

# ENABLE CRITICAL OPERATIONS AT SEA

CLS, DECISION SUPPORT SOLUTIONS

## SAFETY

### BORDER CONTROL

In an insecure geopolitical world, the number of migrants and refugees crossing the oceans is increasing. CLS helps maritime authorities to detect illegal vessels in order to prevent incidents at sea and to help rescue people.

### SEARCH & RESCUE

Maritime authorities are responsible for the safety of the ships in their Search & Rescue (SAR) areas. In support of Search & Rescue operations, CLS provides drift models (fully compatible with International Aeronautic and Maritime Search and Rescue guidelines), as well as the capability to retrieve external data (tracking, oceanographic, weather...) to improve the maritime picture around the reported incident.

## SECURITY

### FIGHT AGAINST ILLEGAL FISHING

In many maritime regions, illegal fishing has led to the depletion of fish stocks threatening local economies and food security. CLS has developed an integrated solution merging data from VMS/SAT-AIS/LRIT/SAR/OPTICAL IMAGERY, RPAS, and biological modeling.

## ENVIRONMENTAL CRIME

### POLLUTION DETECTION

Every 3 days, a 300-Ton ship is wrecked somewhere in the world. Some 6 million tons of oil find their way into the sea each year. CLS offers services to detect accidental or intentional oil spills, identify polluters and forecast pollution drift.

### PIRACY SUPPORT & PREVENTION

According to the International Maritime Bureau (IMB), piracy and robbery are on the decline. However, the kidnapping of sailors remains of concern. With a wide range of satellite & RPAS based services, CLS is a trusted partner in piracy response and prevention.

### AREA MONITORING

Maritime transport represents 90% of global trade. Maritime control and surveillance has become a critical task for maritime authorities in order to preserve the global economy. CLS delivers a comprehensive view of maritime traffic based on multisource data.

### ILLEGAL TRAFFIC

Poaching, drugs & arms trafficking and environmental crime have disastrous effects on the environment and humanity. CLS can detect suspicious activities by combining data from different surveillance systems (satellite, RPAS, big data) with the expertise of dedicated analysts.

### MONITORING OF SHIP EMISSIONS

Following IMO MARPOL Annex VI guidelines on fuel consumption data collection and reporting and EU MRV regulations, CLS has developed efficient, automated solutions allowing flag administrations and registries to collect fuel consumption data from their fleet and ensure data transmission to the IMO or European Commission (THETIS).

### MULTI-SOURCE DATA

SATELLITE TRACKING (SSAS, AIS, SAT-AIS, LRIT, VMS) - EARTH OBSERVATION (OPTICAL & RADAR IMAGERY) - RPAS - SHIP REGISTRY - MARINE ENVIRONMENT (CURRENT, WIND, ETC.)

### MARITIME INTELLIGENCE

DATA PROCESSING ANALYSIS & FUSION - MODELING - BIG DATA - ANALYTICS

### DECISION MAKING PLATFORM

DATA VIZUALISATION SOFTWARE - INTERACTIVE TOOLS

## 30+ YEARS OF EXPERIENCE IN SATELLITE & RPAS SOLUTIONS FOR MARITIME AUTHORITIES

The world's seas are the daily setting for a range of illegal activities, including: oil pollution, illegal fishing, piracy, people trafficking, smuggling, etc.

Maritime surveillance enhances the understanding of activity at sea, allows the management of incidents and ensures that prevention & response occur whenever possible.

- **SAFETY** > Fight against piracy, maritime & port-based terrorism, illegal activities
- **SECURITY** > Monitor maritime areas for rescue operations
- **ENVIRONMENTAL CRIME** > Observe, detect & stop looting of resources

As a result of 30 years of close collaboration with maritime authorities and international maritime governing bodies, CLS is an expert in maritime surveillance. CLS core strength is the ability to acquire and process data from multiple sources (satellite & RPAS) and develop value-added products and services for maritime authorities (customs officials, coastguards, national navies and international maritime security agencies). CLS provides actionable maritime intelligence solutions for the safety and security of people and assets.

