

# ***FRENCH DEFENCE INDUSTRY***

## ***Bilateral seminar***

***presented by Emeric d’Arcimoles, GIFAS***



***São Paulo – March 2015***

# AGENDA

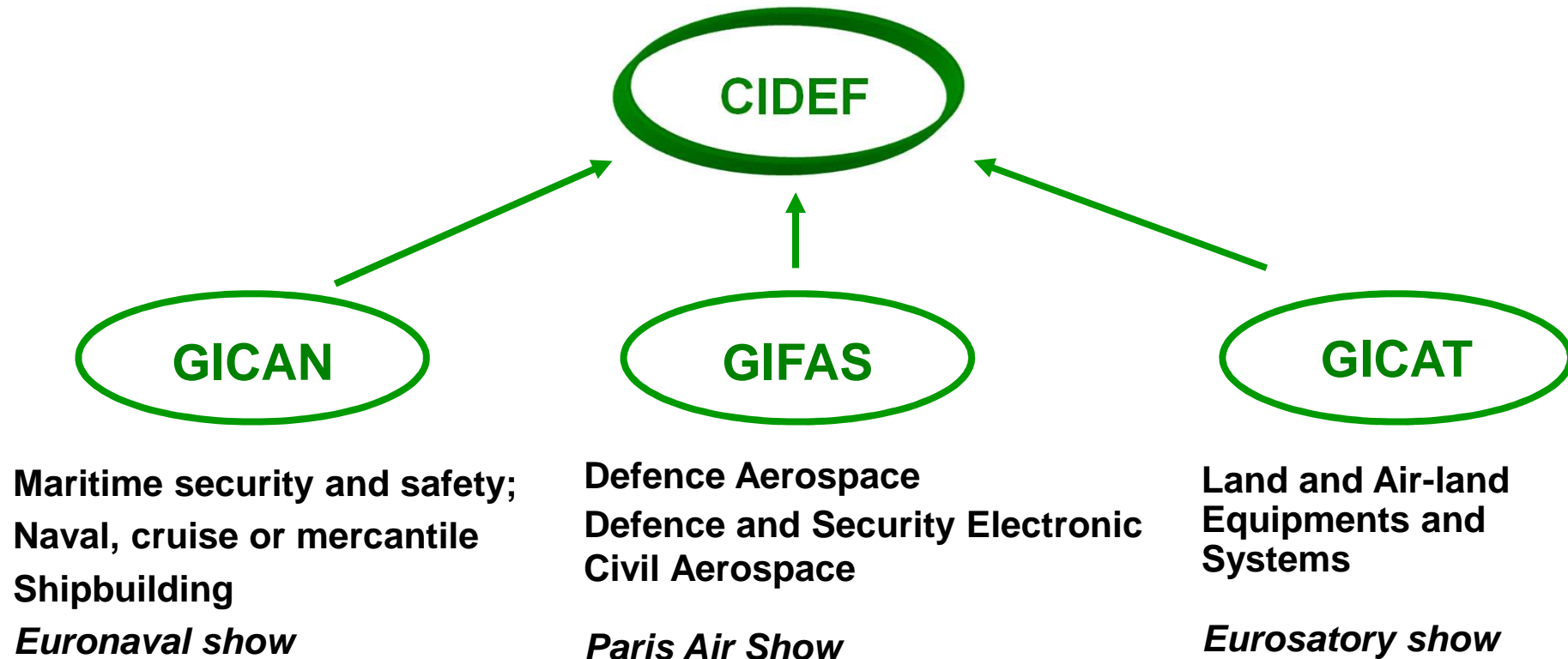
## *Introduction*

***1- Coordination between French industry and government (GIFAS experience)***

***2- Impacts of defence investment on civil applications***

***3- French and Brazilian industries: what we share***

# Advisory Council for French Defence Industries

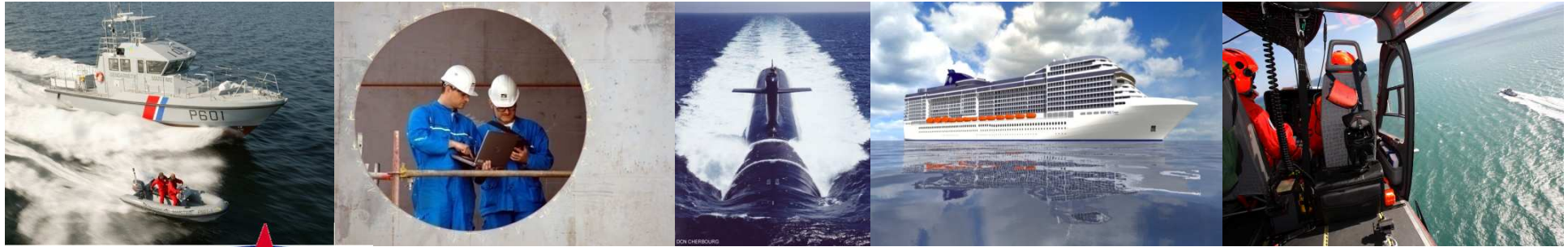


- Rotating chairmanship between the three associations
- 4 committees : Defence, European affairs, R&T and regulations



