Poland is one of the European Union’s major industrial powers and a key partner to Safran. The four facilities in this country – Safran Aircraft Engines, Safran Transmission Systems, Aero Gearbox International and Lisi Aerospace Creuzet Polska – are located in Aviation Valley, a center of aeronautical excellence in southeast Poland. Safran already works with more than 30 local suppliers and has over a thousand employees, making it the third largest employer in Aviation Valley.

Poland offers a host of advantages for this sector, not only through this aviation cluster, but also based on a highly skilled labor force and a strategic location in the center of Europe. There is a real aviation tradition in Poland, reaching back nearly a century, which makes the country a major player in today’s global industry.

Defense is also a strategic market for Safran: Safran Electronics & Defense has been a major supplier of electro-optical products to Poland for a dozen years, and also supplies its JIM family of multifunction infrared binoculars.

**AN ACTIVE ROLE IN LOCAL TRAINING**

Safran is very involved in local training. For example, Safran Transmission Systems Poland has been teaming up for several years with the Technical University of Rzeszów, to develop curricula that meet the specific needs of the aviation industry. At the same time, Safran has launched several measures to improve technical education in high schools, by modernizing these programs, providing additional technical instruction and offering extra equipment to school labs.

The University of Rzeszów has 16,000 students, making it a lively repository of young talent for Aviation Valley and Poland in general.

**AVIATION VALLEY**

Located in southeast Poland, Aviation Valley is the country’s center of aeronautical excellence. It hosts some 150 companies and has generated 22,000 jobs.

The Aviation Valley Association was created as a non-profit in 2003, to support the rapid growth of the country’s aerospace industry. This historic decision was made by a group comprising major aerospace companies, suppliers and business leaders.
Located in the heart of the Polish aviation cluster, this new plant reflects Safran’s strategy of consolidating the production of certain LEAP engine parts in a single zone. The aim is to support the unprecedented production ramp-up for this new engine from CFM International, with some 2,000 to be produced in 2020. Spanning some 8,000 square meters, the plant is dedicated to the production of low-pressure turbine blades. It rolled out its first parts in July 2017. The plant has more than 150 highly qualified operators and 60 support staff. It is taking over the production line created in 2016 by Safran Transmission Systems.

CFM INTERNATIONAL, POWERING POLISH AIRLINES

CFM engines power airplanes for several Polish airlines, some of which has opted for a maintenance contract as well. LOT Polish Airlines deploys nine Boeing 737 twinjets, while the charter carrier Enter Air has a fleet of 18 of these aircraft. The two charter carriers Small Planet and Travel Services operate four Airbus A320s and a Boeing 737.

HIGH-PRECISION WORK

The new Safran Aircraft Engines Poland plant features 20 machinery and equipment, and is specialized in the machining and surface treatment of low-pressure turbine blades for LEAP engines. Made from a nickel-based super-alloy, these complex parts demand high-precision shaping. Once they have been machined and checked, they are sent to the Villaroche plant near Paris to be used on both new engines and as spares. Our new Polish plant was designed for mass production rates which demand highly reliable production facilities and processes.

Safran Aircraft Engines Poland can also count on its highly qualified workforce, trained in all mechanical disciplines. The expert staff is highly motivated to meet the initial challenges of the unprecedented LEAP production ramp-up, with blade production more than quadrupling from 2017 to 2018. This success is anchored in skills and expertise being shared with other Safran Aircraft Engines plants, especially Gennevilliers near Paris, the Group’s legacy foundry specialist. Right from the outset, the Polish plant embraced Safran’s demanding standards, not only for industrial processes, but also for health, safety and the environment (HSE).

