



**POWERED
BY TRUST**

SAFRAN IN EUROPE

European technologies,
world-class performance

2018



SAFRAN, AN INTERNATIONAL ENTERPRISE WITH EUROPEAN ROOTS

SAFRAN IN EUROPE⁽¹⁾

No.1
AIRCRAFT
EQUIPMENT
SUPPLIER



55,100
EMPLOYEES



60%
OF THE CONSOLIDATED
WORKFORCE



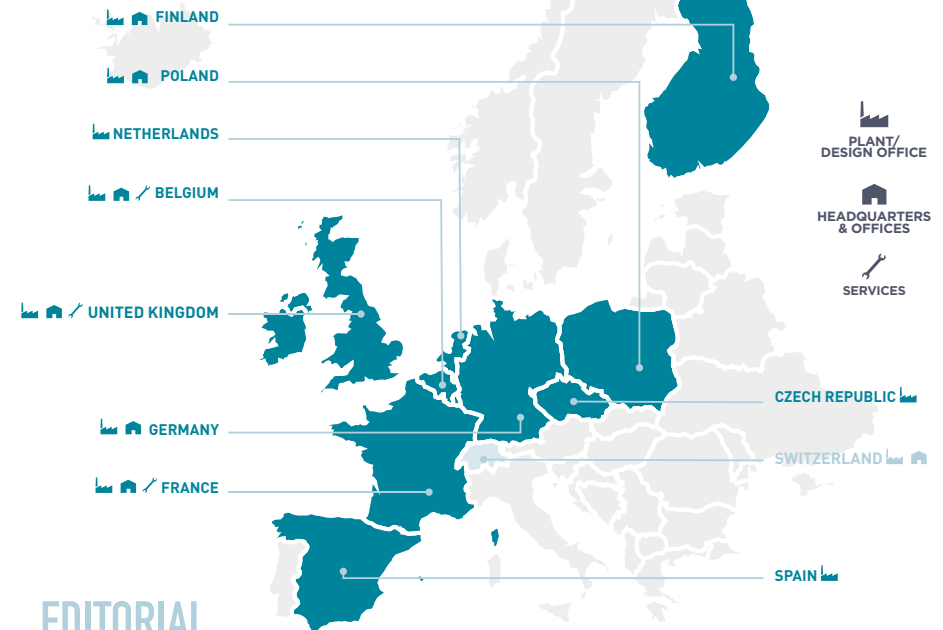
100+
OFFICES
AND FACILITIES



AEROSPACE AND DEFENSE ARE RESOLUTELY INTERNATIONAL MARKETS. AT SAFRAN, WE DEPLOY AN EQUALLY GLOBAL INDUSTRIAL ORGANIZATION TO ENSURE LOCAL SUPPORT FOR ALL OF OUR CUSTOMERS, TO EXTEND OUR REACH AND TO ENSURE OUR COMPETITIVENESS. WE ARE DEEPLY ANCHORED IN OUR HOMELAND, EUROPE, WHICH ACCOUNTS FOR MORE THAN TWO-THIRDS OF ALL EMPLOYEES. THE STRATEGIC CORE OF OUR R&D AND PRODUCTION OPERATIONS IS BASED IN EUROPE, DRIVEN BY HEFTY CAPITAL INVESTMENTS AND AN EXTENSIVE SUPPLY CHAIN, LARGELY LOCATED IN THIS REGION.

(1) Including Zodiac Aerospace.

A STRONG EUROPEAN FOOTPRINT



EDITORIAL

Safran acquired Zodiac Aerospace in February 2018, becoming the leading aircraft equipment supplier in Europe and No. 2 worldwide. Already No. 1 worldwide for engines powering single-aisle commercial jets, and a major player in European defense and space sector, Safran owes its success to a proven ability to innovate: we have taken part in over 90 European research projects and in 2017, we invested 1.4 billion euros in R&D.

Safran is constantly exploring solutions to make aircraft more environmentally friendly and is fully committed to “more electric” aircraft.

Now operating in more than 60 countries worldwide, Safran traces its roots to Europe, like three-fourths of its suppliers. The people of Safran are continuing a story that reaches back more than a century, dedicated to the European conquest of air and space.