# The French Defence Industry

- **17,5 B€ turnover in 2013**
- **30 to 35% exported (France is # 3 for exportations in 2014)**
- **At the heart of the European industry**
- **Proven experience in industrial cooperation & technology transfers.**
- **A dynamic and autonomous supply-chain**
- **165 000 employees**
- **An industry allowing French strategic autonomy**



# **French marine industry Group**

**GICAN is the professional group representing the French marine industry. GICAN members are involved in naval defence, maritime security, safety and environment, and commercial shipbuilding**

**GICAN covers a wide range of activities in the shipbuilding industry:**

- Civil shipbuilding and ship repair
- Military shipbuilding, weapons systems, maintenance and the related in-service support
- Military and civil ship equipment
- Maritime safety, security and environment
- Renewable marine energies and other offshore activities

**Key figures:**

- 165 member companies
  - € 8.5 billion cumulated revenues
  - 40,000 jobs
- ✓ **Organize EURONAVAL, the leading naval defence international exhibition and several French Pavilion in overseas defence exhibition**



# The French Land Defense & Security Industry Association

- Established in 1979, GICAT gathers the French companies working in (Design, Development, Production, Services) the Land and Airland Defence and Security areas (Armored Vehicles, Ammunitions & Weaponry, Crowd control, Crisis Management, Electronic Systems, Helicopters, Logistics, Missiles, UAVs, Training & Simulation)
- **More than 250 members :**
  - Worldwide companies : *Airbus Defense & Space, Airbus Helicopters, Ineo, MBDA, Morpho, Nexter, Sagem, Thales, Renault Trucks Defense, ...*
  - 80% of SMEs (*Bertin, CILAS, Daher, Etienne Lacroix, Photonis, Soframe, ...*)
  - Clusters: *Ares FC, Eden, GIE NBC, GILEP*
- 40 000 Employees - Global Turnover 2013 : 5 Billion € (40 % Exportation)
- 60% of members have a dual activity in the areas of Security and Defense

Management, with the support of its subsidiary company **COGES**, of the Exhibitions **Eurosatory**, the first Land Defence and Security exhibition in the world, Expodefensa & APHS



**GICAT**



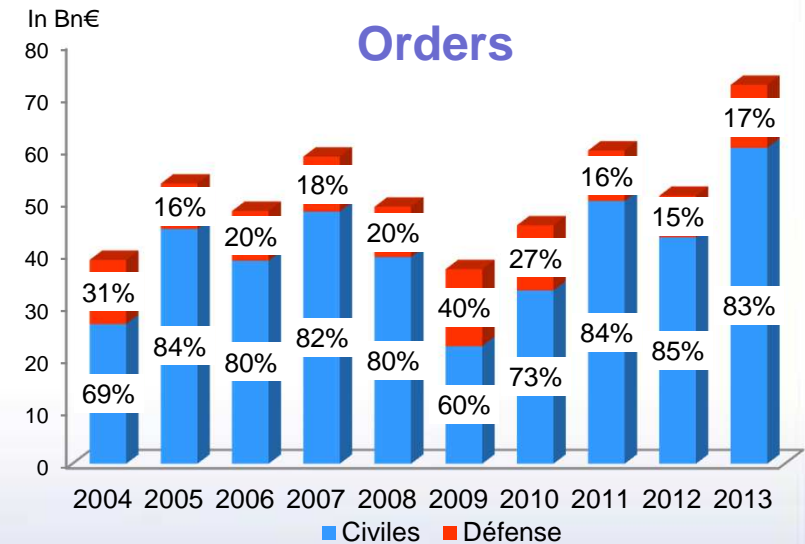
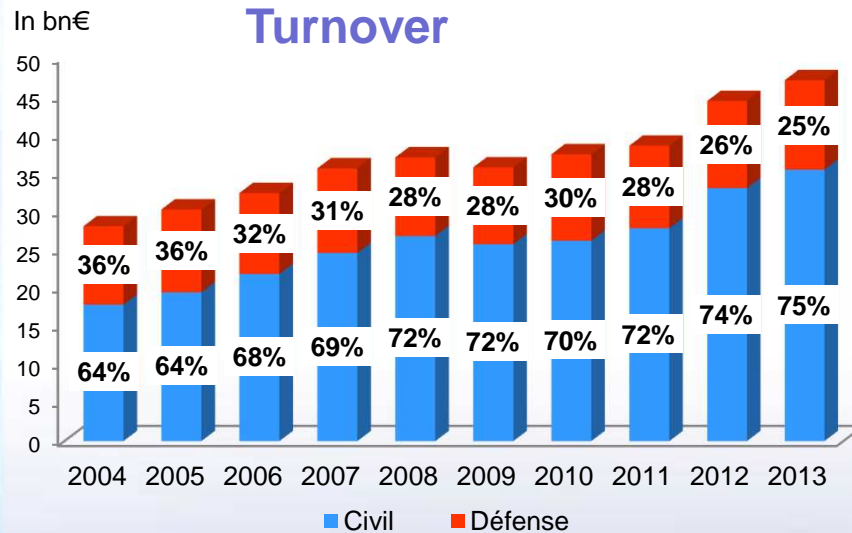
# French Aerospace, Defence & Security Industry

