



**SAFRAN**  
an international  
**Technology Leader**

The background of the slide features a stylized world map with a central point from which numerous lines radiate outwards, creating a globe-like effect. The map is rendered in a light blue color against the darker blue background. The text is positioned in the center-right area of the slide.

# SAFRAN AT A GLANCE

- ▶ **An international high-tech group**
- ▶ **Sales exceeding 10 billion euros in 2004\***
- ▶ **56,200 people in over 30 countries**
- ▶ **Four business branches:  
Propulsion, Communication, Equipment, Defense Security**
- ▶ **Streamlined management structure and operating companies  
organized by business and product family**
- ▶ **A roster of prestigious brands**

*\* Non-audited, pro forma figures, French accounting standards*

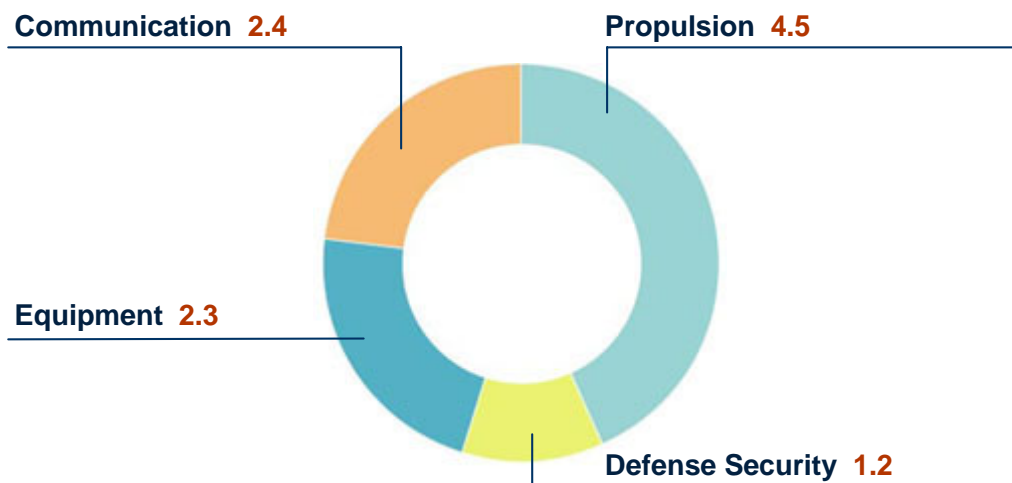
# 2004 KEY FIGURES

- ▶ **2004 sales<sup>(1)</sup> ..... 10.4 billion euros**
- ▶ **Operating income<sup>(1)</sup> ..... 717 million euros**
- ▶ **Net financial position<sup>(2)</sup> ..... 496 million euros**

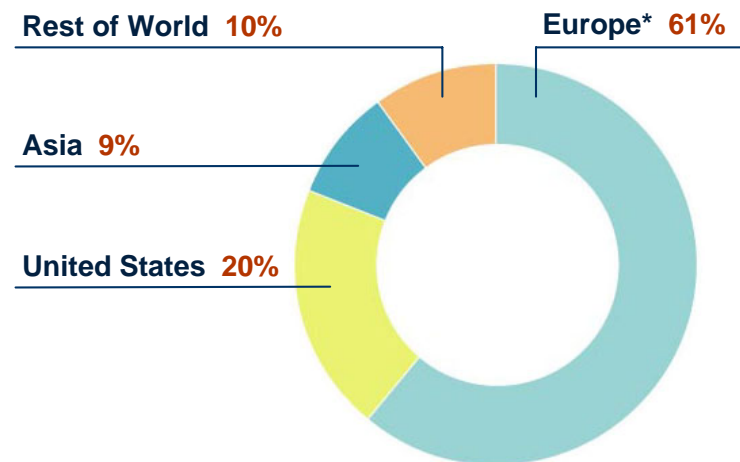
*(1) Non-audited, pro forma figures, French accounting standards*

