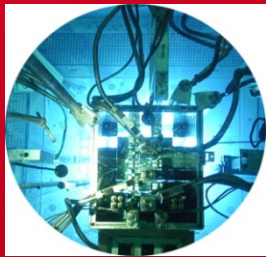


DE LA RECHERCHE À L'INDUSTRIE



Jean GONNORD

**Chef de Projet Simulation Numérique
CEA/DAM**



www.cea.fr

e-infrastructure

A boost for innovation

A 20 years global strategy on line with H2020

- Independent access to the technology
- World class infrastructures
- Important spin-off to industry and society



TERA100: First petaflop/s computer designed in Europe

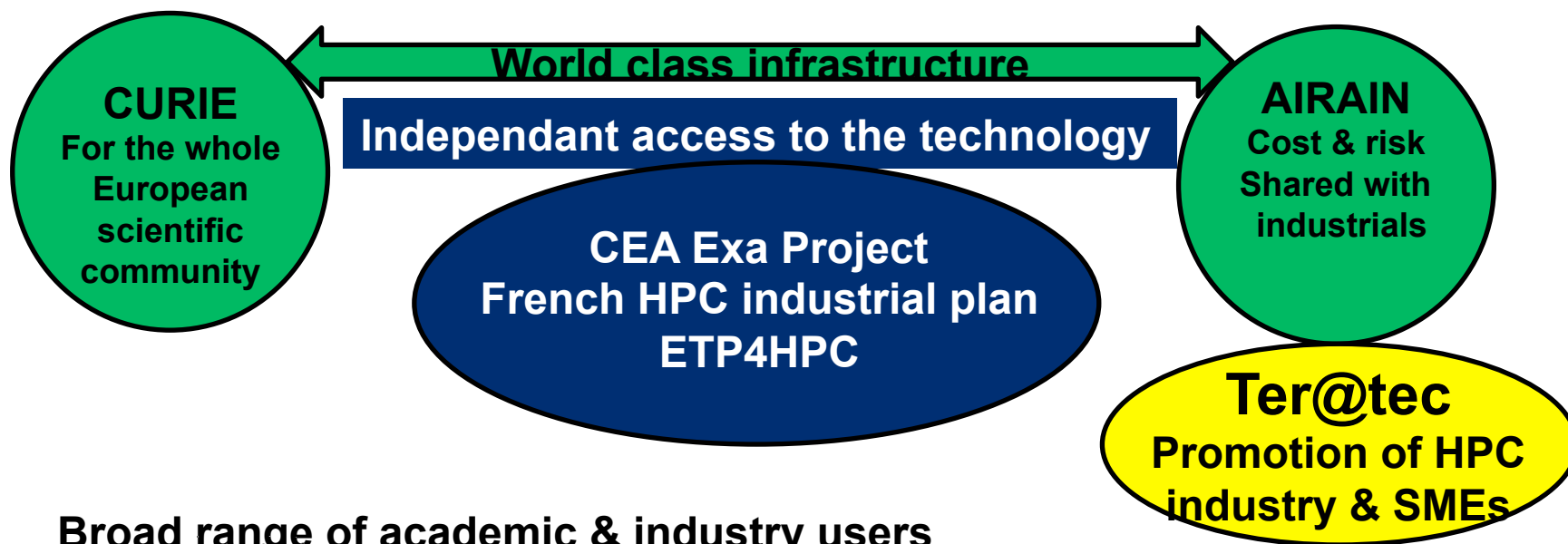
ICRI 2014

ATHENES

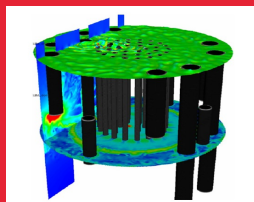
- ❑ *Provide a world-class European HPC infrastructure, benefitting a broad range of academic and industry users, and especially SMEs,*
- ❑ *Ensure independent access to HPC technologies, systems and services for the EU;*



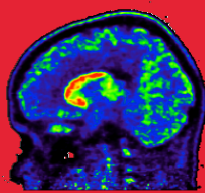
How does CEA participate to these challenges ?



