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Saft batteries power EUMETSAT third-generation weather satellites

- Saft providing high performance, reliable, long-lasting lithium-ion batteries for EUMETSAT's Meteosat Third Generation (MTG) program.
- Space-qualified batteries ensure constant gathering and transmission of weather data during geostationary earth orbit (GEO) eclipse periods of up to 72 minutes per day.
- With a nominal life of 8.5 years in orbit, the six satellites will be launched and retired sequentially to ensure consistent coverage until the early 2040s.
- New MTG weather satellite generation will provide state-of-the-art observation of Earth's atmosphere and real time monitoring of lightning events, taking weather forecasting to the next level.

Paris, March 9, 2023 – Saft, a subsidiary of TotalEnergies, is enabling more accurate weather forecasting through the Meteosat Third Generation (MTG) satellite program by providing space-qualified lithium-ion (Li-ion) batteries for six satellites, the first of which entered operation in December 2022.

The new MTG satellites will provide ten times more data for EUMETSAT (European Organization for the Exploitation of Meteorological Satellites) than the previous generation. In turn, weather forecasting agencies across Europe and Africa will be able to improve the accuracy and timeliness of extreme weather alerts to save lives and limit economic damage.



The geostationary earth orbit (GEO) satellites are being designed and built by Thales Alenia Space under a development contract awarded by the European Space Agency. Saft's VES16 batteries were selected to provide power continuity during periods of up to 72 minutes per day when the Earth eclipses the sun, pausing power generation from the solar photovoltaic panels.

"Power continuity is essential to support a constant, uninterrupted flow of weather forecasting data from the MTG satellites," said Flavio Murolo, Operations Manager for the Meteosat satellites. "Having supplied the batteries for the first- and second-generation satellites, Saft's technology has a proven record of over 45 years of superior performance, reliability, and long life for EUMETSAT."

Manufactured in France, the batteries will support payloads on two types of satellites over a 20-year mission, corresponding to the lifespan of the different satellites. Four imaging satellites will gather visual data on the formation of weather systems and lightning strikes, whereas two sounding satellites will track water vapor and trace gases in the atmosphere. The satellites will also relay data from emergency beacons for people at sea.

Battery power will also support the satellites' three-axis stabilization systems. This ensures that sensors will have a constant view of the Earth.

Saft has been building batteries for space use since the 1960s. The company began making batteries for weather satellites in the 1970s, beginning with the first generation of Meteosat satellites, operated by EUMETSAT. For more than 40 years, every European weather forecast has been powered by a Saft battery.

About Saft

Saft specializes in advanced technology battery solutions for industry, from the design and development to the production, customization, and service provision. For more than 100 years, Saft's longer-lasting batteries and systems have provided critical safety applications, back-up power and propulsion for our customers. Our innovative, safe and reliable technology delivers high performance on land, at sea, in the air and in space.

Saft is powering industry and smarter cities, while providing critical back-up functionality in remote and harsh environments from the Arctic Circle to the Sahara Desert. Saft is a wholly owned subsidiary of TotalEnergies, a broad energy company that produces and markets energies on a global scale: oil and biofuels, natural gas and green gases, renewables and electricity.

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