*(2) Non-audited, pro forma figures, French accounting standards, excluding financing of Sagem's exchange/cash offer for Snecma*

## ▶ 2004 sales by branch\* (billions of euros)



## ▶ Sales by region

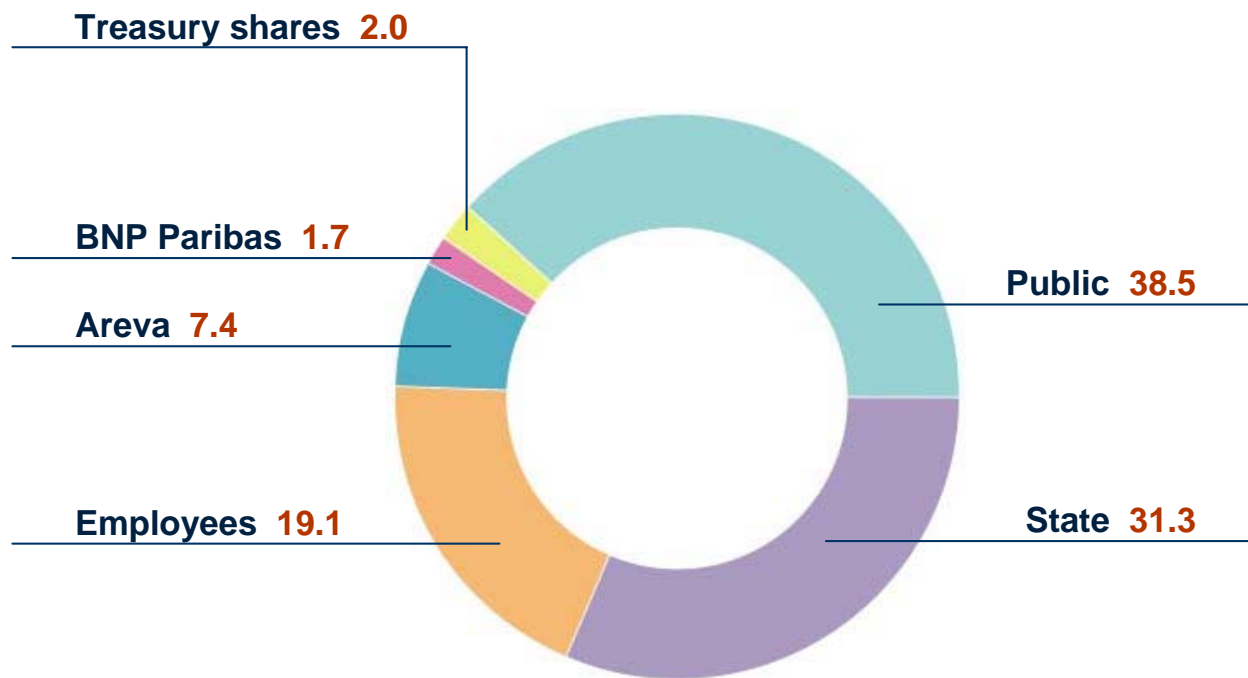


\* Non-audited, pro forma figures, French accounting standards, after elimination of inter-branch sales

\* Mostly re-exported by prime contractor customers

# SAFRAN CAPITAL STRUCTURE

At May 12, 2005



# SAFRAN GROUP BUSINESS BRANCHES

*(main companies)*

## ► Propulsion

- Snecma
- Snecma Services
- Turbomeca
- Microturbo
- Snecma Propulsion Solide
- Techspace Aero

## ► Equipment

- Aircelle
- Labinal
- Hispano-Suiza
- Teuchos
- Messier-Dowty
- Messier-Bugatti
- Messier Services

## ► Communication

- Sagem Communication
  - Broadband Communication
  - Mobile Communication

## ► Defense Security

- Sagem Défense Sécurité
  - Navigation and Aeronautic Systems
  - Optronics and Air-Land Systems
  - Security