Stéphane Abrial

*Senior Executive Vice President,
International and Public Affairs*



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Philippe Wode-Gallien / Safran



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TECHNOLOGIES THAT ENHANCE LIFE IN EUROPE



AVIATION

- A record number of 1,903 engines were delivered in 2017 for single-aisle commercial jets. Demand remains buoyant in 2018, with a backlog of orders for CFM56(1) and LEAP(2) engines standing at 14,834 on December 31, 2017. This confirms the successful production ramp-up for the new LEAP, which releases 15% less CO₂ than its predecessor and up to 50% less NO_x than international standards (ICAO's CAEP/6).
- **23,000 Safran jet engines** are now in service around the world, including nearly 5,200 in the European Union.
- **The acquisition of aircraft equipment major Zodiac Aerospace** means that Safran's expertise in landing gear, wheels and brakes, nacelles, electrical systems, actuators and avionics is now combined with Zodiac Aerospace's leading positions in aircraft seats, cabin equipment, power distribution, lighting, fuel, oxygen and fluid supply and safety equipment.
- Airbus has selected **the new Aneto-1X helicopter engine** to power its Racer high-speed technology demonstrator, financed by the European Commission's Horizon 2020 research program, within the scope of Clean Sky 2.

(1) Developed and produced by CFM International, 50/50 joint company between Safran Aircraft Engines and GE.



DEFENSE

- In 2016, the French army signed a contract for **14 Patroller™ tactical drones** from Safran. Through an adaptation of this drone, Safran is participating in the Ocean2020 consortium, which won the first request for proposals, worth €35 million, for a demonstration as part of the European Commission's PADR (Preparatory Action for Defense Research) program, worth 90 million euros over the period 2017-2019.
- Nearly 20,000 **Safran FELIN** soldier modernization systems have been delivered to the French army, and deployed on missions in France and abroad.
- Over **6,000 of Safran's JIM** multifunction infrared binoculars are deployed by European armed forces.
- Safran is a leading contributor to the **Airbus A400M transport** (TP400 turboprop engine⁽¹⁾, FADEC engine control unit, landing gear, wiring, navigation system) and the **Tiger helicopter** (MTR390 turboshaft engine⁽²⁾, landing systems, infrared sights, mission planning system).

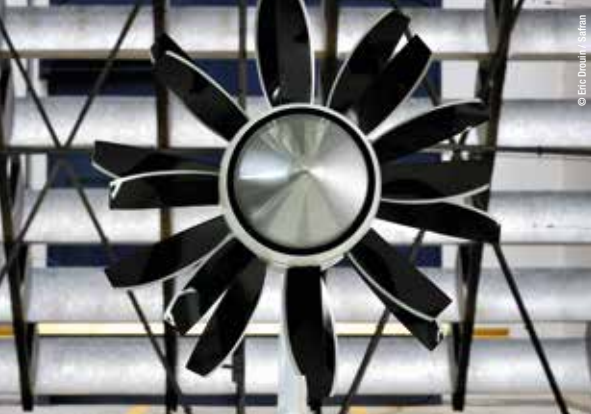
(1) Through the European consortium Europrop International.

(2) Developed through a joint program by MTU Aero Engines, Rolls-Royce, ITP and Safran Helicopter Engines.



SPACE

- Safran has been a major contributor to **Europe's launchers** for more than 40 years, from **Ariane to the more recent Vega**. Founded in 2015, ArianeGroup (the 50/50 joint company between Airbus and Safran) gives Europe a competitive space industry that also supports its strategic independence. The first flight of the next-generation European launcher, Ariane 6, is on schedule for July 2020.
- In December 2017, an Ariane 5 ES successfully orbited four more satellites **in Europe's own global navigation satellite system (GNSS), Galileo**. An Ariane 5 launch scheduled for the summer of 2018 will complete this constellation of 24 satellites (plus two in-orbit spares).
- Safran is the **European leader in plasma propulsion systems for satellites**, and also provides space optical components, sensors, electronics and inertial or GNSS-based navigation systems, as well as valve systems. ESO (European Southern Observatory) chose Safran Reosc (a subsidiary of Safran Electronics & Defense) to polish and integrate four of the five mirrors on the **ELT (Extremely Large Telescope)**, which will be the largest optical telescope in the world when completed.



