

Know today, live better tomorrow.



CLS
COLLECTE LOCALISATION SATELLITES

CLS, worldwide leader of satellite-based environmental data collection, location and ocean observations by satellite

Company CLS

CLS, a subsidiary of CNES (French space agency), IFREMER (French research institute for exploration of the sea) and several French financial institutions, offers satellite services in location and data collection to a broad range of professionals including: government, industry and the scientific community.

Within this context, CLS works in close collaboration with CNES, the U.S. National Oceanic and Atmospheric Administration (NOAA), and Eumetsat, (Organization for the Exploitation of meteorological satellites).

CLS is an international corporation with 260 employees: 200 at company headquarters in Southwestern France, near Toulouse, and 60 at its offices and subsidiaries around the world.

Certifié ISO 9001 : 2000 par

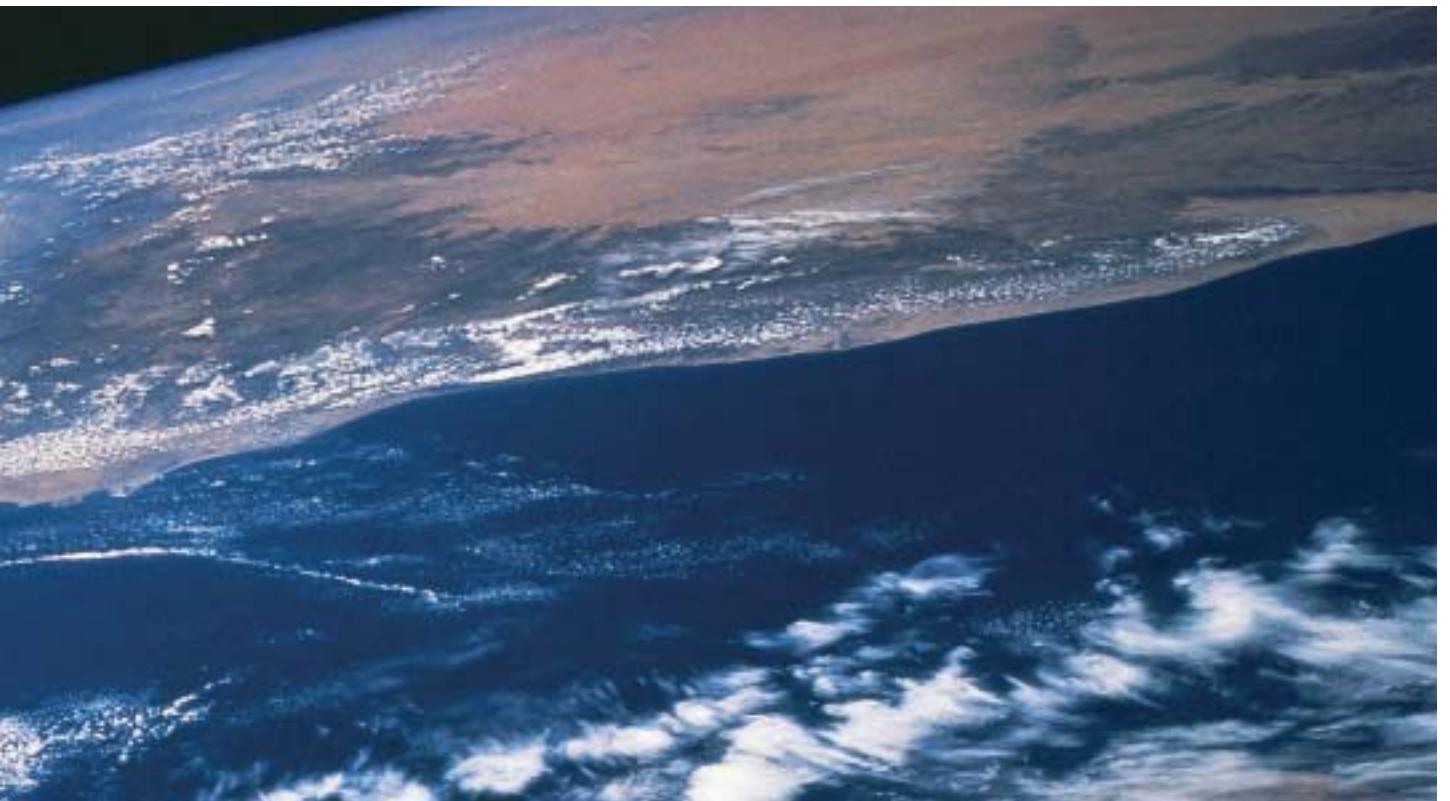


CLS SECURES ISO 9001: 2000 CERTIFICATION

Following its certification in 2004, CLS confirms its global quality policy with three clear objectives:

- Boost customer confidence
- Make organization more efficient
- Strengthen relations with space agencies to ensure long-term continuity of the programs representing the center of its activities





Anticipate today the world of tomorrow

Better managing fisheries, preserving wildlife, studying climate and oceans, controlling industrial hazards, and ensuring maritime safety are some of the key environmental challenges of the 21st century.

