

BSBF miniseries: a look into the future of Big Science infrastructures

On 4-7 October 2022, the top European Big Science research facilities will be meeting together with industry in Granada (Spain) in the [Big Science Business Forum 2022](#) to present their business opportunities for industry in the period 2022-2026, worth YY million euros. Industry will therefore learn about the Big Science investments in the coming years in different technology areas and benefit from the unique opportunity of networking with key representatives from the Big Science organisations and other stakeholders.

But what will come next? In this webinar series we take a leap to glimpse what the future might bring in terms of new facilities, experiments or upgrades and what challenges lie ahead of us. Representatives from different Big Science facilities will lay out in three episodes their research and development plans and future projects, providing industry a picture of their technology needs and opportunities for collaboration which will drive the Big Science market in the decades to come.

Episode 2: Strategic view, roadmaps and development programmes of Fusion Energy Research Infrastructures

It is expected that fusion could meet humanity's energy needs for millions of years. Fusion fuel is plentiful and easily accessible and will play a future climate change mitigating role as a low carbon energy source. How long it will take to recreate the process of the stars on the Earth? EUROfusion has developed a roadmap to align the priorities in fusion research and development towards the ultimate goal of achieving electricity from fusion energy; it recognises fusion energy as a potential long-term solution and understands that Europe needs to remain at the forefront of developing fusion technologies.

In the short to medium term, the key research infrastructure is the ITER project, a worldwide tokamak, which will demonstrate the scientific and technological feasibility of magnetic fusion. While the design of a demonstration fusion power plant DEMO is already on-going, high-performance –operation of ITER will give important input to fine tune the DEMO design. DEMO will demonstrate first electricity production to the grid by fusion.

A strong programme of accompanying research and innovation is needed alongside ITER and DEMO. An essential element in this respect is the realisation of a test facility, called IFMIF-DONES, for validating materials to be used in the harsh conditions of a fusion power plant. But also there are challenging technologies being developed by innovative companies such as Tokamak Energy and Commonwealth Fusion that could be paramount in the future of fusion energy.

In this webinar, we take a step ahead and identify the technologies that will drive these and other organisations' future projects, having a look at their strategies for the future and their research and development programmes and how industry can get involved in early phases.

Date: 11th November, 2021

Webinario ZOOM

Agenda

9:30-9:35	Welcome and introduction to speakers Belén – Spanish ILO for ITER and fusion related projects, CDTI, E.P.E.
9:35-9:55	European roadmap – DEMO Development Programme Tony Donné [EUROfusion Programme Manager]
09:55–10:15	ITER – Beyond the First Plasma Leonardo Biagioni (F4E Deputy Chief Financial Officer)
10:15–10:35	IFMIF- DONES Development Programme and future plans Ángel Ibarra (CIEMAT)
10:35-11:15	A DIFFERENT VIEW OF FUTURE FUSION DEVELOPMENTS Invited companies: Commonwealth Fusion (TBC) Tokamak Energy (TBC)
11:15-11:45	ROUND TABLE Moderated by Søren Bang , Danish ILO for ITER and Fusion ILOs Network Chair
11:45-11:55	##### Poll to the audience (slido) ##### (10 min) Poll on: “How to involve industry in early phases of the European roadmap”
11:55-12:00	Closing Belén – Spanish ILO for ITER and fusion related projects, CDTI, E.P.E.