



## Press release

Neuchatel, Switzerland, 3 November 2010

### **Frost & Sullivan Award Highlights Colibrys' Outstanding Advances in Enabling Technology of MEMS Accelerometers**

**The 2010 Frost & Sullivan award for Enabling Technology in MEMS accelerometers has been awarded to Colibrys SA. The company has been recognised for its development and exploitation of high precision MEMS based capacitive accelerometer products.**

Precision navigation aids are essential for aviation and smart munitions, as well as in autonomous land vehicles, robotics, and personal locators. The solution of choice has been the highest precision inertial measurement units (IMUs) which provides good performance but tax the rest of the system budgets, including cost (which runs into thousands of dollars), power, and size. Hence, systems designers have begun to re-examine their approach to guidance-system design, primarily because of an order-of-magnitude savings in cost, along with attractive size and power advantages. The challenge for designers is to reallocate system performance budgets and to design-in additional performance rather than relying solely on the core IMU. The cost advantages would open up many new application opportunities.

Colibrys since its creation in 2001 has focused on innovative cost effective designs of high stability accelerometers for harsh environments and safety critical applications in the Defence/Aerospace, Energy and Industrial markets. Their collective multidisciplinary skills in MEMS sensor design, electronic system architectures and assembly/packaging technologies has allowed them to create microsystems optimising the compromise between sensor performance, ruggedness and cost.

“Colibrys has demonstrated consistently over time an ability to develop best-in-class accelerometers for use in precision inertial, tilt, vibration and more recently seismic sensing.” remarked Sunanda Jayanth from Frost & Sullivan. They are already delivering inertial sensors that are several orders of magnitude more accurate than those typically found in i-phones and automotive industries, and seismic sensors that are some hundreds of times more sensitive than other competitive MEMS products. The company’s MEMS sensors have proved to once again be disruptive in displacing piezo, optical and electromechanical vibrating quartz (Force Balanced / Servo Accelerometers) in numerous applications. Their vibration sensors are now being widely adopted for ‘Condition monitoring’, automotive crash-test, measurement and safety critical control testing applications, The small size, low power, high functionality and robust potential inherent in MEMS based structures is being exploited to the full.”

The company targeted originally the Defence and Avionics markets providing miniaturised and robust inertial sensors in guidance and navigational applications across many platforms including guided missiles, smart munitions, UAV/ALVs, avionic flight recorders, land vehicles, ships,



submersibles. As precision tilt sensors they have enabled amongst others highly accurate platform stabilization systems for antenna pointing systems, camera surveillance, avionic control systems (AHRS), line of sight targeting, gyro-compass orientation, robotics, crop harvesting and down bore-hole drilling.

In recent years they have adapted their technology to provide 3 axis seismic imaging sensors increasing the probability of drilling in profitable fields, reducing substantially the risk of drilling dry wells and permitting ever increased efficiency of extraction from existing fields. Developing applications in the Energy market include down directional drilling, borehole drilling, Measurement Whilst Drilling (MWD) and pipe line monitoring

Most recently they have succeeded in dominating supply of seismic sensors into emerging markets for 'health monitoring' of many infrastructure such as large buildings, bridges, towers, dams, embankments, nuclear plants, wind turbines, aircraft. As these structures prevail more and more around the world especially in regions prone to earthquakes and other natural disasters there is becoming an increasing societal demand to quantitatively validate that these structures are safe to the local population. Sensors like these will help assure the future safety of such people and guide building owners in cost effective maintenance and repair.

Colibrys has partnered with the EPFL Lausanne, CSEM Neuchatel and the FHNW-IME Windisch in many of the developments undertaken. It has participated in selective EC initiatives including Europractice and Nexus as well as receiving significant support from the Swiss CTI, all of which have helped underwrite many of the marketing, business and technical achievements.

Each year, Frost & Sullivan presents this award to a company that has demonstrated excellence in the following categories: uniqueness of technology, impact on new products/applications, impact on functionality, impact on customer value and relevance of innovation to industry.

Frost & Sullivan Best Practices Awards recognize companies in a variety of regional and global markets for demonstrating outstanding achievement and superior performance in areas such as leadership, technological innovation, customer service, and strategic product development. Industry analysts compare market participants and measure performance through in-depth interviews, analysis, and extensive secondary research in order to identify best practices in the industry.

#### **About Colibrys**

COLIBRYS is a world-leading supplier of standard and semi-custom MEMS based motion sensors to the harsh-environments (Military, Aerospace and Energy) and safety critical (Industrial and Instrumentation) applications. COLIBRYS family of motion sensors includes extremely low noise and shock resistant seismic sensors, high stability high shock inertial accelerometers and DC coupled capacitive vibration sensors. COLIBRYS is based in Neuchâtel, Switzerland. Additional information is available at [www.colibrys.com](http://www.colibrys.com).

#### **About Frost & Sullivan**

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best in class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages almost 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from 31 offices on six continents. To join our Growth Partnership, please visit [www.frost.com](http://www.frost.com).

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