### CLS

- Over 650 employees
- 24/7 manned operations center

#### EXPERIENCE

- 100 000 assets tracked each month
- 12 000 000 positions processed per day
- 130 satellites (Geopositioning : SAT-AIS, LRIT, VMS - Earth Observation : RADAR & Optical Imagery, Meteocean)
- 20 RPAS missions to be deployed per year
- 10 000 satellite images programmed, acquired, processed & analysed per year

#### PROVEN SOLUTIONS

- Data collection, fusion, and analysis
- Provision of software, analytics & maritime security data centres, etc.
- Multi-source data, interactive maps
- Solutions that draw on the expertise of highly trained operators

#### WORLDWIDE NETWORK

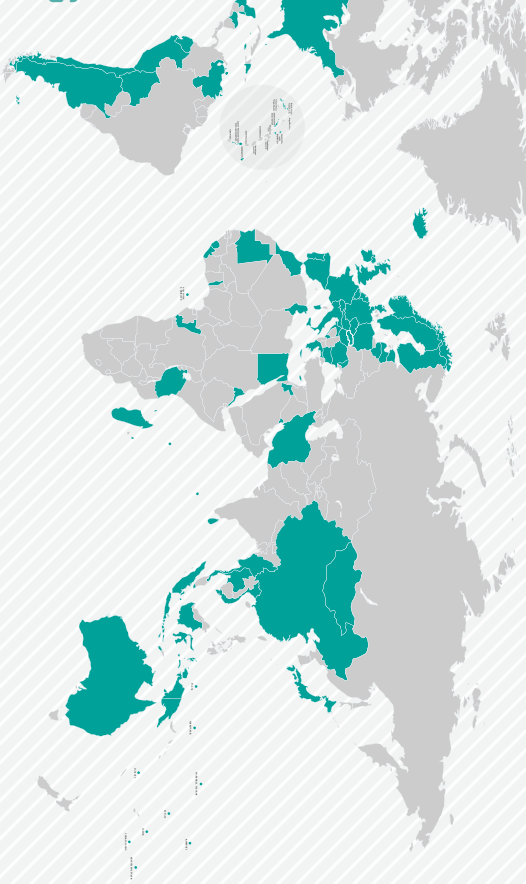
- CLS is present in 26 locations worldwide

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SERVED



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CLS IS AUTHORIZED TO CONDUCT CONFORMANCE TEST AND ISSUE LRIT CONFORMANCE TEST REPORTS (CTR) ON BEHALF OF THE FOLLOWING FLAG ADMINISTRATIONS:

- |                                |                    |                                      |                                  |
|--------------------------------|--------------------|--------------------------------------|----------------------------------|
| • Argentina                    | • Dominica         | • Malta                              | • St. Kitts and Nevis            |
| • Austria                      | • Egypt            | • Monaco                             | • St. Vincent and the Grenadines |
| • Hungary                      | • Ecuador          | • Marshall Islands                   | • Sweden                         |
| • Netherlands                  | • Eritrea          | • Mauritania                         | • Switzerland                    |
| • Antilles                     | • Estonia          | • Mauritius                          | • Tanzania                       |
| • Slovakia                     | • Falkland Islands | • Mexico                             | • Thailand                       |
| • Antigua and Barbuda          | • France           | • Micronesia                         | • Togo                           |
| • Albania                      | • French Polynesia | • The Federated States of Micronesia | • Tonga                          |
| • Australia                    | • Germany          | • Mongolia                           | • Trinidad and Tobago            |
| • Bahamas                      | • Gibraltar        | • Myanmar                            | • Tunisia                        |
| • Barbados                     | • Greece           | • NZIS, Zanzibar                     | • Turkey                         |
| • Belgium                      | • Greenland        | • United Kingdom                     | • USA                            |
| • Belize                       | • Honduras         | • New Caledonia                      | • Vanuatu                        |
| • Bolivia                      | • Iceland          | • Norway                             | • Venezuela                      |
| • Botswana                     | • Ireland          | • Palau                              | • Vietnam                        |
| • Brazil                       | • Isle Of Man      | • Peru                               |                                  |
| • British Virgin Islands       | • Cayman Islands   | • Poland                             |                                  |
| • Bulgaria                     | • Chile            | • Portugal                           |                                  |
| • Cambodia                     | • Colombia         | • Romania                            |                                  |
| • Cameroon                     | • Cook Islands     | • Samoa                              |                                  |
| • Canada                       | • Kuwait           | • Sao Tome e Principe                |                                  |
| • Cote d'Ivoire                | • Laos             | • Seychelles                         |                                  |
| • Cyprus                       | • Liberia          | • Sierra Leone                       |                                  |
| • Czech Republic               | • Lithuania        | • Singapore                          |                                  |
| • Democratic Republic of Congo | • Luxembourg       | • Slovenia                           |                                  |
| • Denmark                      | • Madagascar       | • Spain                              |                                  |
|                                | • Maldives         | • Sri Lanka                          |                                  |

ACTIONABLE  
INTELLIGENCE  
FOR MARITIME SURVEILLANCE