# LEADERSHIP POSITIONS

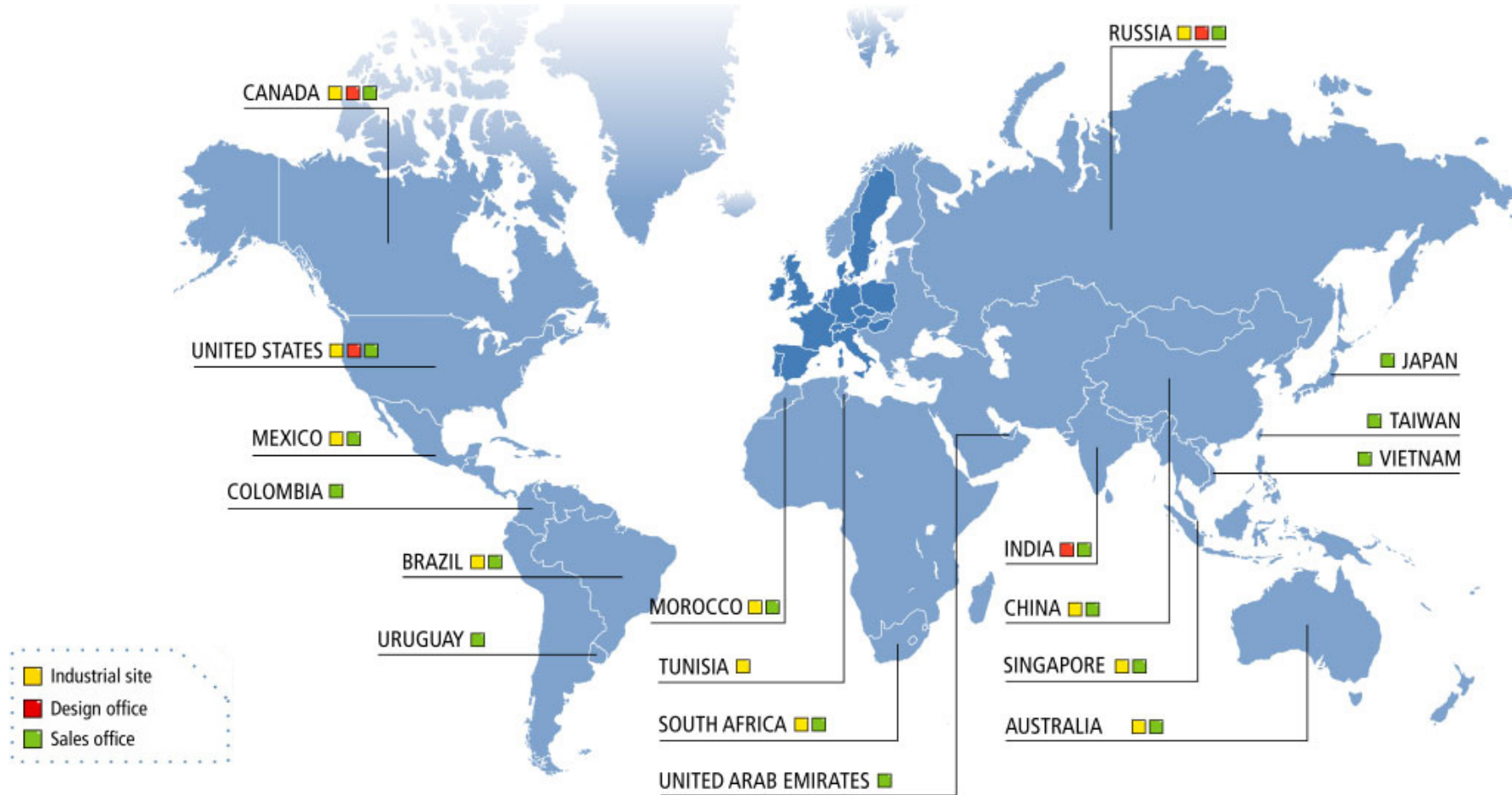
## ▶ Global leadership positions in aerospace

