

The Sophie Germain, Orange's new cable ship: a technological achievement supporting global connectivity

The Sophie Germain is joining Orange Marine's fleet of seven ships. She will replace the fleet's oldest vessel, the Raymond Croze (launched in 1983). Named in honor of the famous mathematician and philosopher, this state-of-the-art vessel is dedicated to repairing submarine cables in the Mediterranean, the Red Sea and the Black Sea, and will be able to operate for over 40 years. The ship recently arrived in her home port of La Seyne-sur-Mer (France) and is now fully operational.



The Sophie Germain, at the forefront of a new generation of cable ships

As one of the world's leading players in this field, Orange is expanding its investment in the submarine cable industry to remain at the cutting edge of cable laying and maintenance technologies. Building a new cable ship represents a larger investment than the conversion of an existing vessel but means that Orange benefits from a ship with a minimal environmental footprint that is fully-equipped to meet growing global connectivity needs.

The Sophie Germain is 100 meters long and includes:

- A hull designed and tested in a model tank to reduce fuel consumption, and that is optimized for cable repairs.
- A state-of-the-art 450 kW ROV (Remotely Operated Vehicle) used to cut, inspect and bury cables, stored on board in a dedicated hangar. The ROV was designed and built in-house by Orange Marine.
- The ability to be connected to an onshore power supply, which will enable it to reduce its carbon emissions when docked.
- "CLEANSHIP" classification (controlled detection of refrigerant gas leaks, special anti-fouling coating, large waste storage capacity, etc.)
- A small environmental footprint, allowing a 20% reduction in CO2 emissions and an 82% reduction in nitrogen oxide emissions.

All of these characteristics have been specifically defined by Orange Marine on the basis of its extensive experience in submarine cable operations.

Orange's central role in the global submarine cable industry

99% of intercontinental telephone communications and data transfers pass through submarine cables. 486 submarine cables currently traverse the oceans, measuring a total length of 1.3 million kilometers – or 33 times around the Earth.

The Group will continue to play a major role in this field. Orange is one of the few operators to master end-to-end connectivity. The Group invests, deploys and operates across the globe. Orange's submarine cable businesses are a flagship activity that contribute to the excellence of its networks, guaranteeing optimal, uninterrupted connectivity across the world.

At the end of 2022, Orange Marine's ships had installed over 257,000 kilometers of fiber-optic submarine cables, and had carried out over 800 repairs, some at depths of over 6,000 meters.

Christel Heydemann, CEO of Orange, said: "It is with great pride that we inaugurate today the Sophie Germain, a new generation cable ship. Through this launch, the Orange group reaffirms its central role in the laying and maintenance of submarine cables, a little-known industry and yet an essential base for the development of connectivity around the world. At the cutting-edge of technology and thanks to a reduced environmental footprint, the Sophie Germain contributes to the Group's sustainable innovation approach to respond to the major challenges of our time."

About Orange

Orange is one of the world's leading telecommunications operators with revenues of 43.5 billion euros in 2022 and 136,000 employees worldwide at 30 June 2023, including 74,000 employees in France. The Group has a total customer base of 291 million customers worldwide at 30 June 2023, including 246 million mobile customers and 24 million fixed broadband customers. The Group is present in 26 countries. Orange is also a leading provider of global IT and telecommunication services to multinational companies under the brand Orange Business. In February 2023, the Group presented its strategic plan "Lead the Future", built on a new business model and guided by responsibility and efficiency. "Lead the Future" capitalizes on network excellence to reinforce Orange's leadership in service quality.

Orange is listed on Euronext Paris (symbol ORA) and on the New York Stock Exchange (symbol ORAN).

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