

Press Information

Award for "VMAP" Research Project

New CAE standard for virtual engineering with cooperation of the EDAG Group

8 November, 2021

Special achievements receive special awards. "VMAP", a manufacturer-neutral standard for CAE data storage and transmission was created in the course of the international ITEA cooperation project headed by the Fraunhofer Scientific Computing and Algorithms Institute (SCAI). EDAG, the world's largest independent engineering service provider in the automotive industry and project participant, tested application scenarios for the new standard in the automobile environment. The aim was to improve interoperability in virtual engineering workflows. Thanks to these outstanding results, "VMAP" (Virtual Material Modelling in Manufacturing) received the "ITEA Award of Excellence for Standardization".

Computer-aided engineering, or CAE for short, is used to develop products and components in a wide variety of fields of industry. All the essential simulation steps should be efficiently combined in a CAE chain, and an integrated product development made possible, taking all relevant production effects into account. Only in this way can structurally optimised components and products be realised across several simulation steps. However, as things stand today, such continuous communication between the different simulation software types is not yet anchored in the systems. The newly developed VMAP standard now makes the manufacturer-independent exchange of data between the various CAE programs in the development chain possible.

In the course of the project, EDAG simulated the application of the new standard on behalf of the automotive industry, focussing mainly on CFRP components. With the help of the new standard, the results of the individual CAE programs within the process chain were output in an additional format. The new interface created in this way not only makes it easier for the user to exchange data between different software tools, but also makes a significant contribution to increasing the efficiency of simulation-based development.

Dr. Lukasz Lasek, project leader for the implementation of the new simulation standard in the automobile environment, reports on his experience: "We, EDAG, contributed towards ensuring that the operations and use cases in the automotive industry can be more than just secured with the new standard. With our project results, we have contributed to considerably increasing efficiency in the CAE environment by us-

ing VMAP in the correct use case. And we are particularly pleased, after three years of cross-sector, international collaboration with our cooperation partners, to be the holders of the "ITEA Award of Excellence for Standardization".

ITEA is the Eureka Cluster programme for software innovation. Within this large international community, it will be possible to work together on funded projects that will turn innovative ideas into new companies, workplaces, economic growth, and benefits to society as a whole.



About **EDAG**

EDAG is an independent engineering service provider working for the global automotive industry. The company has a global network of some 60 branches at the world's major automobile centres to serve leading national and international vehicle manufacturers and technologically discerning automotive suppliers. In addition, EDAG also offers engineering services in the vehicle engineering, electrics/electronics and production solutions segments. This extensive competence enables EDAG to provide its customers with all-round support, from the original idea to design, through to product development, prototype construction and even turn-key production systems. As an innovative technological leader, the company also has competence centres for ground-breaking future technologies for the automotive industry: sustainable vehicle development, safe mobility, digitalisation and drive and storage technologies. In 2020, the company generated sales of 650 million euros in the core business. On 31 December, 2020, EDAG employed a global workforce of 7,984 (including apprentices).

**Do you have any questions, or need further information?
I look forward to hearing from you:**

Christoph Horvath
Press Spokesman of EDAG
Tel.: +49 (0) 661- 6000 570
Mobile: +49 (0) 171- 8765 310
E-mail: christoph.horvath@edag.com

Head office
EDAG Engineering GmbH
Kreuzberger Ring 40
65205 Wiesbaden
www.edag.com