- No. 1 worldwide for mainline jet engines (50/50 joint venture with General Electric)
- No. 1 worldwide in civil and military helicopter engines
- No. 2 worldwide in liquid and solid propellant rocket propulsion
- No. 1 worldwide in landing gear
- A world leader in:
  - military aircraft engines
  - aircraft engine nacelles
  - carbon brakes for mainline jets
  - aircraft wiring
  - inertial navigation
  - helicopter flight controls

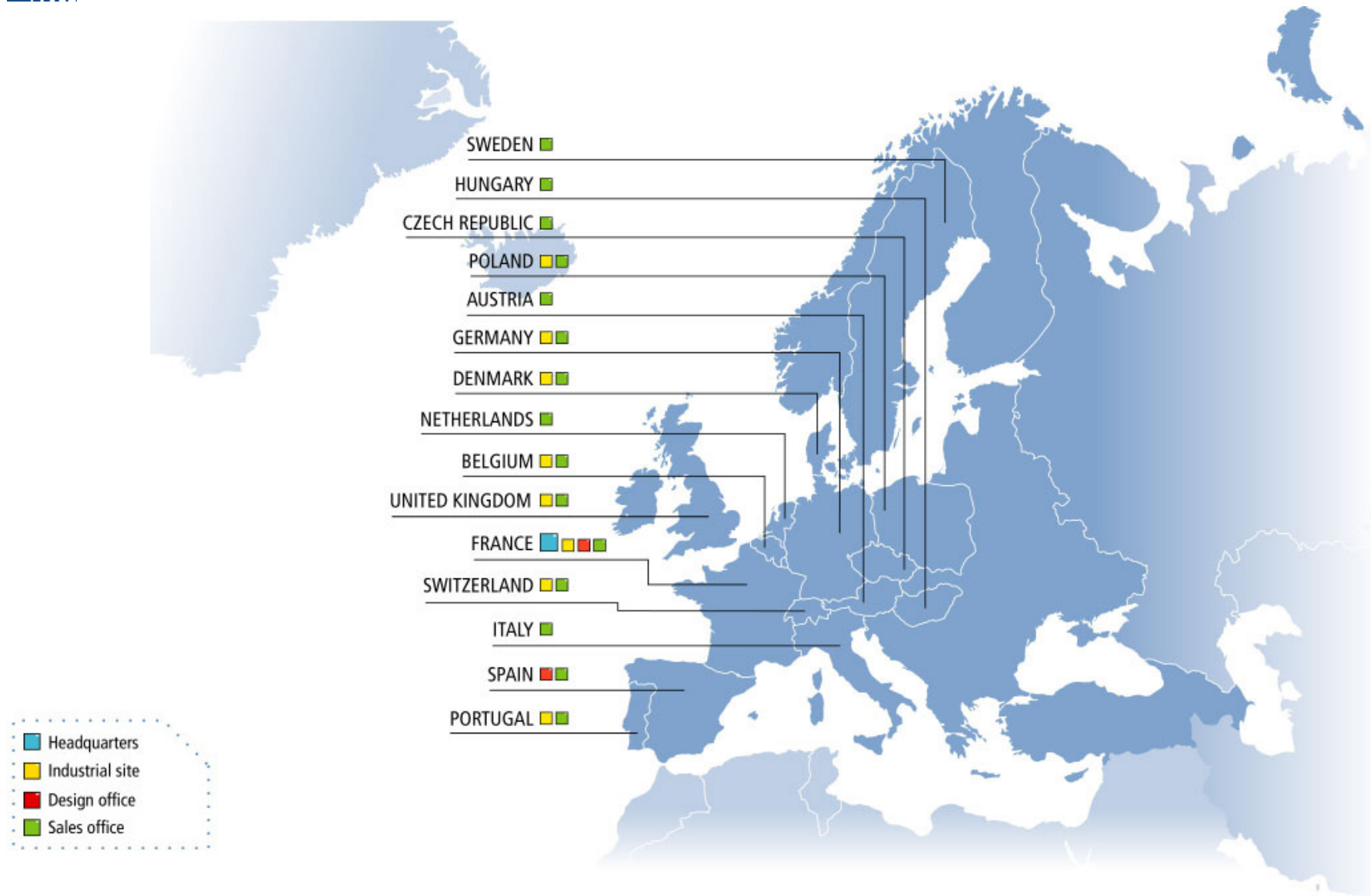
## ▶ Strong European or global positions in Defense and Security and Communication

