

PRESS RELEASE

Safran and ATR develop “Smart Lander”, a groundbreaking service to analyse hard landings

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Safran Landing Systems, the world leader in aircraft landing and braking systems, Safran Engineering Services, provider of high technology engineering services and ATR, world’s leading regional aircraft manufacturer have developed ‘Smart Lander’, **Safran Engineering Services** an innovative landing gear diagnostics service that uses state-of-the-art knowledge in data analysis to optimise the manufacturer’s response times in the event of hard landings, and enable aircraft to be quickly returned to service.

This extremely innovative service, the first of its kind in the aviation industry, is based on machine learning technology. Based on hundreds of thousands of hard landing simulations, Smart Lander issues recommendations to operators on the maintenance actions to be taken according to the hardness of the landing and to the load level sustained by the landing gear. Aircraft can subsequently be permitted to continue their commercial operations or alternatively, be sent to a maintenance base. This process takes less than an hour, compared to over a week previously.

David Brigante, ATR Customer Support and Services Senior Vice-President, stated: “*Our former process could take up to 10 to 20 working days. It required analyses from both the ATR Design Office and Safran Landing Systems to decide whether the aircraft was fit to return to service. With Smart Lander, we will be able to massively reduce ATR response times, therefore boosting aircraft availability, reducing costs for customers and enhancing customer satisfaction, while maintaining the same level of analysis quality.*”

Patrick Joyez, Technical Director at Safran Landing Systems, said: “*We have been working hand in hand with Safran Engineering Services and ATR, capitalizing on our joint know-how regarding landing gear and the operations performed by ATR to develop this health-monitoring service, analyzing the condition of the landing gear based on Safran’s expertise in harnessing data. Smart Lander is a true breakthrough in terms of landing load analysis, which will offer real value to ATR operators.*”

Yves Bley, Technical Director of Safran Engineering Services: “Thanks to its teams specialized in calculations, digital transformation and artificial intelligence, Safran Engineering Services is proud to have contributed to this innovative project, transforming a customer need into a concrete service bringing actual added value to ATR operators.”

By considerably reducing the response times required for returning the aircraft to service after a hard landing, Smart Lander will offer undeniable advantages to both ATR and its customers in terms of man-hours, aircraft availability and customer satisfaction.

Safran is an international high-technology group, operating in the aviation (propulsion, equipment and interiors), defense and space markets. Its core purpose is to contribute to a safer, more sustainable world, where air transport is more environmentally friendly, comfortable and accessible. Safran has a global presence, with 76,800 employees and sales of 15.3 billion euros in 2021 and holds, alone or in partnership, world or regional leadership positions in its core markets. Safran is listed on the Euronext Paris stock exchange and is part of the CAC 40 and Euro Stoxx 50 indices.

Safran Landing Systems is the world leader in aircraft landing and braking systems. The company has partnerships with 20 airframers in civil, regional, commercial and military transport, and supports 27,000 aircraft.

For further details: www.safran-group.com / Follow [@Safran](https://twitter.com/Safran) and [@SafranLandingS](https://twitter.com/SafranLandingS) on Twitter.

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ATR is the world number one regional aircraft manufacturer with its ATR 42 and 72 aircraft the best-selling aircraft in the less than 90-seat market segment. The unifying vision of the company's employees is to help everyone, no matter where they are in the world, to connect and develop in a responsible manner. Thanks to the efficiency of turboprop technology and the benefits of the company's focus on continuous innovation, ATR aircraft open more than 100 new routes every year on average, burn up to 40% less fuel and emit up to 40% less CO2 than regional jets. For all of these reasons, ATR aircraft have been chosen by some 200 companies in 100 countries around the world. ATR is a joint-venture between Airbus and Leonardo.

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