

**Media Contacts:**

Lisa Melsted

The Bateman Group for The Open Group

(415) 503-1818

[opengroup@bateman-group.com](mailto:opengroup@bateman-group.com)

## **Europe Invests Over €3M for Research and Development on Model-Based Tools for Embedded Systems in Aerospace and Defense**

*The Open Group Joins Leading European Technology Developers, Manufacturers, and Universities to Undertake First Industrial Evaluations of New Software Development Framework*

MILAN, Italy and READING, England – November 28, 2011 – [The Open Group](#) today announced that it has partnered with a consortium of leading European real-time technology developers, industrial manufacturers and research organizations to develop a new model-based software development framework for complex real-time systems in Aerospace and Defense. Supported by the European Commission, the Model-based Methods and Tools for Avionics and Surveillance Embedded Systems (MADES) project is investing over €3.5 million (US\$5.1 million) to develop an advanced framework covering all phases of real-time systems development – from design to code generation and deployment. This platform-independent framework will maintain the robust reliability essential for safety and mission-critical applications while providing improvements in developer productivity, reusability of code, and lower costs for maintenance and retargeting to newer multicore platforms.

Led by [TXT e-solutions](#), an Aerospace and Defense engineering company, the MADES consortium includes The Open Group; [University of York](#); [Polytechnic University of Milan](#); [Cassidian](#), an EADS company and worldwide leader in global security solutions and systems; and [Softeam](#), an embedded systems technology supplier specializing in tools for advanced model driven architectures. Softeam is directing the research to ensure the MADES project results meet the highest level of standards for reliability and real-time performance within the industry.

The strategic objective of the MADES project is to develop new model-based verification and simulation methods, along with new model-based code generation methods and tools that will address both conventional programming languages and hardware description languages. The MADES tools will provide developers the ability to more easily reuse existing software

components, ensure consistency of complex systems, and exploit advanced multicore hardware platforms.

“Embedded systems developers require new tools and methods based on recognized standards to design complex applications utilizing model-driven development methods,” said Flavio Fusetti, Director of Aerospace & Defense Business at TXT e-solutions. “The MADES project will provide an evolutionary path that integrates existing development methods providing a way forward to more advanced model-based design. These development techniques will also enable real-time systems developers to achieve higher performance levels, greater reliability, and scalability with increasingly sophisticated multicore platforms.”

In addition, the MADES tools and technologies will be integrated into a single framework that provides a seamless environment for modeling, validation, and code generation of Avionic and Surveillance solutions. With the imminent arrival of the new avionics standard DO-178C (Software Considerations in Airborne Systems and Equipment Certification) later this year, embedded systems developers will be able to adopt model driven methods that will dramatically improve the way safety-critical systems are developed.

The MADES project applies a holistic approach in researching new tools and technologies that support design, validation, simulation, and code generation, while providing better support for component reuse. New annotation and verification methods are also being developed to ensure overall system consistency. In addition, advanced code generation technologies will address both conventional programming languages and hardware description languages providing compile-time virtualization techniques that can cope with the increasing complexity of modern multicore hardware architectures.

“The MADES consortium partners are experts in each phase of model-driven systems development. This project will bring new innovations to the process of transforming software designs into deployable systems that have the required reliability and assurances for safety-critical applications,” said David Lounsbury, Chief Technical Office at The Open Group. “We’re confident the powerful model-based tools already being evaluated by industrial partners will allow applications developers to be more productive and manage expected increases in system complexity.”

The MADES project is financed in part by the 7th Framework Programme, an initiative of the European Community created to foster European research and development of new

technologies, applications and industries. The project will run through mid-2012 and is expected to contribute to ongoing standards development activities related to unified modeling language (UML) and modeling and analysis of real time and embedded (MARTE) systems. For more information on the MADES project, visit: [www.mades-project.org](http://www.mades-project.org)

#### **About TXT e-solutions**

TXT e-solutions is an international leading company in the supply of software and strategic solutions to large enterprises. Main areas of business are: *Demand & Supply Chain Management* with the TXT Perform offering, especially targeting Luxury, Fashion, Retail and Consumer Goods sectors; *Software for Complex Operations & Manufacturing*, for Aerospace, Defense, High-Tech Manufacturing and Financial Institutions, with the TXT NEXT offering. TXT is listed in the STAR segment of Borsa Italiana - London Stock Exchange (TXT.MI) with Headquarters in Milan and offices in Italy, France, UK, Germany and Spain. Further information can be found at [www.txtgroup.com](http://www.txtgroup.com).

#### **About The Open Group**

The Open Group is an international vendor- and technology-neutral consortium upon which organizations rely to lead the development of IT standards and certifications, and to provide them with access to key industry peers, suppliers and best practices. The Open Group provides guidance and an open environment in order to ensure interoperability and vendor neutrality. Further information on The Open Group can be found at [www.opengroup.org](http://www.opengroup.org).

###

**Note to Editors:** Boundaryless Information Flow is a trademark of the Open Group. TOGAF is a registered trademark of The Open Group. All other company, brand and product names may be trademarks or registered trademarks of their respective holders.