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Press Release

Fly in the Solar Impulse virtual cockpit thanks to solution from Swisscom

Today, André Borschberg and Bertrand Piccard's solar plane set off on its first international flight to Brussels. Thanks to the satellite-supported Swisscom solution on board the plane, anyone can fly in the Solar Impulse virtual cockpit and keep up to date with the project's progress via the Internet on Bluewin and using a mobile app.

Swisscom has been supporting André Borschberg and Bertrand Piccard's solar plane project since 2009, because Solar Impulse is a great ambassador for renewable energies, energy efficiency and innovations. As part of this cooperation, Swisscom, as the national telecommunications partner, has undertaken to develop an ultra-light system to ensure communication between the pilot and his crew on the ground at all times anywhere in the world. "The communication solution from Swisscom is very important because it allows us to pilot the plane safely over uninhabited areas and oceans," explains André Borschberg, CEO of Solar Impulse. The system includes a satellite unit with antenna, amplifier and modem, a screen with integrated keyboard, computer (CPU) and memory, a phone with amplifier for the pilot's headset and a camera.

Communication solution has to meet extreme demands

It might seem simple at first glance, but upon closer inspection it becomes clear that the communication solution is a major technical challenge, as the entire thing weighs only five kilograms. Previous products with a significantly smaller number of functions weighed more than 20 kilograms. In addition, the average power consumption is just 50 watts, about as much as a standard light bulb. All of the components fitted in the cockpit have to withstand considerable fluctuations in temperature and air pressure too.



A year-long development process

The communication solution was developed by one of Swisscom's innovation teams, because it has extensive technical know-how and its own testing laboratory in Ostermundigen, Switzerland. Six engineers spent a year searching for the most powerful global communication network and the most efficient components. They then worked with the manufacturers on the laborious development process required to reduce everything to the bare essentials. The team also designed a space- and energy-saving phone and programmed fail-safe software for operating the system.

Experience it live

Thanks to the Swisscom communication solution, anyone can experience Solar Impulse's international flights for themselves through the eyes of the pilot, because the satellite connection allows the plane's current data (position, speed, route, etc.) to be reproduced online in a virtual cockpit. Swisscom also provides updates on Bluewin, Facebook and Twitter and a special application for iPhone, iPad and Android smartphones.

Solar Impulse's first international flights

Payerne – Brussels (13 May 2011)

Brussels – Paris (first half of June 2011)

Paris – Payerne (end of June 2011)

Further information

www.swisscom.com/solarimpulse

<http://2010.swisscom-report.ch/en/solar-impulse>

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