



The Story of ESI

**Pioneer and Leading Innovator
in Virtual Prototyping**

www.esi-group.com



1973

THE STORY BEGINS

ESI (Engineering System International) is **created in France** by Alain de Rouvray, current Chairman and President, and three other Berkeley PhDs (Jacques Dubois, Iraj Farhooman, Eberhard Haug). The company **initially operates as a consulting company**. ESI gradually develops sophisticated simulation techniques based on Finite Element Analysis (FEA), and acquires a broad understanding of industrial processes and needs.



Alain de Rouvray, Jacques Dubois, Eberhard Haug.

1979

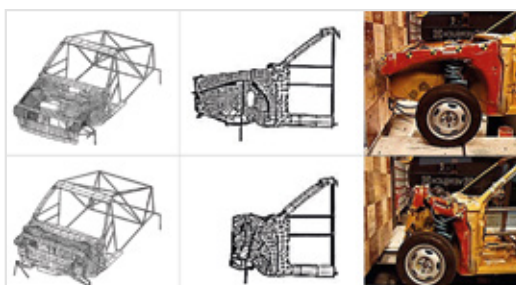
CREATION OF A SUBSIDIARY IN GERMANY

Following a **strong demand from German automotive companies** as they start to implement the very first crash and safety regulations, **ESI opens a subsidiary in Germany (ESI GmbH)**.



1985

FIRST CRASH TEST ON FULL CAR

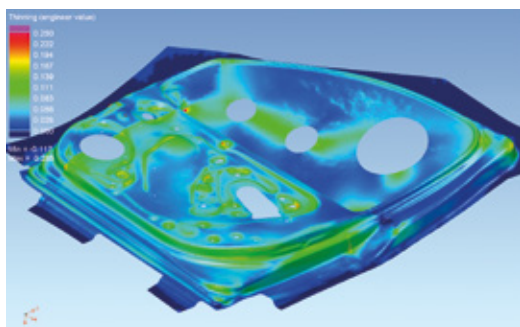


First Volkswagen Polo crash test. Virtual and physical tests.
Courtesy of Volkswagen AG.

ESI teams up with a German consortium led by Volkswagen to become the **first company to develop simulation software** analyzing the severe deformations inflicted on a car as a result of a crash. This is the first step towards the development of ESI's flagship product PAM-CRASH, now part of ESI Virtual Performance Solution.

1991

CREATION OF SOFTWARE ACTIVITY



ESI offers numerical simulation solutions for numerous industrial processes.

In order to develop the company's software branch for industrial applications, the Group carries out a share capital increase with the California-based venture capital firm Burr Egan Deleage, which invests 3 million US Dollars. ESI then develops **a unique set of software tools** to speed up the manufacturing and testing process of industrial products, while improving their design.

1992-
1995

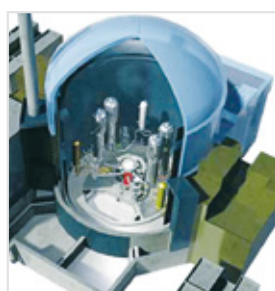
CREATION OF SUBSIDIARIES IN JAPAN, THE US AND SOUTH KOREA

To market its software more widely, ESI sets up subsidiaries in the United States, in Japan, and in South Korea. ESI Group is now an **international organization**.



1997

ACQUISITION OF FRAMASOFT



Nuclear power plant.

ESI Group acquires from Framatome (now AREVA) its **subsidiary Framasoft** (whose software is now SYSTUS), providing a set of mechanical simulation tools, especially suited to the nuclear energy sector.

1999

ACQUISITION OF DYNAMIC SOFTWARE

ESI Group **reinforces its expertise in metal stamping simulation** with the acquisition of Dynamic Software, editor of the Optris "virtual press" software.



Stamping simulation of a car door. Courtesy of SKODA Auto.

2000

INITIAL PUBLIC OFFERING ON Euronext PARIS & ISO 9001-2000 CERTIFICATION

With its Initial Public Offering (IPO) on July 6th, 2000, ESI Group is **successfully listed in Eurolist** Compartment C of Euronext Paris stock market and **raises around 30 million Euros**.

In the same year ESI Group successfully **obtains its first ISO 9001 certification**.



2001

CREATION OF SUBSIDIARIES IN CZECH REPUBLIC AND SPAIN & ACQUISITION OF STRACO

ESI Group pursues an active acquisitions policy by **successfully integrating companies** and creating subsidiaries for developing European markets.

The acquisition of Straco France is a first step into the **vibro-acoustics market**.