A SOLID COMMITMENT TO EUROPE

R&D

- Innovation, advanced technologies and technical partnerships are all an integral part of Safran's strategy, involving some 20% of its workforce. In 2017 Safran **invested 1.4 billion euros in Research & Development**, about 8% of total revenues.
- Safran is a **founding member of Clean Sky⁽¹⁾**, Europe's largest aviation research program. We direct a dozen Integrated Technology Demonstrators (ITD), including the Open Rotor (a new engine that offers potential fuel savings of 30% over the CFM56), the Tech800 helicopter turbine engine, and innovative design studies for "more electric" aircraft.
- Safran filed for nearly **850 initial patents worldwide** in 2017, making us one of the leaders in French industry. For the last seven years, we have also been rated as one of the world's 100 most innovative companies and research organizations by Clarivate Analytics.

(1) www.cleansky.eu: a public-private partnership with the European Commission.

ENVIRONMENT

- Safran is developing advanced engineering solutions to meet the ambitious objectives set by the Advisory Council for Aviation Research and Innovation in Europe (ACARE) **to reduce the environmental impact of air transport** and meet the most stringent international standards.
- Safran invests in all facilities worldwide, implementing state-of-the-art processes **to reduce its environmental impact**.
- We are also heavily involved in the search for replacement substances to comply with the **European regulation REACH: Registration, Evaluation, Authorization and restriction of Chemicals**.

EMPLOYMENT

- Safran has nearly 91,000 employees worldwide⁽¹⁾, including 55,100 in the European Union in 2017, or 60% of the total. We hired 6,700 new employees in 2017, and welcomed more than 2,300 interns and 2,600 apprentices from all horizons in our European entities, primarily for R&D, production and customer relations.
- Safran is a **member of the European Alliance for Apprenticeships**. Working with the European Commission, we pledge to bolster the quality and attractiveness of apprenticeships in our European companies, and also facilitate our apprentices' mobility.
- In September 2017, Safran and IndustriAll renewed for five years their **agreement in favor of the professional inclusion of young people in Europe** – representing at least 10% of Safran's workforce annually. The initial agreement had allowed Safran's European companies to welcome more than 24,000 apprentices and interns from 2013 to 2016.

(1) Including Zodiac Aerospace.

CORPORATE SOCIAL RESPONSIBILITY

Safran has made **corporate social responsibility (CSR)** an integral part of our development strategy, with the aim of achieving exemplary corporate, social and environmental performance.

- As a signatory of the United Nations Global Compact, Safran confirms our commitment to respecting employee and union rights. In October 2017, this was reflected in a global CSR framework agreement, signed by management, IndustriAll Global Union and the metallurgical federations of French unions. Safran's CSR actions will be guided by this agreement in the coming years. In addition, Safran's social rating is improving, and the company is still included in the VIGEO EIRIS EURONEXT 120 index.

SAFRAN

WORLDWIDE

Safran is an international high-technology group, operating in the aircraft propulsion and equipment, space and defense markets. Through our global presence, we not only enhance the competitiveness of our European base, but also build industrial and commercial relations with the world's leading prime contractors and operators, while providing fast, local service to all customers. Working alone or in partnership, Safran holds world or European leadership positions in our core markets.

 NEARLY
91,000
EMPLOYEES⁽¹⁾

 IN MORE THAN
60 COUNTRIES

 **16.5 BILLION**
IN SALES IN 2017⁽²⁾

 **8%** OF SALES
INVESTED IN R&D⁽²⁾



For further information
go to our website
www.safran-group.com

No. 1 WORLDWIDE AEROSPACE

- Single-aisle commercial jet engines (in partnership with GE)
- Helicopter turbine engines
- Landing gear
- Wheels and carbon brakes⁽³⁾
- Aircraft wiring
- Commercial launches into geostationary orbit, via ArianeGroup (a 50/50 joint company between Airbus and Safran)

No. 1 IN EUROPE DEFENSE

- Tactical drones
- Optronic (electro-optical) systems
- Inertial navigation systems

(1) Including Zodiac Aerospace

(2) Excluding Zodiac Aerospace

(3) Mainline commercial jets with over 100 seats.