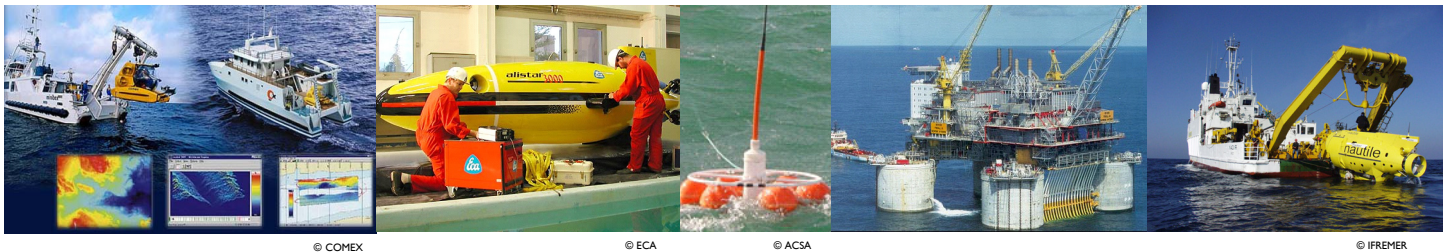




Developing an internationally-renowned marine economy

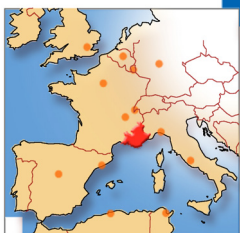
The Provence-Alpes-Côte d'Azur MARINE CLUSTER

The internationally-oriented “ **Pôle Mer PACA (Provence-Alpes-Côte d'Azur)** ” competitiveness cluster brings together **key players from the worlds of industry, research and education** working in the areas of **safety and security** and in **sustainable development**. They are united in their ambition to become a leading player in “homeland security”, to develop innovative products and services for the shipping sector and to make the region an international centre of expertise in marine sciences and related environmental risk management.



■ A Marine Cluster in France encompassing two regions: Brittany and Provence-Alpes-Côte d'Azur

These two regions boast remarkable industrial potential (**700 companies**) in the marine sector and **three-quarters of this sector's research in France** is concentrated here. The extraordinary history and unique marine environment of each of these regions entail many different yet complementary issues. Brittany and Provence-Alpes-Côte d'Azur have therefore decided to join forces and form a Marine cluster with an international outlook.



Key figures for our region

- **60,000** jobs directly dependent on the sea
- **8,000** jobs at stake in the region in the next 5 years
- A cluster supported by **117** industrial companies and SME/SMIs,
- **59** research centres, schools and universities, etc.
- ... accounting for **19,500** direct jobs ...
- ... and turnover of **€3,000 million** ...
- ... plus over **€200 million** invested in R&D
- **2,200** jobs in R&D and in public-sector research
- Over **2,000** technicians, engineers and doctorate students trained every year
- Around **50** joint projects applying for labelling in 2006

■ Head South: the factors that make the region so special

■ A cluster where several areas of excellence in the region converge

Information technologies, robotics and teleoperation, optics and photonics, simulation and modelling, underwater acoustics and signal processing, biotechnologies and naval maintenance: major assets for an industry that has developed an outstanding capacity to innovate by drawing on these sectors.

■ Critical mass of companies, research and dedicated training centres...

... offering a high concentration of marine equipment and experimental facilities

■ Genuine expertise based in the region

- Commercial and navy shipping: Toulon, France's **major military port**
 - Super-yachts and sailing: the **leading** yachting area in the world, on a par with Florida
- These sectors account for **6,600 jobs** and more than **700 establishments** (almost exclusively made up of SMEs/SMIs)

■ Competitive economic and geographical positioning

- An extraordinary geostrategic position at the very heart of the Mediterranean
- High concentration of leading players in the marine sector, giving it a competitive lead

