

PRESS RELEASE – MONDAY JUNE 15TH 2015

SWISSto12 reaches out into space with 3D printing

SWISSto12 announces it has signed its first contract with the European Space Agency (ESA). The activity will focus on developing new antenna components based on 3D printing of plastic materials. To this aim, SWISSto12 is supported by the Swiss Space Office (Swiss delegation to ESA). The results of this project have the potential of becoming a game-changing element in the manufacturing of such components for space applications.

Modern satellite telecommunication applications thrive for higher data throughput. To cope with this demand, new satellite systems operate with increasingly higher frequency signals to support high data rate transfer. One of the key elements to support such data links are high performance antennas. SWISSto12 specializes in creating specific antenna designs, which are then 3D printed out of high performance plastic materials before being metal plated by a proprietary process. SWISSto12 competes with antenna providers who rely on traditional machining of metallic materials. In this context, the 3D printed antennas feature drastic weight reductions alongside with reduced costs. The antennas under development will allow for applications using signals up to 110 GHz and beyond.

This quest towards the space industry will allow for SWISSto12 to enter the market of satellite “connectivity-on-the-move” applications which will provide high-speed internet connections to passengers in airplanes, ships, trains and ground vehicles. In parallel, the products under development also aim at contributing to a global satellite Internet access everywhere on earth, including in developing countries.

SWISSto12 recently joined the Swiss Space Center in order to stimulate cooperation with the Swiss space community. For Emile de Rijk, CEO of the company: « This first step into the space industry open up major opportunities for SWISSto12. Our company hereby becomes a new type of actor in the field of space telecommunications. ».

About SWISSto12

SWISSto12 is a start-up company that builds upon 5 years of experience accumulated in the field of additive manufactured RF components. The company collaborates closely with the Laboratory of Electromagnetics and Acoustics (LEMA) of the EPFL of Prof. Mosig to target space, aeronautical, automobile and remote sensing applications. SWISSto12 products feature weight reductions up to a factor ten, along with high performance that allow for operations in high data rate satellite telecommunication applications.