2002

CREATION OF A SUBSIDIARY IN THE UK & ACQUISITION OF VASci, ProCAST AND CALCOM



Casting. Courtesy of Patriot Foundry.

ESI **strengthens its position in Europe and opens a new subsidiary in the UK.**

ESI also extends its offering in:

- the **field of vibro-acoustics** with VASci (Vibro-Acoustic Sciences), an American solution for the simulation of noise and acoustics ;
- the **casting & industrial metallurgy sector** with the acquisition of Swiss software ProCAST, followed by the integration of the Swiss-based distribution company Calcom.

2003

ACQUISITION OF EASi & CREATION OF A SUBSIDIARY IN INDIA

ESI Group acquires from the American vendor EASi the intellectual property rights to EASi's CAE (Computer-Aided Engineering) simulation design and control software environments, allowing ESI to **develop an open collaborative engineering environment.**

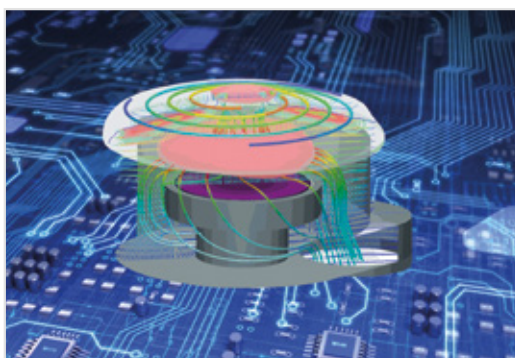
During the same year, ESI creates a **subsidiary in India** to reinforce its global offering and to provide local high quality services.



ESI's common platform enables collaborative work.

2004

ACQUISITION OF CFDRC PRODUCTS & CREATION OF A SUBSIDIARY IN CHINA



ESI's CFD software tools applied to plasma technologies, widely used in the electronics sector.

The acquisition of CFD Research Corporation's product division enables ESI Group to **diversify its business in advanced Computational Fluid Dynamics (CFD)**, targeting new market sectors with strong growth potential, including electronics, biotechnology and alternative energy.

ESI Group creates a **subsidiary in China** to facilitate access to strategic industrial projects for the benefit of Chinese customers in the fast growing local economy.

2006

ACQUISITION OF ATE TECHNOLOGY AND IPS INT. HUMAN MODELS

ESI acquires the Chinese-based company ATE Technology International, bringing **expertise** of integrated **solutions in the aeronautic sector**.

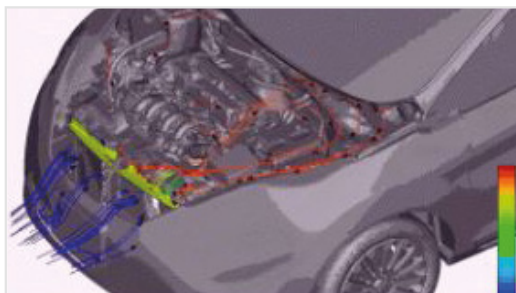
ESI Group also acquires the branch of IPS International for digital simulation services in Computer-Aided-Engineering (CAE) in South Korea, as well as the **intellectual property rights** to their **virtual human models**, allowing ESI to enter promising markets such as passenger comfort simulation.



Aeronautics seat with dummy in ESI Virtual Seat Solution.

2008

CREATION OF A SUBSIDIARY IN ITALY & ACQUISITION OF Vdot AND MINDWARE



CFD analysis for air charge temperature evaluation.

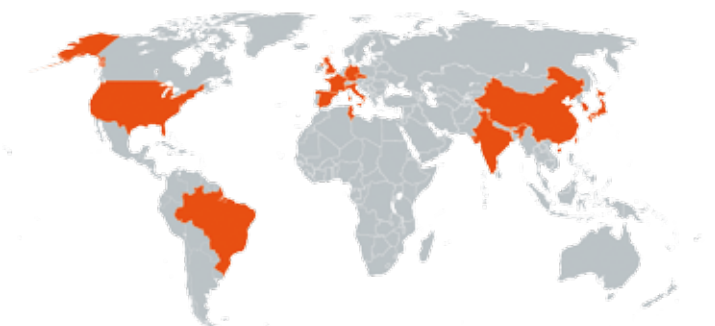
In order to further expand its **distribution network**, ESI opens a subsidiary in Italy.

ESI Group **acquires Vdot™**, a software platform for lean process management from the US company Procelerate Technologies Inc. ESI Group also acquires leading US Services provider **Mindware Engineering Inc.** This acquisition accelerates ESI's ability to further **develop its presence in the CFD market** and in the US.

