounders	2013	Turkey



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Regions	Research Vessels	# of days	# of EF+ scientists	AREA	DATES	Suitable for:	Year built	Country
Southern , Arctic & Pacific Ocean, Mediterr anean	RV Laura Bassi	5	12	Ross Sea, Southern Hemisphere, Pacific, Mediterranea n, Arctic	Fitting in the vessel annual schedule	Seismic, Bathymetric, Oceanographic and Multipurpose	1995	Italy

Tbd: to be determined. Please contact operator or <a href="mailto:Euroflees.Plus@Marine.ie">Euroflees.Plus@Marine.ie</a> to request precise information.





**Table 4**: Marine Equipment: Autonomous Underwater Vehicle (AUVs) scheduled for SEA-Programme Call 2 "REGIONAL"

Marine Equipment	Max. # of EF+ days	DATES	Country
AUV ASTERX or IDEFx	8	Depending on fleet programming	France
AUV CNR Glider ,Teresa'	10	Any	Italy
AUV Hugin (UGOT)	Tbd	according to annual cruise plan	Sweden
AUV VLIZ	10	Tbd	Belgium
ROV Ocean Modules V8 offshore (UGOT)	Tbd	Jan – Dec 2020 - 2022	Sweden
VSAT Satellite System (Telepresence Unit) (GFOE)	14	Any month, minimum 6 months' notice	USA

Tbd=to be determined. Please contact infrastructure operator or <a href="mailto:Euroflees.Plus@Marine.ie">Euroflees.Plus@Marine.ie</a> to request precise information.