Thanks to its renowned expertise and experience acquired from 20 years of operating satellite systems, CLS is a major contributor to global efforts to protect the environment and enhance security. Our solutions offer direct operational support to government and private businesses working in these areas.

CLS's forward-looking vision is focused on guaranteeing quality of service to customers at all times. Our teams strive constantly to provide the best service and obtain the most accurate environmental data. The more we understand the Earth's mechanisms, the better we can predict its evolution and safeguard its natural resources.

Christophe Vassal

Chief Executive Officer

Global satellite-based monitoring for the environment

CLS operates global satellite systems, including the international Argos system, to bring its customers operational services and complete end-to-end solutions for:

- locating buoys, fishing vessels, wildlife and any mobile carrying an Argos transmitter
- collecting environmental data such as ocean temperature profiles, river levels or an animal's heart rate
- observing the oceans and measuring sea level variations, wave heights, ocean currents, temperature, and color.



OCEANOGRAPHY



Science for management of major environmental crises

CLS is actively involved in oceanographic research that yields vital data to understand the environmental effects of climate and to mitigate major environmental crises. Buoys equipped with Argos transmitters are telling us more about the composition of the sea in the remotest ocean regions. Ocean observations, directly from space, conducted by CLS's on-site oceanographers, derive sea-state charts from altimetry data to provide information about currents, wave heights, and subsurface temperature.

CLS offers ocean data services for international organizations across a broad a spectrum of applications including climate change prediction, pollution tracking, preservation of fish stocks, controlled coastal development and support for offshore oil platform operations.

FISHERIES MANAGEMENT



Enforcing quotas and fishing zones to preserve stocks for future generations

The future of our fisheries depends to a large extent on our ability to preserve stocks effectively. As a result, most seaboard nations now mandate fishing vessels operating within their Economic Exclusion Zone (EEZ) to be equipped with a satellite-based vessel monitoring system (VMS). ArgoNet is the complete package solution from CLS that meets the requirement for monitoring fishing vessels and their catches. ArgoNet has been certified by most of the leading seaboard nations around the world and is already operating on thousands of ships worldwide.

MARITIME SAFETY



Making maritime transportation more secure

To improve the security of maritime transportation, the International Maritime Organization (IMO) has mandated all ships weighing over 500 metric tons to install a Ship Security Alert System (SSAS). CLS's comprehensive SHIPLOC product allows shipowners to meet IMO standards and keep constant track of their fleet. If intruders board a ship, SHIPLOC lets the crew send an alert signal automatically

and discreetly to teams ashore. It also helps them to comply with specific regulatory requirements that may vary between ports.

CLS has signed an exclusive agreement with the International Maritime Bureau's Piracy Reporting Center and is the first supplier in the world to offer a 24/7 solution of this sort.

PROTECTING WILDLIFE



HUMANITARIAN ACTIONS



Preparing the applications of the future

The ability to collect and distribute data is also crucial to ensuring effective, well-targeted and economically proportionate humanitarian aid. Fighting world hunger or monitoring epidemics is made easier when organizations in charge of programs have the right information at the right time, at an affordable cost.

The World Food Program (WFP) turned to CLS to monitor food aid for children. Thanks to an extensive network of Argos stations in schools, teachers record and transmit data on school attendance, numbers of children receiving aid, quantities of food received by each, and other relevant information.



Learning more about life on our planet

More than 2,500 animals — among them birds, marine and land mammals — are tracked constantly using miniaturized Argos transmitters. Combining position information and data about animals allows wildlife biologists to better understand their behavior, feeding strategies, breeding and adaptation to their environment. Such observations provide the basis for conservation measures that are benefiting many endangered species. In addition to its ecological value, this work meets the need to learn more about human origins and our environment's natural resources.

Responsive, expert teams in the field and at our processing centers



CLS's technicians, scientists and engineers have acquired a high level of expertise that is key to mission success. This expertise covers every link in the data processing chain from data collection through to development of technologies and customized applications.

