

## PRESS RELEASE

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### **Eurostars voted innovation at VIBES.technology as one of the best in Europe**

**Eurostars supports international innovative projects led by research and development-focused small- and medium-sized enterprises. Twice a year, all applications are evaluated and, when applicable, granted funding. VIBES.technology has submitted an innovative project in collaboration with the Technical University of Munich (TUM) and the German car and motorcycle manufacturer BMW. The project goal is to develop software which accurately predicts the sound & vibration behavior of new (electric) vehicles. Out of the nearly 400 European applications, this project was ranked the most innovative in the Netherlands and 2nd in Europe. This result guarantees funding for the project and secures the start of the project.**

#### **Innovative Dutch software for the automotive industry**

During the two years that the project will run, VIBES will develop a software product to make accurate noise and vibration predictions for the automotive industry using so-called *substructuring technology*. By cleverly combining computer models and data of actual measurements, the noise and vibration behavior (the industry term is 'NVH', Noise and Vibration Harshness) is reliably predicted in the early phase of new vehicle development. This ensures that the design can be optimized before an actual prototype is built, which results in saving valuable time, resources and money for the manufacturer and a more enjoyable and relaxing driving experience for the driver of the vehicle.

Matching the current developments in the field of electric vehicles and components is particularly challenging in this project. Electric vehicles lack the masking effects of a combustion engine and require a different engineering approach. Additional challenges are caused by new components, such as compressors for the cooling of battery packs. In order to create an acoustically comfortable e-vehicle for the driver, it is necessary to pay extra attention to the NVH process in e-vehicles.

#### **Strong cooperation of partners**

The TU Munich, and in particular prof. dr. Rixen, is leading in research in the field of dynamics and substructuring. The involvement of the innovative market leader BMW ensures a good match between the results of the project and the market demand. For VIBES, the development of this innovative software will be a valuable addition to the existing product portfolio.

*"This collaboration with the TU Munich and BMW, and the support from Eurostars, is a fantastic opportunity to develop innovative software that enables us to accurately make NVH predictions, even in challenging situations with further electrification and weight reductions. We are proud that our Dutch company is leading in the European innovation in this field."*

- Maarten van der Kooij, CEO VIBES.technology -

### **About VIBES**

VIBES.technology is a global expert in modular sound & vibration engineering for the automotive industry. Using the VIBES methodology, computer simulations and test measurement data are combined, addressing vibration challenges before a physical prototype of the vehicle is built. This saves time and money and delivers a better end result. VIBES develops user-friendly software applications (*SOURCE*, *DIRAC* and the *Toolbox*) to perform these complex analyzes, provides training and also works as an engineering consultant for automotive OEMs and suppliers around the world. VIBES started as a spin-off from TU Delft and has offices in Delft (the Netherlands) and Munich (Germany).

### **About Technical University of Munich**

The Technical University of Munich (TUM) combines forefront research with a unique offer for students. It seeks solutions for the societal challenges of the future, including mobility & infrastructure. The university thinks and acts in an entrepreneurial manner and aims to generate sustainable profit for the society. That makes it one of the leading universities in Europe.

### **About BMW**

The BMW Group is the world's leading manufacturer of premium cars and motorcycles with brands as BMW, MINI, Rolls-Royce and BMW Motorcycle. As an international corporation, the BMW Group uses 31 production and assembly facilities in 15 countries. The global sales and distribution network extends over more than 140 countries. Premium and durability are inseparable. The success of the BMW Group is traditionally based on a long-term vision and corporate responsibility. The company has anchored environmental and social sustainability throughout its value chain. Comprehensive product responsibility and the economical use of natural resources are an integral part of the strategy.

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### **Notes for editors**

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