First Regional Symposium on Sustainable Small-Scale Fisheries
27 – 30 November 2013, St. Julian’s Malta

How CLS may help in Small Scale Fisheries Challenge?

CLS Group

Created in 1986 – Branch of CNES & IFREMER

International network: 16 offices and subsidiaries

Above 470 employees at different points around the world
Collecte Localisation Satellites (CLS)

- **Created:** 1986 – Operator of the Argos System
- **Shareholders:** CNES (57%) and Ifremer (15%)
- **Locations:** Toulouse, France + 16 offices & subsidiaries worldwide
- **Staff:** 480 people worldwide
- **Turn-Over:** 85 M€ (2012)

**Core activities:**
- Commercial operation of satellite systems for positioning, data collection, ocean observation and radar surveillance
- Developing added-value applications and services based on satellite remote-sensing data;

**Sectors of activity:**
- environmental surveillance,
- sustainable management of marine resources,
- maritime security,
- oil and gas;

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**Satellites data**

24/7 operations

Receiving, processing, validating, distributing and archiving data from approximately 80 instruments carried on almost 40 satellites

- **Positioning and Data Collection**
- **Satellite Oceanography**
- **Radar Surveillance**

- 15,000 radar images processed each year
- 2,000,000 messages processed and 1,000,000 products supplied every day

http://www.cls.fr
Satellite services: tracking for scientific purposes

**CLS Services:** equipment and expertise with which to implement ocean monitoring systems, deploy *in situ* data-acquisition networks, and process the data collected. Systems for fitting and tracking species by satellite (ARGOS/GPS, archival tags), processing the data collected.

**Objectives:** monitoring the oceans, studying the climate, protecting the great migratory species.

**Customers:** ARGO, NMDIS-NMFC, DBCP, JCOMMOPS, WWF, FAO, ICCAT,
Most of the world countries have or will imposed their industrial fishing fleet to equip their vessels with a satellite transponder, which emits a GPS location with speed and heading at fixed interval.

Fisheries Monitoring Centres (FMC) receive, process and display this information so to monitor and control the fishing activity.

**Satellite services:**

**Monitoring fishing activities (VMS and Fishing Logbook)**

**Services:** Location and electronic log books in compliance with national and international regulations.

**Objectives:** Monitoring legal fishing, quota surveillance, protecting stocks.

**Customers:** More than 6000 fishing vessels tracked at this moment.
Monitoring data for ICCAT

VMS data flows for ICCAT 2009 campaign

Legend: Dotted lines: flags for Tuna Libyan vessels.

Libyan Tuna seiners monitoring
Various fleets equipped

Various markets
Satellite services: supporting local fishing activities, preserving fish resources and economic development

**Service:**
Provision of real time and very accurate ocean and weather data, directly on board.

**Objective:**
Improving safety for sea-borne operations.

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Satellite services: combating illegal fishing

**Services:** high-resolution satellite-based radar imagery.

**Objectives:** reducing the cost of sea-borne monitoring operations.

**Success story:** Patagonian Toothfish (Chilean sea bass) saved.
Satellite services: operating the Cospas/Sarsat alarm system for the French authorities

**Services:** Since 1997, CLS has been responsible for issuing alerts on behalf of the Cospas-Sarsat French Mission Control Centre (FMCC).

**Objectives:** The State's mission to provide search and rescue services on land, sea and in the air.

**Customers:**
- The French Maritime Affairs Directorate (DAM).
- The French Civil Aviation Authority (DGAC).

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**Marine Protected Area’s**

- **Areas for conservation** (strict nature reserve, wilderness high seas area, national park, habitat/species management)
- **Aimed for conservation with restrictions for access & usages,** (ie. managing interaction of people and nature over time)
- **Space & Time for fish and fisherman** protecting marine population when shifting from marine reserves to maritime zoning, managing stocks, & optimising fisheries for sustainability
THEMIS integrated platform

Tracking: VMS + AIS
RADAR-SAT

OCEANOGRAHY

15/02/2012

Theme: Integration of various data from multi-sources
**MOVIMAR – Small Scale Fisheries project**

**Services:** Satellite-based fishery monitoring system and cyclone warnings.

**Objectives:** Improving the safety of Vietnamese fishing crews at sea and assisting with the sustainable management of marine resources.

**Customers:** Ministry of Agriculture and Sustainable Development.

3000 vessels carrying location and data collection transmitters.

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**Solutions for Small scale fisheries**

Small scale fisheries equipment is definitely our next decade challenge

VMS regulations & recommendations give a legal frame to fleets over 12 m

But Small scale fisheries keep today out of legal scope

Thanks to GFCM for allowing some trials in this environment
GFCM Trial with Lebanon Fishing Authorities

Collecting catch data for small scale fisheries
CLS is keen to participate actively in this major challenge, with Small Scale Fisheries actors, in: *(no limitative)*

- Data collecting platform
- Trial periods
- Consultancy
- Types of Terminal

Any question or note will be very welcome at:

**pgirard@cls.fr**

In case of emergency...or not...feel free to call,

Pierre Girard
+33 561 393 721
+33 682 670 301