A dual industry covering all sectors: aircraft, helicopters, engines, equipment, missiles, UAVs, launch vehicles, satellites and defence & security systems.

- 352 Gifas members (incl. 161 equipment manufacturers and 159 SMEs)
- 177,000 employees
- €47.9 billion revenues in 2013
- €73,1 billion orders in 2013
- Order book representing 5/6 years' production
- R&D: 14% of the turnover



## Turnover and orders Aerospace, defence and civil, from 2004 to 2013



- **Civil sector boom** as a result of the increase in air traffic.
- **Defence maintained a constant level in absolute term** - budget cuts compensated by exports and new markets.

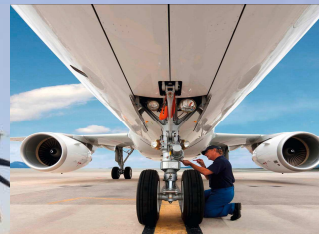
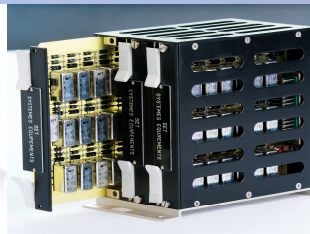


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# Development of the Industrial and Technological Base: a joint concern (1/2)

- Preparing the future together:
  - Roadmap for R&T in the civil aerospace sector jointly defined by French industry and by French authorities : **CORAC**,
  - Similar approach in the space sector: **COSPACE**,
  - **ONERA**, the French aerospace research center, is an associate member of GIFAS,
  - Close relationship with **DGA** to define priorities,
  - Development of initial and continuing education programs: creation of engineering apprenticeship schemes with **public schools**.



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# Development of the Industrial and Technological Base: a joint concern (2/2)

- **Strengthening of the supply-chain:**
  - **Facilitate consolidation** through sectorial funds (Aerofund III), 60% of which contributed by the industry (Airbus et Safran), 40% held by a public bank,
  - **Improve industrial efficiency** with a large program financed by Industry and Government covering 23 French Regions and 400 SMEs,
  - **Accompany and monitor** defence SMEs through a government dedicated program supported by large companies (SME Pact).



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## As a result : an integrated, supportive, dynamic supply chain

- An industrial base of 161 major equipment suppliers and 159 smaller firms making up the industry's supply chain.
- Consolidation of the industry with more intermediate-sized enterprises.
- SMEs in international markets:
  - More than half of SMEs export
  - Their export revenues increased from 22 to 27% between 2006 and 2013.



# Defence investments in innovation bring ...

- Cost saving by sharing research infrastructure,
- Education at high level by partnering with universities
- Competitiveness on a technical point of view
- Competencies that can be used in the civil sector (*ex : integration of complex systems like radars, aerodynamic capabilities, mastery of supersonic studies*)

## Defence investments in production provide ...

- Cost saving by sharing production lines
- Flexibility in case fluctuation of demand
- Development of technical skills and workers  
*(ex : precision machining, composite material work)*

# Some flowdowns from defence to civil sectors

## Carbon for missiles nozzles

- Carbon breaks with 46% of market share on civil aircraft (>100 seats)

## Optimization of conception and industrial processes for shipbuilding

- Projects of marine turbine fields

## C3I & C4I communications

- Air Traffic Management (SESAAR project)

## Electronics components (gallium arsenide) developed for radars and electronic warfare

- Application in transports, automotive, optical fibers

## IFF technologies (recognition of allied aircrafts)

- Electronic toll on highway





**CIDEF**

CONSEIL DES INDUSTRIES DE DÉFENSE FRANÇAISES

# What we share



***An objective of strategic autonomy :***

***-> Looking to have a full scope of Aerospace & Defense capabilities and products***



# What we share



# A call for cooperation



***UNITED WE ARE STRONGER !***