



Conveying floating Offshore
Wind turbine

Logistic support at sea: towing and anchoring

Surface positioning Assisting during towing

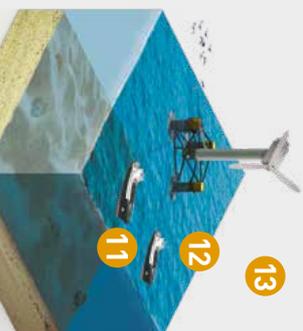
Weather downtime statistics during
towing and anchoring

TOWING

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ANCHORING

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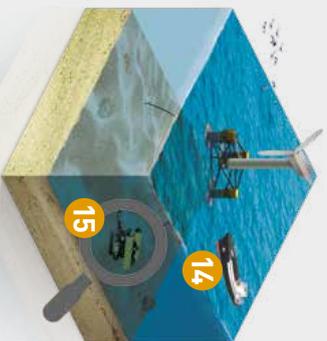
Assisting anchoring
and cabling works

- Validation of the mooring area with
insurance company/
- Onshore control of the Subsea material
- Underwater video assistance

ROV & Sensors

OPERATION

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PRELIMINARY

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Created in France 25 years ago, BIOTOPE has become one of the World's leading consultancies specialized in biodiversity. With a dedicated full-time staff of over 240, Biotope has extensive experience in ecological surveying and consulting, as well as environmental communication. The company has offices all over the world in Europe, South America, China and Africa. Specialized in ecological assessments, BIOTOPE has acquired invaluable experience in supporting project developers in managing their biodiversity risks. For its clients in wind energy - also for offshore projects - BIOTOPE work at all stages of project life cycles: feasibility assessments, impact assessment, design and monitoring of mitigation and offset measures, on-site inspections during construction, restoration associated with decommissioning. Working also with conservation organizations, we bring practical know-how in linking business and biodiversity.

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The Société Nouvelleise de Remorquage was created in 1982. It is a social enterprise of collective interest. SNR operates 365 days a year and 24 hours a day. Our sectors of activity include: harbor towing, conveying barges, dredgers, etc.), maritime works, transferring material, underwater works, beach marking, transporting personnel. We have approval for port towing, and our tasks include assisting ships with berthing and departure maneuvers, and moving vessels in the harbor or bay. We also participate in port security and safeguarding port facilities. In addition, we are in partnership with the Lycée Paul Bousquet in Sète (a high school that trains future sailors).

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The Compagnie Maritime CHAMBON was created in December 2002, following the purchase of six subsidiaries, "Les Abeilles harbor towing," initially owned by the Bourbon Group. The Compagnie CHAMBON was originally founded in 1873 by the CHAMBON Family and was acquired by BOURBON in 1976. CMC is involved in harbor towing, deep sea towage and salvage, but also in the Oil & Gas sector with the exploitation of its own ships, supply vessels and crew boats in West Africa. CMC is also involved in renewable marine energies such as offshore wind through the contribution of service vessels adapted to this type of exploitation, as well as an R&D study for an accommodation vessel project "Windkeeper". CMC has dedicated sailors specialized in difficult offshore and maritime work. CMC is present in Occitania through its two maritime subsidiaries, one in Sète - Cie Sèteoise de Remorquage et de Sauvetage, and the other in Port La Nouvelle - Cie Nouvelle de Remorquage et de Sauvetage. For this type of offshore project, we could offer our vessels, Bora & Norrolt, both tugs, and our supply ship Alize.

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MAPPEM Geophysics is a spin-off from the University of Brest created in 2013. It develops innovative solutions for site investigations and buried object localization (UXO, pipelines, cables,...). Using electromagnetic techniques, these new systems provide unique information for offshore projects. Marine resistivity measurement is a great tool for cable route surveys (dedge ability), and geophysical characterization even in the presence of shallow gas or hard rocks. For UXO surveys, the 3D electromagnetic MAPPEM tool makes possible a large range, as well as excellent detection capabilities, both for ferrous and non-ferrous objects. It is not sensitive to magnetic masking and false positives. With its new technologies, MAPPEM Geophysics has already been involved in many projects in Europe and abroad, in particular for MRE. Mappem is represented in Occitania by Iola-Survey.

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Fosellev is an independent industrial group founded in 1970 dedicated to the fields of industry, construction and the nuclear sector. As an industrial service provider, the Group develops its industrial service offer in France and on the international market. With near to 1950 employees and a 300M€ turnover, the Group's activities revolve around three areas of expertise: Services & Logistics (1730 employees), Maintenance (1755 employees) and Contracting (645 employees).

