Safran Transmission Systems is a world leader in high-performance mechanical power transmission systems for today’s aircraft, from accessory drivetrains (ADT) to propeller gearboxes.

We leverage our recognized expertise in mechanical systems and long-standing partnerships with the world’s leading aero-engine manufacturers to help our customers meet their latest challenges. Our people’s proven skills in integrating these systems into the increasingly demanding aircraft and engine environments help meet the growing demands of our customers.

Safran Transmission Systems invests nearly 8% of annual sales in Research & Development to shape tomorrow’s successes, by pushing back the limits of performance.
Safran is a leading international high-technology Group and Tier-1 supplier of systems and equipment for aerospace, defense and security. Operating worldwide, Safran has 70,000 employees and generates sales of 17.4 billion euros in 2015. Through its global presence, Safran not only enhances competitiveness, but also builds industrial and commercial relations with the world’s leading prime contractors and operators, while providing fast, local service to customers around the world. Working alone or in partnership, Safran holds world or European leadership position in its core markets.
SAFRAN TRANSMISSION SYSTEMS, THE WORLD LEADER IN ACCESSORY DRIVE TRAINS

Safran Transmission Systems makes accessory drive trains (ADT), chosen by the world’s leading engine-makers for their unexcelled reliability. Their ongoing trust is anchored in our unrivaled expertise and precision technologies, applied across a breadth of the aircraft industry.

Safran Transmission Systems accessory drive trains, a pivotal part of mechanical power management on aircraft, provide the power needed to drive essential systems on the aircraft (hydraulic and electrical), and the engine (oil, fuel, electricity).

As a legacy partner to two of the world’s leading aero-engine manufacturers, CFM International* and Rolls-Royce, Safran Transmission Systems has established its leadership in the global accessory drive train market.

CFM INTERNATIONAL

Safran Transmission Systems helps write the extraordinary success story of the CFM56®—the best-selling engine that powers the Boeing 737 and Airbus A320 families of single-aisle commercial jets. The story is continuing with the next-generation LEAP®, for which Safran Transmission Systems is developing the accessory drive trains, for all three versions of this engine: LEAP-1A for the Airbus A320neo, LEAP-1B for the Boeing 737 MAX, and LEAP-1C for the Comac C919. Our innovative solutions improve the reliability of this ADT, while decreasing its weight by 25% and increasing the power transmitted to accessories by 30% compared with today’s engines.

ROLLS-ROYCE

The preferred supplier on the Trent engine family (Trent 500, 700, 800, Trent XWB) for over 30 years, Safran Transmission Systems has largely proven its ability to deliver added value to the British engine-maker. To further anchor this relationship, in 2015 we teamed up with Rolls-Royce to create a new equal joint venture, Aero Gearbox International, responsible for the design, development, production and support of accessory drive trains for all future Rolls-Royce commercial engines.

* CFM International, the 50/50 joint company between Safran Aircraft Engines and GE.

BUILDING THE FUTURE ON INNOVATION

IGGB®

The latest innovation from Safran Transmission Systems is the IGGB®—Integrated Generator Gearbox, an excellent example of teamwork with the engine-maker CFM International and a partnership with GE Aviation Systems.

This new technology not only handles the usual power transmission function, but also adds power generation, combined if needed with engine starting, by integrating a starter-generator in the limited space offered by the accessory gearbox (AGB). In other words, the AGB saves weight and space, while also enhancing maintainability.

In addition to advantages for the engine-maker, the IGGB® also improves the aircraft’s overall performance by reducing fuel consumption, a key advantage for today’s airlines.

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* CFM International, the 50/50 joint company between Safran Aircraft Engines and GE.
Safran Transmission Systems has designed and built reduction gearboxes for turboprop and turboshaft engines for many years now.

**REDUCTION GEARBOXES: SAFRAN TRANSMISSION SYSTEMS RISES TO TOMORROW’S AIR TRAFFIC AND ENVIRONMENTAL CHALLENGES**

**REDUCTION GEARBOXES TODAY...**

**TURBOPROP ENGINES**
Safran Transmission Systems makes the propeller gearbox for the Tyne turboprop engine powering the Transall tactical transport and Atlantic maritime patrol aircraft. This is a two-stage radial offset reduction gearbox, rated at 4,400 kW or 6,000 horsepower. The combination of a compact design, high power and proven reliability make it an exemplary product in this market.