RECEIVING, PROCESSING AND DISTRIBUTING DATA



Photo : Christian Rivière

24 hours / 365 days a year processing operations

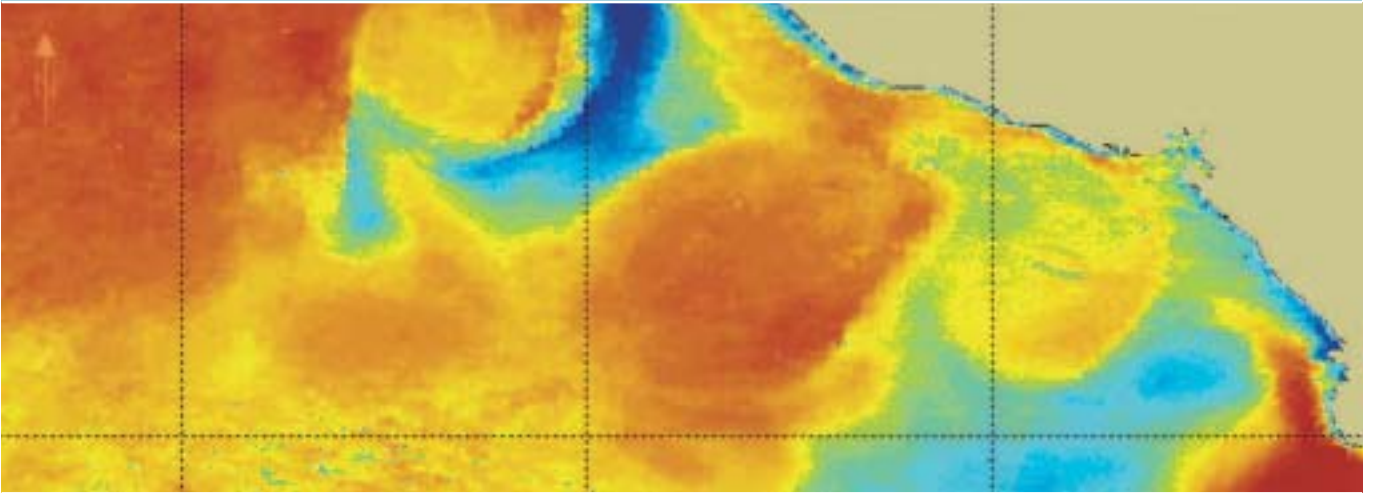
More than 40 specialists operate a full set of systems to keep ground segments, networks, data processing and storage servers, and databases up and running.

CLS processing centers ensure the continuous operation of more than 15 orbiting instruments thanks to a service that includes:

- ensuring compliance with operating requirements,
- corrections and modifications, tests, checks, commissioning, and qualification,
- performance assessment and monitoring,
- controlling quality of service delivered to the customer.

CLS continually innovates with new operations concepts thanks to its highly skilled and adaptable staff and resources.

DATA ANALYSIS



Continuously scrutinizing data to maintain and further our expertise

Operational oceanography today relies on in-situ and satellite observing networks to supply the data for customers' numerical prediction models. CLS is actively involved in this process, collecting readings at sea through the Argos system; observing the oceans from space to derive a comprehensive range of satellite altimetry products; measuring sea-surface temperature and ocean color; and developing analysis and prediction systems through its contribution to the MERCATOR project and its European extension MERSEA (Marine Environment and Security for the European Area).

CLS develops and sells complete package services for maritime professionals. The CLS CATSAT service provides global oceanography data in near-real time to aid fishing fleets, and its Ocean FOCUS™ ocean circulation forecasting service, developed in partnership with CLS subsidiary Ocean Numerics, gives offshore platform operators early warning of strong currents likely to hamper operations. CLS continues to work actively to develop space oceanography and serves a growing portfolio of institutional and private customers.

ENGINEERING



Meeting new scientific and engineering challenges

CLS designs, supplies and implements systems to meet its customers' requirements around the world. With space systems becoming ever more complex, integrated solutions — comprising antennas, monitoring centers and multi-system data centers, regional data access and checking, applications, adapted transmitters, and software — are increasingly the rule. CLS teams maintain operational sites remotely in close partnership with their customers.

REFERENCES

INDONESIAN MINISTRY OF MARITIME AFFAIRS AND FISHERIES

The world's largest VMS

The Indonesian Ministry of Maritime Affairs and Fisheries chose CLS to deploy a nationwide vessel monitoring system (VMS). This system is currently the largest operational VMS in the world.

Initially 1,500 fishing vessels were fitted with transmitters, three fisheries monitoring centers set up, and 15 patrol boats equipped with a direct data receiving system to enable intruders to be intercepted in fishing zones. CLS then installed two Argos receiving antennas in Indonesia and created a subsidiary, PT CLS Argos Indonesia, to operate the Argos data receiving, processing and distribution center on the ministry's behalf.