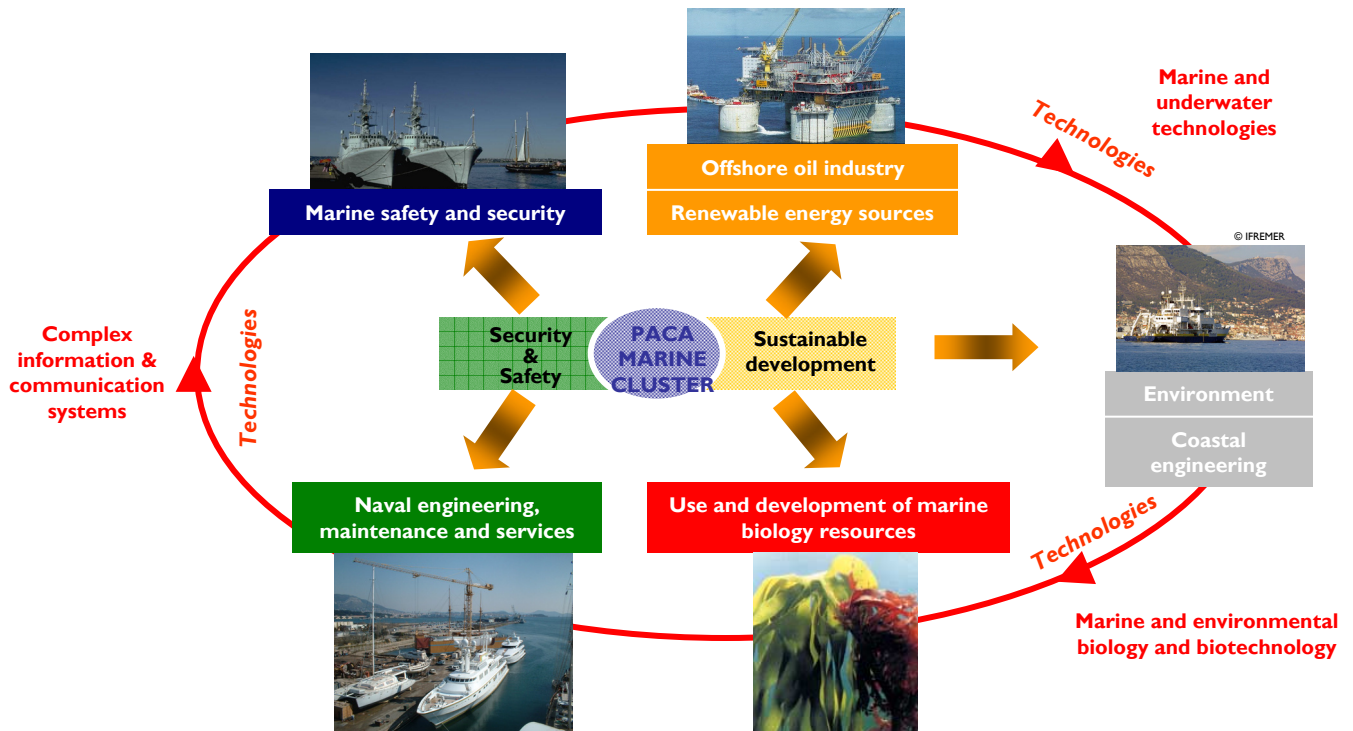
■ An attractive coast

The region boasts **835 km** of coast, i.e. **15%** of the French coastline, and **132 marinas** with **55,000 moorings**



■ All-round convergence

The **PACA Marine Cluster** lies at a point where two major growth areas converge, encompassing seven sectors related to marine applications. With a view to working together on cooperative projects, it serves as a networking hub for companies, research centres and universities that develop technologies that are applicable across different sectors for an integrated marine policy.



■ Innovative projects within the cluster

The first projects to be labelled include:

■ SECMAR

Subject: marine safety & security

A safety system for property, people and facilities within a sensitive maritime zone. The aim of this project is to find concrete solutions to the need to detect terrorist threats coming from the sea and targeting sensitive sites in coastal areas.

■ PRONOSTICS

Subject: naval engineering, maintenance and services

Real-time prognosis of faults in critical vessel systems. Setting up an e-maintenance platform designed to enable the development of new prognostics technologies for naval systems maintenance. Civilian and defence markets.

■ GIRAC – Gestion Intégrée des Rejets d'Assainissement Côtiers / integrated coastal sewage management

Subject: environment and coastal engineering

Developing methods and implementation tools for network administrators that can be used to simulate the functioning of a sewage system and its related works, as well as the physical and biological processes at work in the receiving body of water.

■ REGICOLOUR

Subject: environment

A marine environment surveillance project supported by an operational service that processes, distributes and develops the use of ocean colour data obtained via spaceborne remote sensing. The project is part of the European initiative, GMES (Global Monitoring of Environment and Security).

■ L - CAT

Subject: coastal engineering

This project aims to construct a hybrid vessel prototype (landing barge + catamaran): coastal operations system and landing craft.