Here is below the detail of these areas of expertise:

- **Services & Logistics:** Lifting, transport, handling, transfer, Personnel Lifting, Storage, Modular Construction, Training.
- **Maintenance:** Sectors: Industry, Nuclear, Oil & Gas, Marine, PW/Civil Engineering; Piping/Welding; Trades: Piping/Welding, Hydraulic Mechanics, High-Pressure Cleaning, Electricity, Automation, Instrumentation.
- **Contracting:** Unit Construction, Heavy Lifting & Complex Handling Operations, Multi-trade Projects, Process Integration, EPC



IMI-Orion, specialized in the development and the manufacture of embedded measurement systems, diversifies its markets. The acquisition early in 2019 of Ocean Innovation System (OIS) know-how and solutions, architect of the S-ROV modular underwater robotic platform, enables IMI-Orion to offer complete solutions for measurement and operations in marine and submersible environments. Ocean Innovation System, created in 2015 by two engineers in habitat exploration, operation and measurement in shallow water and seabed. OIS provides innovative solutions with a truly modular approach. OIS provides solutions for gravity based or floating Offshore Wind Turbines inspections with its small innovative ROV platform

S-ROV @ main advantages are:

- Navigation in strong currents up to 4 / to 5 knots
- Launching and recovery from a small vessel (light logistics means)
- Multi-purpose platform for sonar and video imagery anchoring and mooring inspection, cathodic protection measurements, cleaning, thickness



Dietsmann is the leading independent Operation & Maintenance and Maintenance Engineering & Inspection specialist for continuous-production plant in the oil & gas, conventional and nuclear power generation and mining industries. The Company's reputation for excellence is the result of more than 40 years of accumulated know-how of plant and equipment. We are known for our pioneering approach and consistent focus on our core business. We are always responsive to client needs, innovative in our thinking and more agile than our larger, integrated competitors. This culture has earned us the trust of our clients, with many of whom we have long-standing relationships. Based on our 40 years' experience in the Oil & Gas sector and considering that offshore wind farms technology will be very close of the Oil & Gas, we offer to clients expertise in :

- Electrical Offshore Engineering, Construction and Start up activities
- Maintenance Engineering and Maintenance of Offshore wind farms
- Our French headquarters are located in Occitane, south of Toulouse.



This project for grouping together regional skills is accompanied by **ADOCc**

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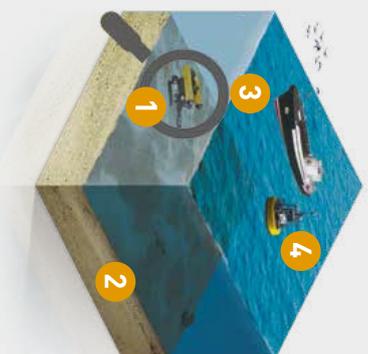
Member: - Compagnie Maritime Chambon

- Iola-Survey
- Noveltis
- IMI-Orion
- Biotope



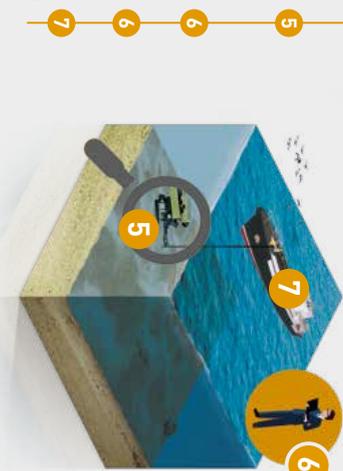
Member: - 82 France
- Biotope

PROJECT DEFINITION



1. Seabed Survey - Geophysical and Geotechnical study, Client Representative, Marine Consultant Acoustic Impact Study
2. Environmental study support: Biodiversity inventory - Impact assessment - Mitigation measures - Environmental management plan
3. Investigating sites, geophysical resistivity imaging, surveying for UXO (ferrous and nonferrous), pipelines, ...
4. Analyzing extreme environmental conditions (wind, waves, current) at local scales Advanced Statistics

PRELIMINARY



5. Daily, weekly and Pre-survey to define the mooring design
6. Detailed seabed and Habitat ROV Survey
7. Theoretical and practical training at the Lycée de la Mer - Sète (maritime high school) for Sailors - Captains 200

CONSTRUCTION/COMMISSIONING



8. SCADA Data Analysis on pre-commissioning and run-test data
8. Inspection after commissioning with mobile application
8. Spot vibration measurement and rotor imbalance measurement
9. On site supplies, diving works, training center
10. Lifting and assembling