**HELICOPTER TURBOSHAFT ENGINES**
Safran Transmission Systems has developed a reduction gearbox for the CTS800 engine powering the Finmeccanica Helicopters Super Lynx helicopter (from the Rolls-Royce-Honeywell joint venture, LHTEC), clearly displaying our ability to design, develop and produce reduction gearboxes for state-of-the-art helicopters.

**... AND TOMORROW**
Drawing on our experience with propeller gearboxes for turboprop engines and our broad expertise in propulsion systems, Safran Transmission Systems has undertaken the development of high-power reduction gearboxes for tomorrow’s very-high-bypass engines. For instance, we have drawn up a design and development plan for gearboxes rated at several megawatts, to meet our customers’ evolving needs.

Located in the heart of the engine, reduction gearboxes are a major part of any propulsion system. They are used to decrease the rotating speed of the fan or propeller, while also transmitting all of the engine’s mechanical power.

Safran Transmission Systems has opened a new research and test center dedicated to reduction gearboxes for next-generation engines. Now up and running, this center spans some 800 square meters (8,640 sq ft) and is used to test the performance of new metals and bring them to maturity. This state-of-the-art facility reflects Safran’s goal of developing gearboxes for the upcoming generation of very-high-bypass engines.

**SAFRAN TRANSMISSION SYSTEMS, A PARTNER IN CLEAN SKY 2**
Safran Transmission Systems is of course involved in the vast European “green aviation” research program, Clean Sky 2. We are developing gearboxes for different market segments, in particular turboprop business aircraft, with the development of an integrated propeller and accessory gearbox, or IPEA.
DEDICATED TO CUSTOMER SERVICE

OUR PRIORITY: GUARANTEE THE PERFORMANCE OF OUR CUSTOMERS’ POWER TRANSMISSION SYSTEMS THROUGHOUT THEIR OPERATING LIFE.

CUSTOM-TAILORED SOLUTIONS

As an original equipment manufacturer (OEM), we adapt our solutions to each customer’s specific needs. From the dependable, timely supply of spare parts to by-the-hour support contracts, all with optimum quality.

RESPONSIVE COMPETITIVE

Leveraging the synergies between our engineering and support teams, Safran Transmission Systems offers innovative repair solutions that reduce turn times and operating costs throughout the service life of your equipment.

OUR EXPERIENCE AT YOUR SERVICE

With thirty years of experience as a top-tier supplier and over 35,000 power transmission systems delivered worldwide, Safran Transmission Systems guarantees the origin of our parts and the quality of our services to all customers, engine-makers, repair stations and airlines.

BY-THE-HOUR SUPPORT PACKAGES

Safran Transmission Systems’ ‘BY-THE-HOUR’ support packages enable customers to:

> SIGNIFICANTLY REDUCE EQUIPMENT REPLACEMENT TIME, based on personalized management of the spare parts stock they need

> PLAN AHEAD MORE EFFECTIVELY for maintenance costs throughout equipment lifetimes

> REDUCE OPERATING COSTS based on a close relationship of mutual trust between the OEM Safran Transmission Systems, the engine-maker and the airline

SAFRAN TRANSMISSION SYSTEMS’ ‘BY-THE-HOUR’ SUPPORT PACKAGES (ENABLE CUSTOMERS TO)
INDUSTRIAL EXCELLENCE
Safran Transmission Systems is Safran’s center of excellence in mechanical power transmissions, built on our experience since the company’s founding in 1904. Today, we offer all customers the benefits of our recognized expertise and state-of-the-art industrial machinery and equipment.

CUSTOMER SATISFACTION
Our teams’ technical expertise, coupled with advanced analytical capabilities, allow us to address customer requests quickly and efficiently. We also offer a highly flexible approach and demanding performance requirements, making Safran Transmission Systems a pivotal partner in the design and development of modern mechanical power transmission systems.

INNOVATION
Safran Transmission Systems plays a vital role in today’s aircraft industry, by paving the way for tomorrow’s successful programs thanks to our skilled, committed people.

RECOGNIZING TALENT
The global reputation of our products is anchored in our people’s long-standing expertise. We continue to recruit the top talent in our fields to sustain our knowledge base from generation to generation, and make sure that our customers always stay ahead of the pack.