CFM International developed the LEAP engine family to meet the growing performance expectations of aircraft manufacturers. LEAP engines have been selected by the world’s leading planemakers to power the new-generation of single-aisle jets: the Airbus A320neo entered service in 2016, followed by the Boeing 737 MAX in 2017. This new-generation turbosfan has also been chosen by Comac of China as the sole Western powerhouse for its new C919. The LEAP is the fastest-selling engine in the history of aviation, with more than 15,000 orders and commitments to date.
Safran Transmission Systems has nearly 750 employees in its plant opened in 2001 in Poland. This facility of 25,000 square meters is specialized in the manufacture and assembly of mechanical power transmission systems for LEAP and CFM56 engines. The power transmission taps part of the energy produced by the main jet engines and uses it to drive engine and aircraft subsystems. The Polish facility also makes components for low-pressure compressors for Safran Aero Boosters and gears for turboshaft engines dedicated to Safran Helicopter Engines. Safran Transmission Systems was the first company in the Group to set up shop in this country. It also handled production of low-pressure turbine blades for several years, today transferred to Safran Aircraft Engines to support the fast-paced production ramp-up of LEAP engines.

Safran Transmission Systems is also deeply involved in this ramp-up. The Polish facility will assemble nearly 1,750 power transmissions in 2018, rising to over 2,000 in 2019 - a 65% increase over production in 2017. In a proactive response to this ramp-up, Safran Transmission Systems has initiated a transformation project, primarily involving the expansion and modernization of the Polish plant, to be completed in 2019.

Widely recognized for its technical expertise, Safran Transmission Systems has also earned recognition for its quality, on-time deliveries and performance, which have earned kudos from customers. It is acknowledged as a center of expertise within Safran and in Aviation Valley.

A MAJOR LOCAL PLAYER
To meet the demands of the LEAP production ramp-up, in 2015 Safran Transmission Systems opened a 4,800-square-meter logistics center, which supports other Safran companies in the region. As a major player in Aviation Valley, Safran Transmission Systems has also facilitated the installation in Poland of several French suppliers.

SAFRAN TRANSMISSION SYSTEMS
IN POLAND

Since expanding operations to Sędziszów Małopolski more than 15 years ago, Safran Transmission Systems has proven to be a textbook case of a successful cross-border initiative. The company is one of the leaders in Poland’s aviation industry.

A STRONG COMMITMENT TO LOCAL RESEARCH AND EDUCATION
Safran Transmission Systems is involved in the InnoLot research program, designed to develop innovative solutions for the aviation industry and supported by the Polish national R&D center. This European program has a 5 million euros budget over five years. Working with three Polish universities (Warsaw, Katowice and Cracow) and the supplier Thoni Alutec (aluminium casting), Safran Transmission Systems is leading a project that aims to reduce the weight of one of the key parts of the power transmission system, the accessory gearbox.

AERO GEARBOX INTERNATIONAL
A 50/50 joint venture created in 2015 by Safran Transmission Systems and Rolls-Royce, Aero Gearbox International inaugurated its Polish production plant in Ropczyce in 2017. This 13,500-square-meter plant now has 100 employees, and this figure should rise to more than 200 in 2021. Aero Gearbox International makes power transmission systems for all upcoming Rolls-Royce commercial aero-engines. Its first program is the Trent 7000 engine powering the Airbus A330neo.

SAFRAN AERO BOOSTERS
Safran Aero Boosters kicked off a close relationship with Safran Transmission Systems in 2005. It installed an assembly line for nozzle guide vanes, both bolted (for the GE9X and GEnx engines) and riveted (for the GP7000) in a special building. It also set up a machine shop for bearing holders on its low-pressure compressors. Building on this success, in 2012 the company set up a second production line for nozzle guide vanes and spools. Today, Poland accounts for 30% of Safran Aero Boosters’ business. The teaming arrangement with Safran Transmission Systems is also a complete success on both a human and an industrial level, with 560 spools and 3,400 nozzle guide vanes produced every year on LEAP and CFM56 assembly lines.

2010
The year 2010 will go down in the history of Safran Transmission Systems and remain engraved in the memories of French and Polish employees alike. An unprecedented flood ravaged the facilities of Safran Transmission Systems in Poland and paralyzed the plant. Local employees were unable to restart production and deliver these key products to their customers, since all production machinery was damaged.

Both Poland and France production crews managed to team up in order to deliver on time. Everyone at the Safran Transmission Systems (formerly known as Hispano-Suiza) plant in Colombes warmly welcomed their Polish counterparts to continue production. Other Safran companies also pitched in, and products were delivered to customers without any major impact. The customers greatly appreciated the quick response and motivation of Safran employees, and the teams from the two plants developed a very warm relationship which continues to this day.