■ CETOP

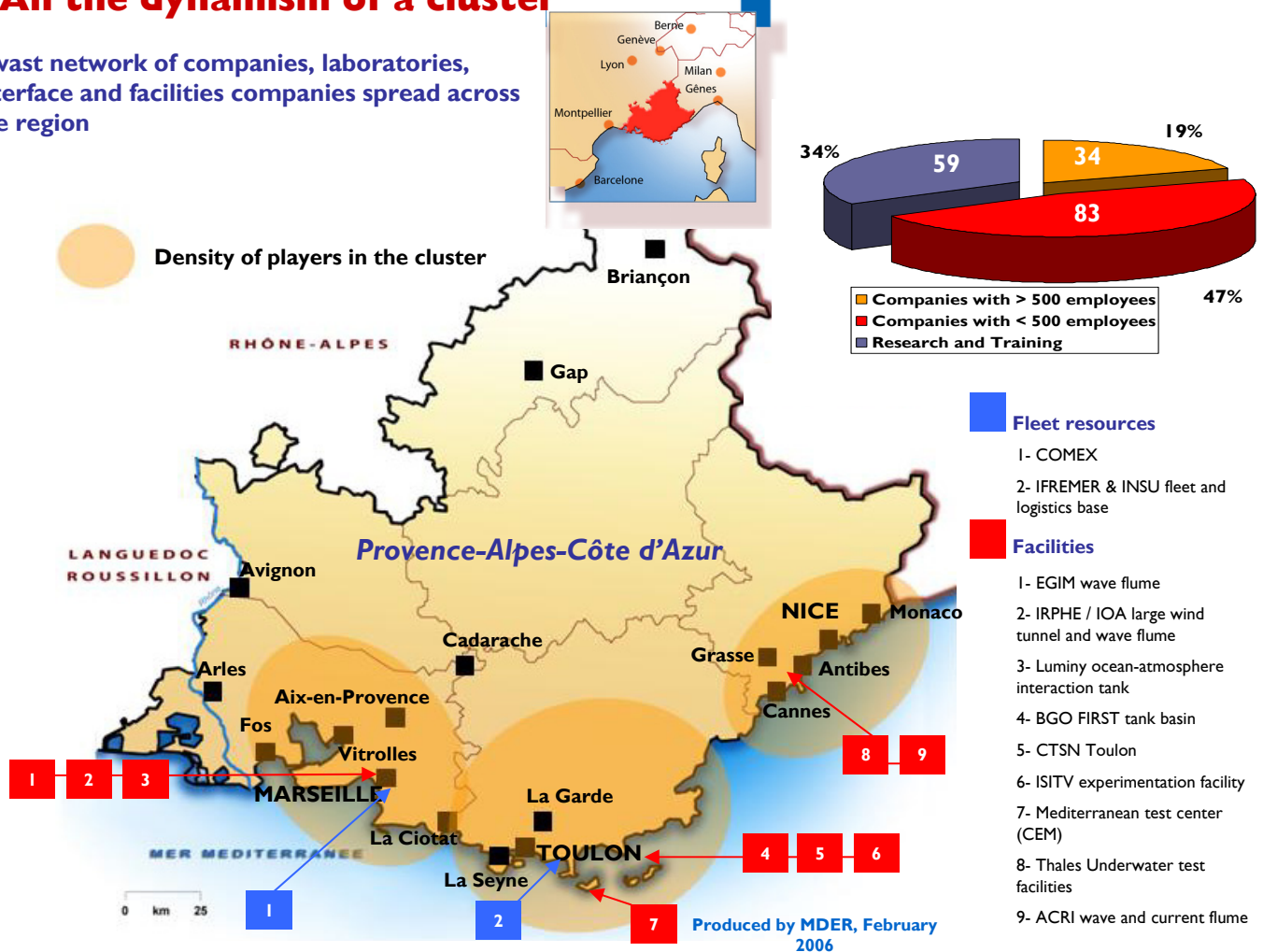
Subject: offshore engineering for the oil industry

Setting up a centre of expertise dedicated to offshore exploration/production techniques. Many potential avenues for innovation and services for the industry: anchoring systems solutions, floating (FPSO) vessels, monitoring systems with integrated decision-aid tools, unloading solutions, etc.



All the dynamism of a cluster

A vast network of companies, laboratories, interface and facilities companies spread across the region



Key players involved in the cluster

117 companies that are leaders in their markets and at the cutting-edge of marine technologies

