



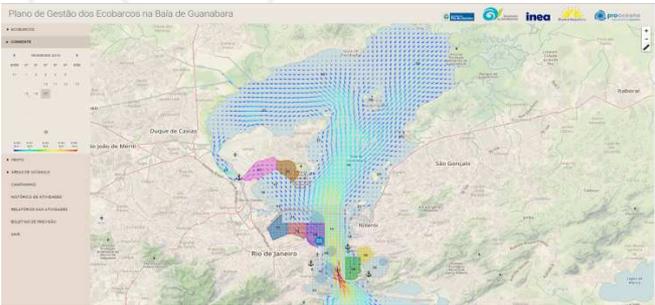
OLYMPIC GAMES RIO 2016
The bay of the games depolluted
through satellites

In less than two weeks, the Rio Olympic Games will be launched in one of the most beautiful bays in the world. Certainly beautiful but also very polluted. Last year, you could observe lots of garbage in the waters where ten sportive events in sailing will occur next month. For over a year, Brazilian local authorities asked CLS Group, through its Brazilian subsidiary PROCEANO, to optimize the collection of waste in the Guanabara Bay. Ten collecting vessels are equipped with beacon of location. They receive forecasting map which show them the drift of waste. A first step, that helped them to collect an average of 30 tons of waste per week during a test period which began in 2015, 2015 when the CLS service also began.

With 30 years of expertise in location, data collection and ocean observation by satellite, CLS uses his skills to modeli and therefore predict the drift of waste in the Guanabara Bay according to current, tides and wind.

The company also equipped 10 boats, with satellite transmitter (positioning system), a location that complements the fleet of 80 000 mobile tracked by the company across the world.

Operators at seas can thus collect most effectively waste according to their positions. The CLS group then maps the position of ships, their areas of intervention and the forecasting of waste presence on a website dedicated to cleanliness operators. Onshore operators can then direct the boats to the nearest landfill to unload their cargoes. An effective system that has increased the collection of waste and helped depollute the bay, although the status of water is still not perfect.



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ABOUT CLS

CLS, a subsidiary of CNES, ARDIAN and IFREMER, has a workforce of 600 and is active in 5 strategic sectors: the sustainable management of marine resources, environmental monitoring, maritime safety, support for onshore and offshore oil operations and monitoring of transport on land. The company provides satellite services based on the location and collection of environmental data (data from 40,000 transmitters are processed each month), from drifting buoys, animals, fishing and merchant ships, etc.). It also observes oceans and inland waters (more than 20 instruments send information on the world's seas and oceans to CLS on a daily basis), and monitors terrestrial and maritime activities (CLS processes more than 10,000 radar images each



CLS monitoring centre in Toulouse
operational around the clock, 365 days a year

year) and geolocates mobiles on land (50,000 vehicles were tracked by Novacom Services (a subsidiary of the CLS Group), in 2015. The CLS Group had a turnover of 108 million euros in 2015 and plans to increase it to more than 120 million in 2016. The group, which has been achieving strong growth these last few years, has set ambitious goals to take advantage of the opening-up of new markets.

www.cls.fr

ABOUT CNES

The French Space Agency (CNES), a public establishment of an industrial and commercial nature, is responsible for helping the French government determine and implement space policy within Europe. As such it 'invents' space systems for the future, masters all space techniques and ensures that France has autonomous access to space. A major player in European space, CNES puts forward proposals for ensuring that France and Europe stay among the leaders in worldwide space competition. CNES also represents France within the European Space Agency (ESA). It collaborates with scientific and industrial partners with whom it carries out the space programmes it has designed. It is involved in several international projects which are fundamental for any far-reaching space policy. www.cnes.fr

ABOUT ARDIAN

Ardian, which was founded in 1996 and is run by Dominique Senequier, is a leading independent investment company which manages and/or acts as consultant for 50 billion dollars of assets in Europe, North America and Asia. The company has always based its strategy on the entrepreneurial spirit and offers its international investors a better return on investment while contributing to the growth of companies throughout the world. Ardian's investment philosophy is based on three principles: excellence, loyalty and the entrepreneurial spirit. Ardian's employees make up the biggest group of shareholders. Indeed 80% of them have chosen to invest in the company, thus expressing their confidence in the strategy implemented by its executive board.

Ardian draws on a substantial international network, with more than 350 employees working in ten offices in Beijing, Frankfurt, Jersey, London, Luxembourg, Milan, New York, Paris, Singapore and Zurich. The company offers its 350 investors a diversified portfolio of funds covering all categories of assets, with Direct Funds including Infrastructure, Mid Cap Buyout, Expansion, Ardian Growth, joint investment, the Fund of Funds (primary, early secondary and secondary) and Private Debt. www.ardian-investment.com

ABOUT IFREMER

Ifremer, the French research institute for exploitation of the sea, contributes through its work and expertise to our knowledge of the oceans and their resources, monitoring of the marine and coastal environments, and sustainable development of maritime activities. In pursuit of its goals, it designs and implements tools for observation, experimenting and monitoring and manages oceanographic data bases. It also runs a significant part of the oceanographic fleet, including all of the submarine activities and heavy mobile equipment (seismic instruments, penetrometers, etc.). Founded in 1984, Ifremer is a public establishment of an industrial and commercial nature (EPIC) placed under the joint supervision of the Ministries of Higher Education and Research and of Ecology, Sustainable development and Energy. www.ifremer.fr