



Press release 2017/11/14

The city of Dax wins Golden prize at the competition TERRITORIA 2017 alongside TRE ALTAMIRA, a subsidiary of CLS, and CNES, French space Agency in the category "Risk prevention"

The prize for the best territorial innovation in terms of prevention has been awarded this week in the French Senate to the city of Dax to reward a French city pioneer in the use of space technology. CLS, a subsidiary of CNES (French Space Agency), is therefore very proud of this distinction, the city of Dax having collaborated with one of its subsidiaries TRE ALTAMIRA. This work proves, first, that the space services delivered by CLS group offer a unique and first-rate added value to the territory development, and second, that this space technology represents a risk management tool for local authorities. The city of Dax will receive this award Tuesday, November 14 at 5:30 PM, in the Senate, in the presence of Anne Urdiroz, project manager for the city of Dax at CLS and Gilles Rabin, Director of Innovation at CNES. This prize honors the use of satellites dedicated to risk management and is also a fruitful collaboration between TRE ALTAMIRA, subsidiary of CLS group, specialized in measurement of ground motions and an innovative city of France.

A dynamic context

This prize tells us the story of a territory which must face to numerous risks. 50% of urban territory of Dax is threatened by several risks: floods, settlement or collapse. We can identify three families of risks: risk linked to mining area (old mines of salt), geological risk (thermal zone), geotechnics risk (linked to stability of underground infrastructures) but also flood risk (Dax is a city protected by a system of dams). Within a context so dynamic, how to ensure stability or instability of ground? Consequently, how to manage a relevant territorial strategy limiting to a minimum risk incurred by populations & infrastructures?

The answer: acquire the best information on ground motion evolution & enhance knowledge regarding flood events.

How: working with the leading expert in terms of space applications for communities: TRE ALTAMIRA.

The Sablar neighborhood: proof of an unknown general settlement

Thanks to radar satellite images, TRE ALTAMIRA, specialized in ground motion measurements (at a mm scale) delivered a ground motion map who showed a general settlement in the neighborhood due to the presence of compressible material such as peat & clay. This neighborhood is an exception, in a territory overall stable. Before this study, this reality was completely unknown. The satellite-based solution offers by TRE ALTAMIRA is the only way to monitor such phenomena at a large scale. Each satellite image covers a surface of 40 x 40 km.

A collaborative solution

Since 2009, the city of Dax with TRE ALTAMIRA and the Antea group was already rewarded during a call for ideas proposed by the French Space Agency.

Together, local authority & private company raised an innovative solution of ground motion monitoring able to characterize stability or instability of zones classified as risky.

After the potential of this technology proven, Dax decided to finance, with its own investment fund, new phases of the project. Then, these new studies helped the city in management of water, geological, hydrogeological and geotechnics risks. These informations are crucial in a context of fast-growing population and decrease of available space.

This unique experience, led by Dax, based on the use of avant-gardist technology, but ending on a concrete application is today awarded. Built on space technology mastered by the company TRE ALTAMIRA, Dax proves that the innovation is in the heart of territories, this innovation and close collaboration are rewarded by this Golden TERRITORIA prize!

Press Officer :

CLS/TRE ALTAMIRA Amélie PROUST-ALBRAND aproust@cls.fr 06 62 80 45 92

Ville de Dax Isabelle CAZAUX icazaux@dax.fr 05 58 56 80 09

DAX is a city in South-West of France, located in the department of Landes (region of New Aquitaine). It belongs to the former province of Gascony. It has 22,000 inhabitants in an agglomeration of 56,000 inhabitants. First thermal pole of France it is a commune of small size 1970 ha. www.dax.fr

TRE ALTAMIRA, is the largest InSAR group worldwide, subsidiary of CLS Group, subsidiary of CNES1, ARDIAN2 & d'IFREMER3, TRE ALTAMIRA is globally recognized as the world leader in ground deformation monitoring services with satellite radar data used in a variety of sectors, including oil & gas, mining, civil engineering and geohazards monitoring. Based in France, Spain & Italy and also Canada, TRE ALTAMIRA has a workforce of 75 employees. The company achieved a turnover of 10 M€ in 2016. These activities complete those of CLS headquarters: A worldwide company and pioneer provider of monitoring and surveillance solutions for the Earth since 1986. Its mission is to deploy innovative space-based solutions to understand and protect our planet, and to manage its resources sustainably. CLS employs 700 people at its headquarters in Toulouse (France) and in its 26 other sites around the world. The company works in six strategic areas of activity: sustainable fisheries management, environmental monitoring, maritime surveillance, fleet management, energy & mining, space & ground systems. CLS process environmental data and positions from 80,000 beacons per month (drifting buoys, animal tags, VMS beacons, LRIT tracking, etc.), ocean and inland waters observations (more than 20 instruments onboard satellites deliver daily information to CLS on the world's seas and oceans). In addition, CLS monitor land and sea activities by satellite (nearly 10,000 radar images are processed each year by CLS). The CLS Group had a turnover close to 115 million Euros in 2016 and plans to increase it to about 125 million in 2017. 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

1 CNES

The Centre National D'Etudes Spatiales (CNES) is the government agency responsible for shaping and implementing France's space policy in Europe. Its task is to invent space systems of the future, bring space technologies to maturity and guarantee France's independent access to space. CNES is a main player in Europe's space program and a major source of initiatives and proposals that aim to maintain France and Europe's competitive edge. The participation of France in the European Space Agency (ESA) is also provided by CNES. It conceives and executes space programs with its partners in the scientific community and industry, and is closely involved in many international cooperation programs – the key to any far-reaching space policy. www.cnes.fr

2 ARDIAN

Ardian, founded in 1996 and led by Dominique Senéquier, is an independent private investment company with assets of US\$60bn managed or advised in Europe, North America and Asia. The company, which is majority-owned by its employees, keeps entrepreneurship at its heart and delivers investment performance to its global investors while fuelling growth in economies across the world. Ardian's investment process embodies three values: excellence, loyalty and entrepreneurship. Ardian maintains a truly global network, with more than 450 employees working through twelve offices in Paris, London, Frankfurt, Milan, Madrid, Zurich, New York, San Francisco, Beijing, Singapore, Jersey, Luxembourg. The company offers its 580 investors a diversified choice of funds covering the full range of asset classes, including Ardian Funds of Funds (primary, early secondary and secondary), Ardian Private Debt, Ardian Buyout (including Ardian Mid Cap Buyout Europe & North America, Ardian Expansion, Ardian Growth and Ardian Co-Investment), Ardian Infrastructure, Ardian Real Estate and Ardian Mandates. www.ardian.com

3 IFREMER

Ifremer, through its research work and expert advice, contributes to knowledge of the oceans and their resources, to monitoring marine and coastal environments, and to sustainable development of marine activities. To these ends, Ifremer conceives and operates tools for observation, experimentation and monitoring, and manages oceanographic databases. It also operates a great portion of the ocean research fleet, including all underwater systems and largescale mobile facilities and equipment (seismic, penetrometer, etc.). Created in 1984, Ifremer is a public institute of an industrial and commercial nature (EPIC). It is supervised jointly by the Ministry of National Education, Higher Education and Research and the Ministry of the Environment, Energy and Marine Affairs. www.ifremer.fr