A/ ACRI, ACSA, ACTIS INGENIERIE, ADHOC VISION, AGIR, ALGART SARL, ANALYTIKA, AQUALOG, AQUA LUNG, ARPEGE DEFENSE, ASSYSTEM FACILITIES, ATOS ORIGIN **B/** 2 BE FINANCES, BERTIN TECHNOLOGIES, BMTI **C/** CAMPENON BERNARD, CANNES AQUACULTURE, CATALYSE, CEGELEC SUD-EST – AGENCE TOULON, CESIC/MS, CESIGMA, CHRISAR SOFTWARE TECHNOLOGIES, CIEL SNEFF, CIRCE INGENIERIE, CICA INGENIERIE, CLEARSY, CMR, CNIM, COMEX, CREOCEAN, CS, CYBERNETIX **D/** DCN ASM, DCN LE MOURILLON (CMS INGENIERIE), DCN SERVICES TOULON, D2M, DEGREANE HORIZON, DGA/SMA/AIA, DIGINEXT, DIGISYS, DORIS ENGINEERING ING PETROLIERE, DYNASUB **E/** EADS SPACE TRANSPORTATION, EASYDIS, ECA, EIFFEL, ELG (SNC), EMC3, EPCOTS, ERAMM, ERG HOLDING, EURILOGIC, EURODOC **F/** FRANCE TELECOM MARINE, FOSELEV MARINE **G/** GENESIS, GENIMAR, GEOCEAN, GLOBOCEAN, GREEN CAP, GTM CONSTRUCTION **H/** HAUCS, HELION **I/** INSILIO, IRTS, IXSEA, IXWAVES, IXCORE **L/** LAPP MULLER, LOUIS DREYFUS ARMATEURS, LOUIS SOUFFLOT CONSEIL **M/** MAURIC BUREAU D'ETUDES, MICOUIN CONSULTING, MICRO BE, MOTEURS BAUDOUIN **O/** OCEANIDE, OPTIS, ORTEC, OSEAN **P/** PORT AUTONOME DE MARSEILLE, PREDICT, PRINCIPIA RD, PROLEXIA, PROSSI, PYROALLIANCE **S/** SEGULA TECHNOLOGIES, SEMANTIC TS, SHERPA ENGINEERING AGENCE PACA, SIEMENS, SII – STE INFORMATIQUE INDUSTRIELLE, SMAC, SOACSY, SOCIETE PONS, SOFRESUD, SONOVISION ITEP, SOPRA GROUP, SQUADRON SCER, STELLA MAR SUBCOMPRESSEUR, SUBSEA TECH, STERIA, SYNAPSE DEVELOPPEMENT, SYS TECHNOLOGIES, SYSTEMIQUE **T/** TECHNICATOME, TECHPLUS, TELINDUS MEDITERRANEE, TERRA NOVA INGENIERIE, THALES COMPUTER SA, THALES SAFARE, THALES SERVICES, THALES UNDERWATER SYSTEMS, TIS SOMELEC, TOPLINK, TRININFOR IES **V/** VEOLIA ENVIRONNEMENT, VIBRIA INGENIERIE **W/** WILCO INTERNATIONAL

59 research and training bodies, including...

- BRGM** – Bureau des Recherches Géologiques et Minières
- CNRS** – Centre National de la Recherche Scientifique
- COM** – Centre Océanologique de Marseille
- Ecole Centrale Marseille**
- ENSAM** – École Nationale Supérieure des Arts et Métiers
- IFREMER** – Institut Français de Recherche pour l'Exploitation de la Mer
- INRIA** – Institut National de la Recherche en Informatique et en Automatique

- IRD** – Institut de Recherche pour le Développement
- ISEN** – Institut Supérieur de l'Électronique et du Numérique et **ISITV** – Institut des Sciences de l'Ingénieur de Toulon et du Var
- OOV** – Observatoire Océanographique de Villefranche
- UNIVERSITES** : **Université Aix-Marseille III** / **USTV** – Université Sud Toulon Var / **UNSA** – Université de Nice Sophia Antipolis

... all specialising in the **key technologies** encompassed within the cluster:

- Electromagnetics and acoustics
- Software Engineering
- On-board electronics
- Underwater technologies
- Signal processing
- Materials
- Biotechnologies
- Robotics and automation



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France's challenge, international events

- La Ciotat Boat Show
- SCADA – Subsea Control And Data Acquisition
- Festival International de la Plaisance – yacht show
- Monaco Yacht Show
- Euronaval, international naval defence exhibition
- among many others

Toulon
Cannes
Monaco
Toulon/Paris



A strong growth environment

- Trade associations, including:
 - RYN – Riviera Yachting Network, a network of companies in the yachting and marine technologies sectors and related industries
 - SIAM – Synergie Interprofessionnelle des Activités Maritimes – a network promoting synergy within the marine industry
- Real networking with the other competitiveness clusters in the region
 - “Capenergies” – Energy sources that do not produce greenhouse gases – from research through to production and consumption management
 - Territorial risks and vulnerabilities management – natural, industrial, technological and urban risk management in national territories
 - Optics and Photonics– complex optical and imaging systems (POPsud)
 - SCS (Secured Communicating Solutions) – encouraging innovation and competitiveness in the fields of microelectronics, telecommunications, software and multimedia

Contact

Pôle Mer PACA

Patrick Baraona: Director

Tel.: +33 (0)4 94 03 89 03

Web: <http://polemerpaca.tvt.fr>



Sea Innovation & Business Cluster



A competitiveness cluster supported by Toulon Var Technologies

