



# Towards a Portuguese participation in the European Spallation Source (ESS) project



Instituto Tecnológico e Nuclear (ITN), 29<sup>th</sup> January 2010, at 09h45

## Synopsis

The European Spallation Source (ESS) which will be constructed in Lund, Sweden, is an international project involving several countries of the European Union.

The ESS project consists mainly of a proton accelerator, a spallation target, several neutron beam lines and associated spectrometers. The ESS programme will address a wide range of multidisciplinary, cross-cutting and leading edge scientific, technological and engineering topics and the associated experimental activities will be of relevance for several scientific and technological domains, like Energy, Environment, Health Sciences, Material Sciences, Physics and Chemistry, among others.

The involvement in the ESS project of institutions from the participating Member States will be performed in the design, construction and operation of the particle accelerator, the spallation target, the spectrometers and associated detectors, the electronics and instrumentation, the control and data acquisition systems amongst others.

The objectives of this meeting between the ESS project staff and Portuguese representatives from research institutes, scientific communities and industrial and engineering companies, will consist of:

- The presentation of the ESS project
- The assessment of the scientific, technological and engineering topics of potential interest to the Portuguese stakeholders
- The discussion of the potential involvement and participation of Portuguese institutions and companies in the design, construction and operation phases of the project

## Program

❖ 9h45: - Welcome Address and the ITN, *Julio Montalvão e Silva, President of ITN;* 15'

### The ESS project

❖ 10h00: - Overview and Scientific Outreach, *Colin Carlile, Director of ESS;* 30'

❖ 10h30: - Accelerator Technologies, *Mats Lindroos, Accelerator Design Coordinator;* 20'

❖ 10h50: - *Coffee break* 20'

❖ 11h10: - Beam Lines, Spallation Targets and Experiments, *François Plewinski, Project Engineer ESS;* 40'

### Portuguese Experience of Participation in International Scientific Projects

❖ 11h50: - Portugal & CERN:- Past, Present and Future, *Emir Sirage, Portuguese ILO at CERN;* 25'

❖ 12h15: - The Portuguese participation in the European Fusion Programme, *Bruno Gonçalves, Portuguese ILO at ITER;* 25'

❖ 12h40: - Training in Science and Engineering, *Filipa Coelho, Agência da Inovação;* 25'

❖ 13h05: - *Lunch* 75'

### Potential Portuguese Contributions to the ESS Project

❖ 14h20: - Areas and topics of interest for the ITN, *Pedro Vaz, ITN;* 20'

❖ 14h40: - Views and topics of interest for the Nuclear Physics community, *Daniel Redondo, CFNUL* 20'

❖ 15h00: - *Coffee break* 20'

❖ 15h20: - The ISQ Institute and Quality Control in Accelerators, *Oliveira Santos, ISQ Administrator* 20'

❖ 15h40: -The EFACEC Experience in Power Supplies for Accelerators, *Pedro Silva, EFACEC Administrator;* 20'

❖ 16h00: - Study and Prototyping of Power Supplies and Klystron Modulators, *Carlos Martins, CIEEE/IST;* 20'

### Summary and Concluding Remarks

❖ 16h20: - From the ESS Project Representatives 15'

❖ 16h35: - From the Portuguese Scientific and Industrial Community 15'

## Organizers

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