2009

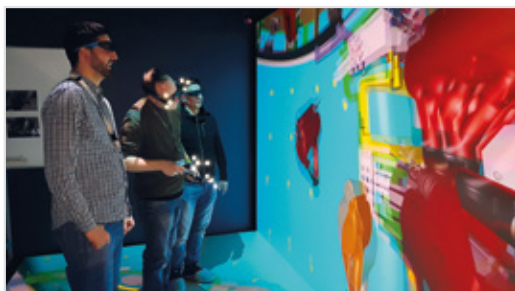
CREATION OF SUBSIDIARIES IN BRAZIL AND TUNISIA

ESI Group opens a **new subsidiary in Brazil**, a country with fast developing industries, and **also in Tunisia**, where a 'near shore' competency center is now dedicated to **high value-added projects**.



2011

ACQUISITION OF IC.IDO AND Efield & STRONG GROWTH



ESI IC.IDO uses real time immersive 3D technologies. Courtesy of Safran Nacelles.

ESI acquires IC.IDO GmbH, leading European vendor of **Virtual Reality solutions**, allowing customers to experience their models 'live' in 3D, to support effective and collective decision-making.

The acquisition of Efield follows: the European **specialist in electromagnetic simulation solutions** strengthens ESI's electromagnetic offering.

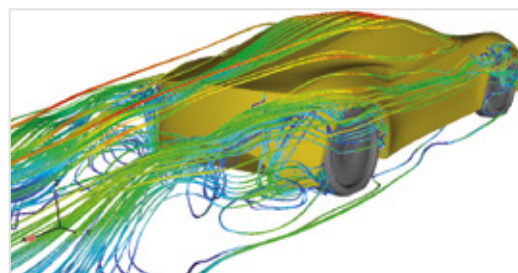
2012

ACQUISITION OF OPEN CFD LTD., FIRST OFFICE IN RUSSIA, STRATEGIC ALLIANCES

ESI acquires OpenCFD Ltd., the leader in **Open Source Computational Fluid Dynamics (CFD)**, and consequently becomes the owner of the OpenFOAM® trademark.

In September, ESI opens its first office in Russia, strengthening its presence on **the fast-growing Russian market**.

In November, ESI signs a protocol for a multi-year strategic collaboration agreement with **Astrium, Europe's leading space technology company**.



OpenCFD open source code is a reference in the field of CFD.

2013

STRATEGIC COLLABORATIONS WITH RENAULT AND AVIC-BIAM



Signature Ceremony for the Joint-Venture contract between ESI and AVIC-BIAM.

Renault and ESI Group sign a framework agreement for **strategic collaboration**. The agreement aims at supporting Renault's new strategic plan "Renault 2016 – Drive the Change".

Later in the year, ESI signs the Joint Venture contract initiated in 2012 with AVIC-BIAM. Under the terms of the contract, the parties agree to establish and operate **the Joint Venture company "AVIC-ESI (Beijing) Technology Co. Ltd."**.

2014

ACQUISITION OF CAMMECH

ESI Group acquires the **Vietnamese company CAMMECH**, deploying ESI's multi-shoring model and **strategically strengthening its presence in Asia**.

2015

INTEGRATION OF NEW TECHNOLOGIES FOR BIG DATA, MACHINE LEARNING, CLOUD AND THE INTERNET OF THINGS



Realistic 3D scene of vehicles driving around a city: ESI Pro-SiVIC™

ESI pursues its acquisition strategy aimed at building a **holistic and complete offering for Virtual Prototyping**. Starting with Pro-SiVIC, a breakthrough technology dedicated to the development and integration of embedded **Advanced Driver Assistance Systems (ADAS)**. ESI also acquires the assets of AMOEBA (of which PRESTO software is part), provider of a disruptive solution dedicated to the electronic device market. With PicViz (now ESI INENDI), specialist in **big data visual analysis** to detect unknown operational problems, ESI enters the field of cybersecurity. ESI also acquires the assets of Ciespace, **enabling cloud-based CAE modeling**.

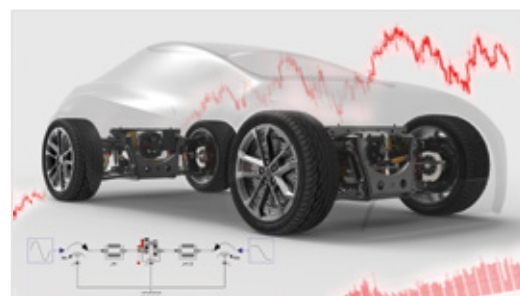
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2016

ACQUISITIONS OF ITI GMBH AND MINESET

ESI continues its series of acquisitions with ITI GmbH, a global leader in the **realistic simulation of mechatronic and multi-domain systems** and its software SimulationX. ESI also acquires Mineset Inc., a **data analytics and machine learning specialist**. ESI continues to strengthen its **global ecosystem** through the signature of **corporate partnerships**, with Huawei for instance.

