

Flash news

Paris, October 2<sup>nd</sup>, 2020

## European Sustainable Development Week 2020

### ESI Group reaffirms its commitment to reduce the carbon footprint of its industrial customers through a "zero real tests, zero real prototypes, zero downtime" approach

Since its creation in 1973, ESI Group, leading innovator in Virtual Prototyping software and services for manufacturing industries, has been committed to addressing the operational performance of industrial products during their entire lifecycle, from launch to disposal.

Leveraging the physics of materials and using new technologies such as artificial intelligence and data mining, ESI is able to predict products' performance and anticipate their maintenance requirements, in interaction with their environment. The approach aims to eliminate the need for physical tests and prototypes and reduce downtime. *" Manufacturing and testing a real prototype is long and expensive for an industrialist. In addition, they need to set up specific test facilities that most of the time cannot be reused for other physical prototypes, which constitutes an additional cost. The use of virtual prototypes allows to overcome these constraints while increasing agility, efficiency and performance."*, explains Emmanuel Leroy, Executive Vice President - Industry Solutions at ESI Group.

This innovative methodology based on virtual prototyping is effective for our customers:

- With ESI's support, the French company Expliseat has developed the lightest seat ever certified by the European Aviation Safety Agency (EASA). This titanium seat is 50% lighter than the lightest models currently available on the market (8-10 kg). This significant weight reduction could result in an estimated 3% to 5% reduction in fuel usage, saving \$300,000 to \$500,000 per aircraft per year;
- More recently, Farasis Energy, a Chinese American battery provider, wins in record-breaking time, a call for tenders made by a premium German automotive OEM. Thanks to ESI's expertise, the reliability of the virtual prototype of the new Farasis battery model was decisive in a "zero real prototype" approach, stipulating the elimination of any physical prototype.

Furthermore, environmental regulations are pushing manufacturers to undertake change and focus on performance. ESI supports companies to face a major challenge: successfully innovating and transforming their models to meet consumers' expectations while maintaining their levels of growth and profitability.

The race to electric vehicles is another example of the relevance of this approach. ESI helps industrial players to develop their projects while maintaining ever tighter deadlines without compromising the safety or comfort of occupants.

- Through the European consortium project [Optemus](#), ESI and its partners have developed a solution enabling a 40% more range for electric vehicles without sacrificing comfort, safety or cost.

The 75th session of the United Nations General Assembly, one of the main highlights of September 2020, was an opportunity for leaders, including Cristel de Rouvray, CEO of ESI Group, among other CEOs from more than 100 countries, to reaffirm their commitment to multilateralism and the values of the Global Compact, by signing the [United Nations Global Compact Statement](#).

### ESI Group

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### About ESI Group

Founded in 1973, ESI Group is a leading innovator in Virtual Prototyping solutions and a global enabler of industrial transformation. Thanks to the company's unique know-how in the physics of materials, it has developed and refined, over the last 45 years, advanced simulation capabilities. Having identified gaps in the traditional approach to Product Lifecycle Management (PLM), ESI has introduced a holistic methodology centered on industrial productivity and product performance throughout its entire lifecycle, i.e. Product Performance Lifecycle™, from engineering to manufacturing and in operation. Present in more than 20 countries, and in major industrial sectors, ESI employs 1200 high level specialists. In 2019, its turnover was 146M€. ESI is headquartered in France and is listed on compartment B of Euronext Paris. For further information, go to [www.esi-group.com](http://www.esi-group.com).

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