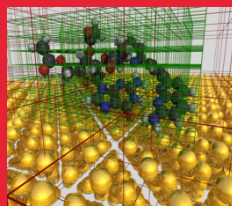
Broad range of academic & industry users



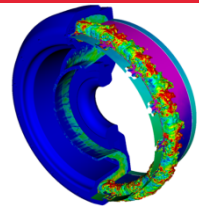
Energy



Health



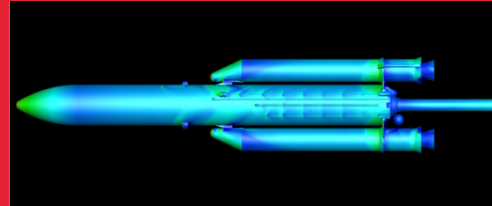
Biology



Combustion



Security



Ariane 5

E-infrastructures: a boost for innovation

Downstream spin-off on the world class infrastructures

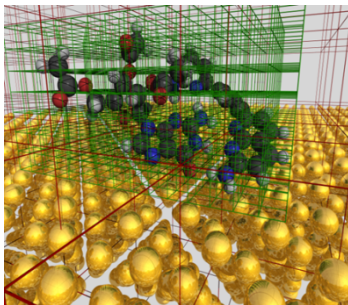
CURIE: The French contribution to PRACE



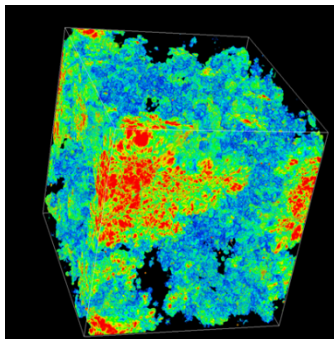
AIRAIN: CEA sharing risk with industry



Research

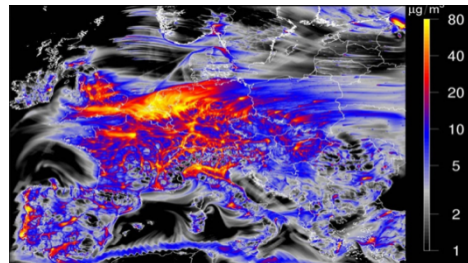


CEA/DSM

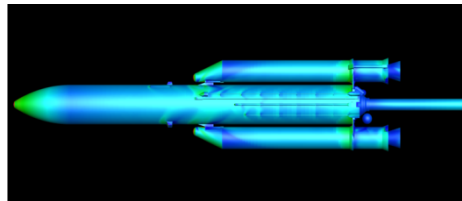
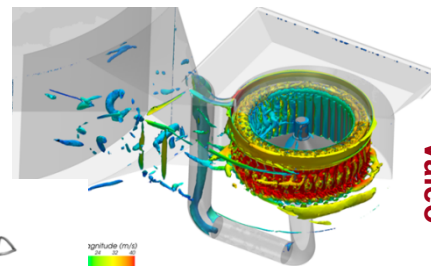


CEA/DSM

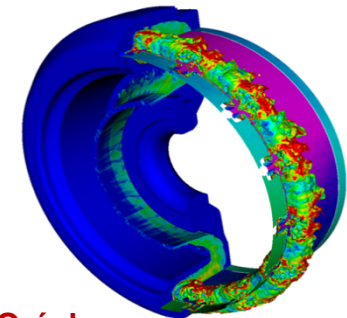
Industry



INERIS

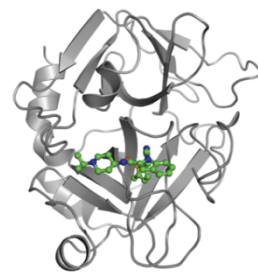


EADS/Astrium



Turbomeca

L'Oréal



CEA/DSV

Valéo

E-infrastructures: a boost for innovation

Upstream spin-off on the world class infrastructures

Co-design



TERA100: First petaflop/s computer designed in Europe



More than 120 HPC references across Europe, America, Africa and Asia since 2010



A significant industrial success
More than 1000 people hired by BULL

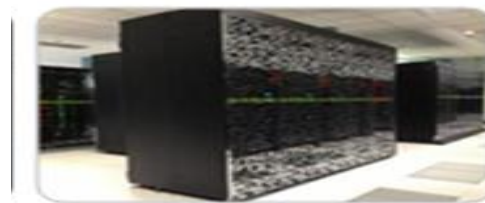
World class infrastructures over 1 petaflop/s



CURIE: 2 petaflop/s



HELIOS: x petaflop/s



Beaufix & Prolix



A platform to support the EU strategy: ETP4HPC

A cPPP signed between the Commission and ETP4HPC in december 2013



Led by European HPC Technology providers with an objective to build a competitive HPC value chain in Europe.

Strategic Research Agenda outlines the research priorities of European HPC on its way to achieve Exascale capabilities

A partner of the Contractual **Public-Private Partnership (cPPP)** for HPC the aim of which is **building a competitive HPC Eco-system in Europe** based on the provision of Technologies, Infrastructure and Applications.

Steering Board 15 members

48 members Jan. 2014
Companies, SME,
ISVs,
Service providers,
Research Centres

www.etp4hpc.eu