ARGO: GLOBAL OCEAN OBSERVING PROGRAM

The ARGO program comprises a network of oceanographic floats belonging to 20 countries. The program's ultimate objective is to release 3,000 floats covering wide areas to study long-term ocean variability. Data collected in this way — temperature and salinity profiles — are relayed by satellite using the Argos system. They are then distributed worldwide and posted on websites and specialized information networks. These data are giving scientists valuable information about the oceans and their role in shaping climate — a key element of the Global Ocean Observing System (GOOS) seeking to ensure sustainable development of our planet.

FRENCH MINISTRIES OF TRANSPORT, DEFENSE AND OVERSEAS TERRITORIES

Monitoring fishing zones

The French government selected CLS to supply, install and operate an integrated radar satellite system to monitor the EEZ of one of its overseas territories. Data from this system are relayed to a regional operations center ashore, for comparison with VMS data. Ships not authorized to be in the zone are therefore identified immediately, making it possible to quickly dispatch a patrol boat to intercept and board vessels fishing illegally.



MERSEA: MARINE ENVIRONMENT AND SECURITY

MERSEA aims at developing a European capacity to analyse and predict the global and regional oceans for the GMES (Global Monitoring for Environment and Security) program. The objective is to supply information on the physical, chemical and biological state of the ocean in order to improve maritime security, monitor accidental pollution (for example oil spills and the development of toxic algae), evaluate the impacts of climate change... CLS is one of the key providers in MERSEA and, in particular, provides expertise on processing and distribution space data and the implementation of integrated operational oceanography systems.



HEADQUARTERS CLS

8-10, rue Hermès - Parc Technologique du Canal
31526 Ramonville Cedex, France
Phone: +33 (0)5 61 39 47 00 - Fax: +33 (0)5 61 75 10 14
Email: info@cls.fr - www.cls.fr

OFFICES AND SUBSIDIARIES

NORTH AMERICA

SERVICE ARGOS INC.

1801 McCormick Drive, Suite 10 - Largo, MD 20774, USA
Phone: +1 301 925 4411 - Fax: +1 301 925 8995
Email: dus@argosinc.com - www.argosinc.com

NORTH AMERICAN CLS

9200 Basil Court, Suite 306 - Largo, MD 20774, USA
Phone: +1 301 341 1814 - Fax: +1 301 341 2130
Email: track-it@nacls.com - www.nacls.com

PERU

CLS PERÚ

Jr. Trinidad Moran 639 - Lince, Lima, Peru
Phone: +51 1 440 2717 - Fax: +51 1 421 2433
Email: gsirech@clsperu.com.pe

CHILE

CUNLOGAN S.A.

Almirante Señoret 70 of 74 - Valparaiso, Chile
Phone: +56 32 25 28 43 - Fax: +56 32 25 72 94
Email: cbull@cunlogan.cl

EUROPE

OCEAN NUMERICS

Gemini House - Hargreaves Rd.
Swindon, Wiltshire - SN25 5AL, UK
Phone: +44 1793 723 014 - Fax: +44 1793 728 302
Email: r.stephens@oceannumerics.com

FRANCE

NOVACOM SERVICES

8-10, rue Hermès - Parc Technologique du Canal
31526 Ramonville Cedex, France
Phone: +33 (0)5 61 39 50 00 - Fax: +33 (0)5 61 39 50 01
Email: info@novacom-services.com
www.novacom-services.com

SOUTHEAST ASIA

PT CLS ARGOS INDONESIA

Adhi Graha, Lt 17, Suite 1701
JI Jend Gatot Subroto, Kav 56
Kuningan Timur, Setiabudi
Jakarta Selatan, 12950, Indonesia
Phone: +62 21 526 42 66 - Fax: +62 21 526 42 65
Email: sales@clsargos.co.id

SOUTH KOREA

KL TRADING CO.

Room No. 328, Obelisk Bldg
492-4 Dapshimni-5 Dong, Dongdaemun-Gu,
130-805 Seoul, South Korea
Phone: +82 2-2215-7134/5 - Fax: +82 2-2215-7136
Email: klsckim@kornet.net

JAPAN

CUBIC-I LTD.

Bluebell Building 7F - 2-15-9 Nishi
Gotanda - Shinagawa-ku
Tokyo 141-0031, Japan
Phone: +81 (0)3 3779 5506 - Fax: +81 (0)3 3779 5783
Email: argos@cubic-i.co.jp

AUSTRALIA AND SOUTH PACIFIC

SIT

Suite 706, 1 Queens Road
Melbourne, VIC 3004, Australia
Phone: +61 (0)3 9863 9650 - Fax: +61 (0)3 9863 9675
Email: clsargos@1qr.com.au

RUSSIA

ES-PAS

15-73 Léningradskoe Chaussée
125171 Moscow, Russia
Phone: +7 095 150 0332 - Fax: +7 095 150 0332
Email: a.salman@es-pas.com