# SAFRAN WORLDWIDE

## ► Production and commercial facilities in more than 30 countries



# SAFRAN IN EUROPE



# ■ A GLOBAL WORKFORCE

▶ 56,200 employees in more than 30 countries

France **40,700**

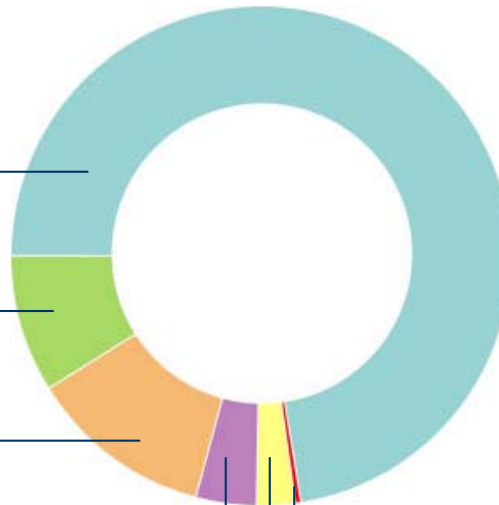
Europe (outside France) **5,000**

Americas **6,700**

Asia **2,200**

Africa **1,400**

Other **200**



# ■■■■ PROPULSION - Commercial Engines

- ▶ **A growth market for commercial aero-engines**
- ▶ **Strong business in production and spare parts**
- ▶ **Sustained orders in first half-year (Ryanair, Japan Air Lines, SALE, Icelandair, GOL, SpiceJet, etc.):**
  - 594 CFM56-7 et -5B engines ordered at May 31, 2005
- ▶ **Major long-term service contracts**
- ▶ **Collaboration with General Electric on preparations for a major Research & Technology initiative**

# ■■■■ PROPULSION - military airplane and helicopter engines

- ▶ **Development on schedule for TP400-D6 turboprop engine (Airbus A400M military transport)**
- ▶ **Helicopters: growth trend in civil and military markets, with a large number of orders in 2004-2005**
- ▶ **RTM322 goes from strength to strength: Australia is 10<sup>th</sup> country to choose this engine for their NH90 helicopters**
- ▶ **Production Ecureuil AS350 B3 powered by Arriel 2B1 sets world altitude record (touchdown-takeoff) (Everest - 8,850 meters)**

## ■■■■ PROPULSION - Space

- ▶ **Successful launch of Ariane 5 ECA (February 12, 2005)**
  - Vulcain<sup>®</sup> 2 and HM7B cryogenic engines
  - MPS solid rocket motors
  
- ▶ **Smart-1 probe injected into orbit around the Moon**
  - PPS<sup>®</sup>1350 plasma thruster - world record: 4,400 hours of operation
  
- ▶ **Vinci<sup>®</sup> engine: successful first ground test (May 20, 2005)**
  
- ▶ **Entire space industry waiting for decisions by European research ministers in December 2005.**  
**Expected result: maintain and develop the technology base in line with Lisbon objectives**

## EQUIPMENT

- ▶ **A number of major developments in progress, including:**
  - integrated landing system for the Airbus A400M
  - main and nose landing gear for the Boeing 787
  - electric brakes for the Boeing 787
  - wiring systems for the Boeing 787
  
- ▶ **Messier-Bugatti wheels and brakes selected for the Airbus A400M**
  
- ▶ **Decision expected on wiring systems for the Airbus A400M**
  
- ▶ **ETRAS: first all-electric thrust reverser control system, successfully operated during first flights of the Airbus A380**

