

## ITER Industry Day 4 December 2017

Speech by Mrs Frédérique VIDAL, Minister of Higher Education, Research and Innovation

Honourable Commissioner Arias Cañete,

Ladies and gentlemen, members of the European Parliament,

Your excellencies,

Ladies and gentlemen, representatives of industry

Ladies and gentlemen,

I would first like to thank the European Commission and yourself, Commissioner Cañete, for your support of the ITER project and the organisation of this event focusing on the industrial impact of ITER.

**The ITER project is unique in many ways.**

It is unique from the perspective

to be held according  
to the Paris Agreement concluded two years ago on 12 December 2017 in Paris to mark the historic Paris Agreement concluded two years ago will show- and this point must be stressed that our 'HDä1 #Q!1

- with ITER being the  
flagship- have a twofold advantage. On the one hand, they remind us that we must invest with a long-term perspective in order to surpass the frontiers of knowledge and technology. On the other, they instil a degree of stability and thus act to promote peace through the international cooperation they create

As France is host to several large scientific instruments, such as the Laue Langevin Institute (ILL), the ESRF synchrotron, the National Large Heavy Ion Accelerator

**we need to go beyond the limits of technology to push the boundaries of science further.** These ambitious scientific adventures drive innovation and allow European industry to move forward and become even more competitive in the international arena. They also allow us to apply

The spoken word prevails

the resulting technologies in other scientific fields. For example, medical imaging techniques using nuclear magnetic resonance (NMR) benefit from progress made by the CERN's Large Hadron Collider (LHC), whereas the quest for the Higgs boson v ( ) š š ( Œ } u Z E [ • superconducting magnets and cryogenics. The ITER project is already producing nascent technological breakthroughs in robotics, materials, nondestructive testing, etc. There is no doubt these breakthroughs will have multiple uses not only in science but in society in general, far beyond the scope of fusion energy.

Æ The CERN's role to serve peace is well known beyond these walls. Our leaders' firm intention to bring the cold war to an end helped reach the decision to go forward with the ITER project. Major international collaboration, ITER being the largest, involving 35 countries, representing 85% of the world's GDP and more than 50% of the world's population - allow the scientists and engineers to live a unique human experience and to better understand the diverse cultures of countries that are participating.

Last of all, ITER is an industrial project of unprecedented proportions in terms of "firsts." Expected to operate for 35 years with a possible 10-year extension, the broad range of highly innovative technologies implemented in ITER, not to mention the size and the number of components to manufacture and assemble, represent a unique opportunity for businesses on two levels. It is an opportunity to build strategic alliances within the framework of lasting partnerships and to develop standards shared by all, making it possible to then confront the global market from a reinforced position.

ITER is therefore a scientific undertaking, a societal endeavor and an industrial project.

### **France provides strong backing for the ITER project.**

The new management led by Bernard BIGOT has deftly managed to put the project back on track.

The schedule for the new 'Reference Baseline' identifies the fastest possible solution to completion, with the first hydrogen plasma programmed for 2025 and the first deuterium tritium plasma for 2035. Gradually ramping up the operational phase of this extraordinarily complex machine resembles the approach used by CERN when it commissioned and ramped up the operation of its LHC accelerator, for which we were able to appreciate the benefits.

Ten years after the creation of the ITER Organization and the European domestic agency, Fusion for Energy (F4E), the 2<sup>nd</sup> ITER Council which recently convened confirmed the fact that the ITER project is now durably on track. Since 2016, the 26 project milestones defined by the ITER Council have been met in compliance with the project's overall schedule. In the few cases where some delay was anticipated in meeting a milestone, compensatory measures were taken to comply with the schedule leading to the first plasma in 2025.

The 10 year anniversary of Fusion of Energy gives me the opportunity to highlight this great joint European adventure centred on ITER and F4E. This project mobilises all the member countries of Euratom whose efforts I would like to commend, through Dominique Ristori and Gerassimos Thomas as well as Switzerland which has been involved from the very start. The twenty member states of Euratom and Switzerland are providing the ITER project with extremely cutting edge components.

France would like to thank the European Commission for its steadfast support of the ITER project. It also hopes that the Council of the European Union will approve the Commission

Æ The OMEGA consortium between Engie and the MW Group (Germany and the UK) which has secured the contract to supply the mechanical and electrical equipment for these buildings

**ITER is now entering a critical phase, in which all the various systems and components will be assembled and integrated into the machine**

It is vital to the success of the project that ITER can benefit from the expertise in this decisive phase. I strongly urge all companies involved, particularly French companies, to take this opportunity to develop new European partnerships.

This integration phase will also p