

# SUCCESS STORY

## AIRBUS

### First flight of the A350 XWB



The first flight of the new Airbus A350 XWB, on 14 June 2013, was widely hailed at this year's Salon du Bourget air show. The Sopra Aeroline teams played an active role in this success. Their contribution included assisting with the on-board computing system, the flight-tests for the new engines, digital simulations, technical documentation.

### Context and challenges

The A350 XWB is a particularly innovative aircraft, especially with regard to the consideration of environmental and economic concerns. With half of the structure formed of composite material, this particularly lightweight aeroplane will post a lower fuel consumption, thus meeting the expectations of airlines.

### Sopra added value

More than 400 Sopra Group employees assisted Airbus in several projects relating to the A350 XWB.

**THE AEROLINE STIE Team** (Scientific, Technical, Industrial and on-board Engineering)

This team was involved with:

- The on-board computing systems. Sopra developed a selection of on-board software applications, in particular the aircraft's secondary flight controls.
- The preparation and monitoring of the flight tests for the new engines. The A350 XWB is equipped with a new generation of Rolls Royce engines. Highly specific test campaigns had to be conducted in order to verify their reliability. Acting as an operator in the control room during the first flight, in direct communication with the pilots, Sopra Group played a very active role in these tests.
- The development of tools for the processing of flight test data. The processing of this considerable volume of data requires specific tools, which had to be developed.
- Digital simulations of the systems. Even though the systems are still undergoing development, these enable the simulation of their behaviour when altering various parameters.

The development of the entire system thus progresses by means of successive validations, leading to the overall finalisation.

- The development and adaptation of specific tools, design methods and processes with certification. Sopra thus assisted a team of more than 2,000 designers at the Airbus design office.

### AEROLINE SIG TEAM (Information & Management Systems)

For its part, a second team provided important associated services:

- The aircraft technical documentation, mandatory prior to the delivery of any aircraft to a customer.
- Associated services such as training, the publication of the progress of the production schedules, incident monitoring, maintenance... have also undergone developments.

For 2 years, Sopra Group engineers in France and India had contributed to the integration of the new functions of the A350 into the existing information systems.

### Customer benefits

- Benefit from the support of a multi-disciplinary partner, assisting Airbus with its large-scale projects
- Optimise the costs of development thanks to the support of Sopra Group's offshore teams
- Realise scheduling objectives: 1st flight in June 2013



“ Our Aeroline teams cover a wide range of technical and operational skills. This rich potential, reinforced by a high level of motivation, contributes to our preoccupation with always remaining as close as possible to our various internal customers at Airbus. As such, we have put in place suitable mechanisms, including our Indian teams, in order to respond to the challenges posed by all of the projects that are assigned to us. Furthermore, our increase in value has enabled us to get involved upstream, increasing the customer's understanding of our profession. It is the group as a whole that must be acknowledged regarding this success, and thus we will continue forwards, strengthened by this identity and the trust that Airbus places in us. ”

XAVIER PECQUET,  
member of the Sopra  
COMEX and Director of  
Aeroline



#### About Sopra Steria

Sopra Steria, European leader in digital transformation, provides one of the most comprehensive portfolios of end to end service offerings in the market: Consulting, Systems Integration, Software Development and Business Process Services. Sopra Steria is trusted by leading private and public organisations to deliver successful transformation programmes that address their most complex and critical business challenges. Combining high quality and performance services, added-value and innovation, Sopra Steria enables its clients to make the best use of information technology.

With 35 000 professionals in over 20 countries, Sopra Steria had pro forma revenue of €3.1 billion in 2013.

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