# DEFENSE SECURITY

- ▶ **Sagem Defense Security chosen in May 2005 to supply the navigation system for the Airbus A400M**
  
- ▶ **Nominal development of the AASM (performance, timetable)**
  - Exemplary completion of flight tests confirm the technological choices and their performance
  
- ▶ **Nominal development of Gerfaut helmet-mounted display for the Rafale**
  
- ▶ **Nominal development of Félin system for tomorrow's soldiers (31,500 systems)**
  
- ▶ **Busard, demonstrator of a surveillance UAV for civil applications (fire detection, traffic, homeland security, etc.), developed in collaboration with ONERA - Daily flight at Paris Air Show**

# SAFRAN'S ROLE ON THE AIRBUS A380

(contributions)

- ▶ 17.5 % stake in GP7200 engine (Snecma, Techspace Aero)
- ▶ Nacelles for both engines on offer (Aircelle)
- ▶ ETRAS (Hispano-Suiza)
- ▶ Nose landing gear (Messier-Dowty)
- ▶ Ventilation systems (Technofan)
- ▶ Wiring systems (Labinal)
- ▶ Hydraulic, fuel and lubrication filtration systems (Sofrance)
- ▶ Full-brake-by-wire braking control system (Messier-Bugatti)
- ▶ Steering system (Messier-Bugatti)
- ▶ Tire, brake and landing gear monitoring systems (Messier-Bugatti)
- ▶ Onboard information system - Network Server System (Sagem Defense Security)
- ▶ Secondary fly-by-wire flight control system (Sagem Defense Security)



# SAFRAN'S ROLE ON THE AIRBUS A400M (contributions)

- ▶ Integrated landing system (Messier-Dowty)
- ▶ Steering, Landing, Kneeling (SLK) system, for steering, landing gear extension/retraction and kneeling/hiking of aircraft (Messier-Bugatti)
- ▶ Wheels and brakes (Messier-Bugatti)
- ▶ Inertial navigation system (Sagem Defense Security)
- ▶ Electrical harnesses for the nose (Labinal)
- ▶ TP400-D6 turboprop engine (Snecma 32.2% through EPI)
- ▶ TP400-D6 engine control system (Hispano-Suiza)
- ▶ Engine lubrication system (Techspace Aero)
- ▶ Engine lubrication and fuel filtration (Sofrance)
- ▶ TP400 D-6 starter (Microturbo)
- ▶ Cabin ventilation (Technofan)



# SAFRAN'S ROLE ON THE BOEING 787

(contributions)

- ▶ Main and nose landing gear (Messier-Dowty)
- ▶ Electrical wiring systems (Labinal)
- ▶ Wheels and electric brakes (Messier-Bugatti)
- ▶ Stake in GEnx engine (Techspace Aero, Hispano-Suiza)



# RESEARCH & DEVELOPMENT

- ▶ **25% of group employees are involved in research, technology and development for new products**
  
- ▶ **Self-financed investment exceeding 10% of sales**
  
- ▶ **Primary R&D objectives:**
  - Continuous performance improvement
  - Even more environmentally-friendly products
  - “More electric” systems
  - Reduced cost of ownership.
  
- ▶ **Two examples of Snecma/Sagem synergies:**
  - “Smart” engine monitoring system to improve responsiveness, efficiency and maintenance costs (SaM146)
  - Electric braking with integrated monitoring functions (Boeing 787).

# OUTLOOK

- ▶ **When the half-year results are announced on October 12, 2005, we will also provide figures at comparable size to allow a more accurate evaluation of SAFRAN's growth**

**Given the application of new IFRS accounting standards, objectives are:**

- ▶ **Sales growth of 5%**
- ▶ **Sustained operating margin**
- ▶ **Higher net earnings**
- ▶ **Improved net financial position, including decrease in debt load, which is already very low**