

# F4E-Ro initiative

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Euratom MEdC Association

# Context

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- ITER project: International Thermonuclear Experimental Reactor
- Objective:
  - to demonstrate the feasibility of a fusion nuclear reactor as safe energy source;
  - it should produce ten times more energy than it consumes;
- Temporal scale:
  - 2008-2040 : construction and scientific exploitation;
- ITER organization, agreement signed, consortium:
  - European Union, USA, Japan, China, India, Russian Federation, South Korea.

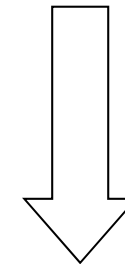
# ITER organization and Domestic Agencies



**ITER Organization**

## **Countries:**

European Union, USA, Japan, China, India, Russian Federation, Korea



*Discharge  
their  
contractual  
obligations  
towards ITER  
organization*

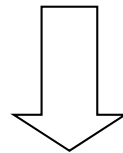
## **Domestic Agencies:**

Fusion for Energy-EU, ITER Korea, ITER China Office, Institute of Plasma Research-India, Fusion Research & Development Directorate-Japan, US ITER Project Office

# Contribution of the European Union

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- Cadarache - France, the place where ITER will be built;
- About 50% of ITER costs;
- Contribution to "Broader Approach" project: infrastructure to be built in Japan (three large projects for scientific and engineering validation ) in the ITER support



discharged through

F4E- Fusion for Energy- *European Joint Undertaking for ITER and the Development of Fusion Energy*- the European Domestic Agency in charge with the contribution of European Union to ITER realization

# Re-organization of the fusion programme in Europe

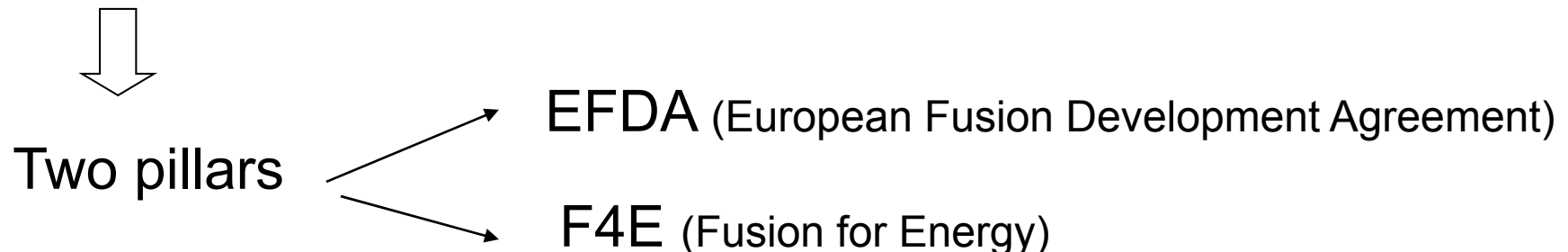
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- *Jerome Pamela, EFDA leader, about F4E institution:*

"The construction of the ITER project implies a significant reorganisation of the European fusion programme.

- The new organisation (i.e. F4E) will be based on this new Joint Undertaking in charge of providing Euratom's contribution to ITER construction on *the one hand*,

- and the European Fusion Development Agreement (EFDA) in charge of coordinating research in preparation of the scientific exploitation of ITER *on the other hand*, with the laboratories, the so-called Associations, providing the bulk of the competences and the scientific and technical work force;



# Perspectives for the present fusion research under F4E umbrella

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## F4E launches calls:

- Procurements ( 100% financial contribution of F4E);
- Grants, financial conditions:
  - For research and technological development activities, Fusion for Energy's financial contribution may reach a maximum of 40% of the total eligible costs.
  - For demonstration activities, Fusion for Energy's financial contribution may reach a maximum of 40% of the total eligible costs.

# Initiative to support the Romanian participation to F4E calls

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- Already there are Romanian projects accepted in F4E;
- The mechanism of national contribution to financing not yet established



- Creation of a Romanian module F4E- Ro, at Institute for Atomic Physics;
- Preparation of conditions for insuring the mechanism of national co-financing;



- Gather information about ongoing and future Romanian projects in F4E frame;
- A prediction of the annual costs is necessary, in order to propose to MEdC a budgetary planning.

Thank you for your attention and...  
we are waiting for your input !