At the end of the fiscal year, ESI announces the **transfer of its shares from compartment C to compartment B** of Euronext Paris.



ESI deploys innovative solutions for system modeling and data analytics.

2017

ACQUISITION OF SCILAB ENTERPRISES AND EXTENSION OF STRATEGIC POSITIONING



With the acquisition of Scilab at the beginning of the year, ESI boldly pursues its path into OD-4D modeling: from product inception to Immersive Virtual Engineering.

Coupled with the latest technologies, Virtual Prototyping is now anchored in the wider concept of the Product Performance Lifecycle™, which addresses

the operational performance of a product during its entire lifecycle, from launch to disposal. The creation of a **Hybrid Twin™**, leveraging simulation, physics and data analytics, enables manufacturers to deliver smarter and connected products, to predict product performance, and to anticipate maintenance needs.

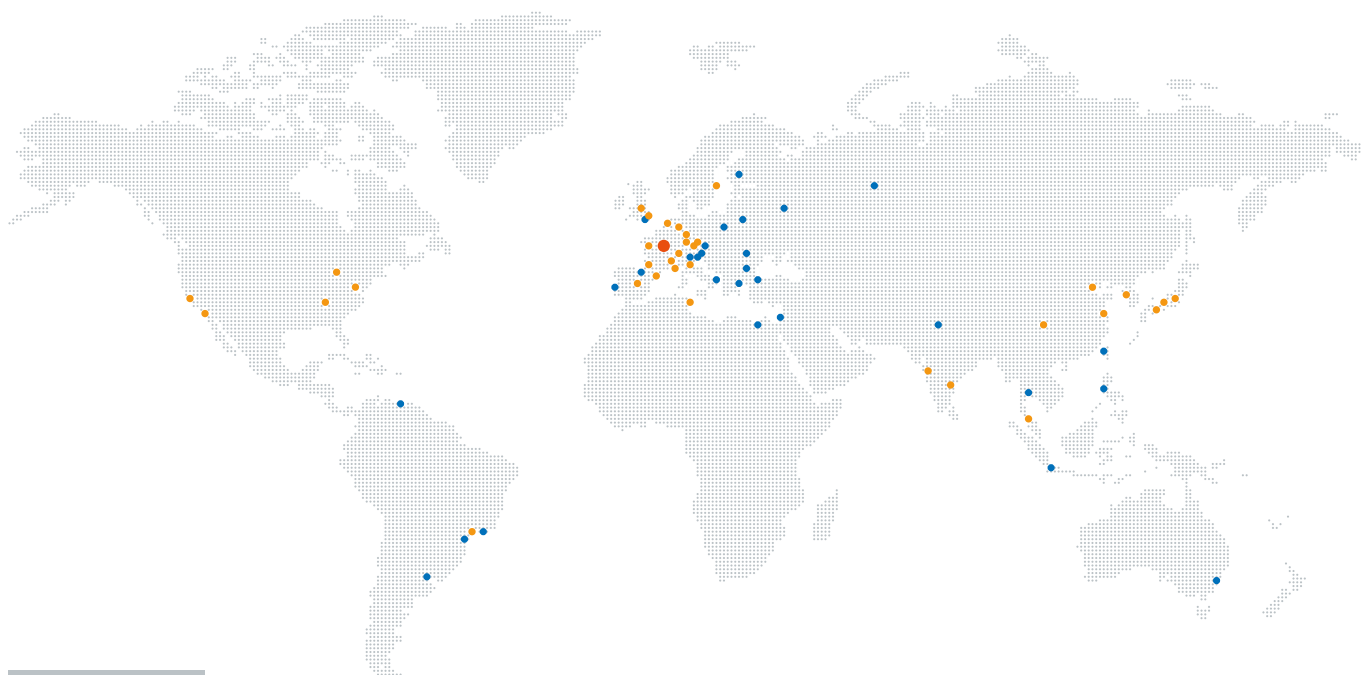
Hybrid Twin™

SNAPSHOT OF ESI

Today, ESI employs more than **1200 Virtual Prototyping specialists worldwide**. Headquartered in Paris (France), the company and its global network of agents provide **sales and technical support** to customers in more than **40 countries**.

ESI has built a **worldwide network of experts** in each industrial domain, allowing the company to be close to its clients and to meet their needs.

● Headquarters ● Subsidiaries ● Agents and Distributors



More information:

www.esi-group.com/ourStory