# ESS & MAX IV Cross Border Science and Society

Mid-term conference November 21, 2016

workpackage

**MAX4ESSFUN** 

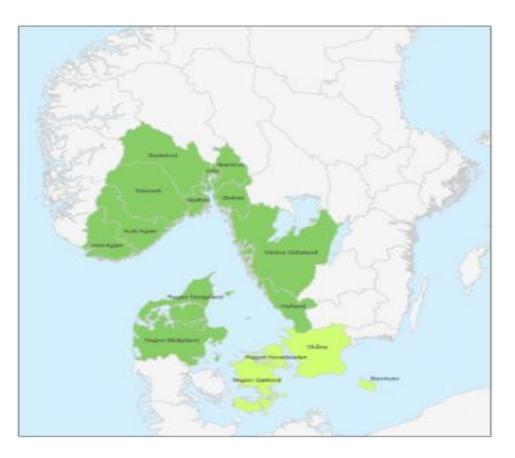








#### **ESS & MAX IV Cross Border Science and Society**



#### Overall goal of the project:

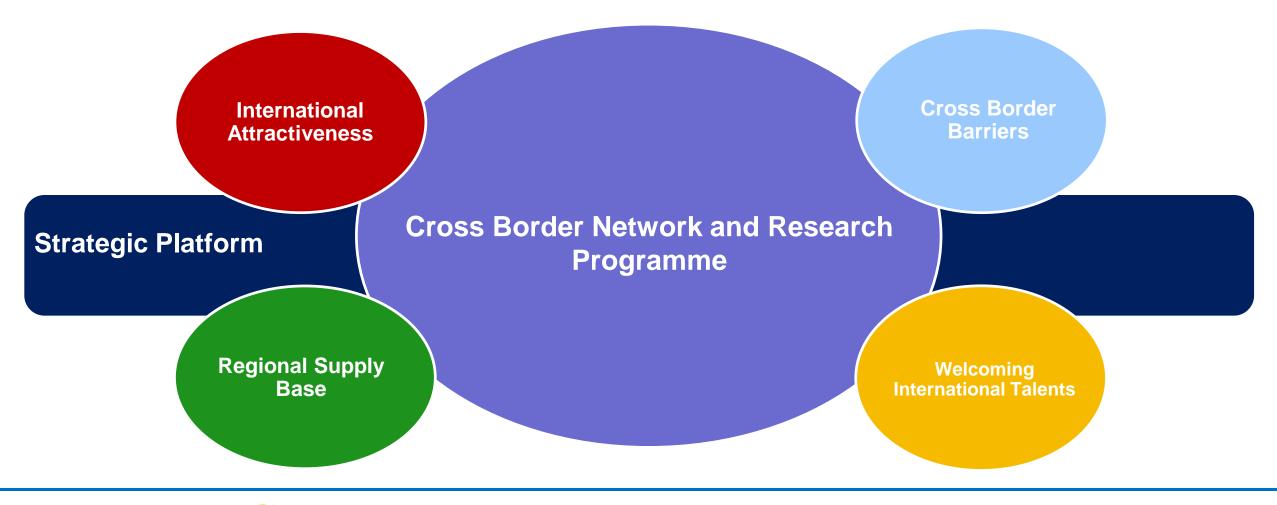
To make the ÖKS region internationally competitive in utilizing neutrons and synchrotron light for research and development in academia and industry.







#### ESS & MAX IV: Cross Border Science and Society

















## Workpackage 1 Cross regional research network and educational program

Strengthening of the neutron and synchrotron radiation user communities in the ÖKS region both in the width and in the heigth

Increase in cross-border regional collaborations

Growth in number of users of ESS and MAX IV neutrons and synchrotron radiation

How can this be achieved?







Gather the right partners with expertise in education in the use of neutrons and synchrotron radiation and stimulate the co-operation between the partners and education of young researchers.



































### **Activities of the work package**

- Cross border projects/experiments related to the use of neutrons and synchrotron light carried out by PhD students and postdocs
- Building a network of researchers within the neutron/synchrotron field
- Courses and international workshops

Steering Committee comprised of representatives of the ten partners







### Interreg reporting

The coordination team:

Ellen Juel Nielsen (KU), Kajsa Paulsson (LU)

Jeppe Baden (KU)

Contact us: max4essfun@chem.ku.dk







### **Activities of the Steering Committee**

- Workpackage acronym replacing: Cross border networking and educational program: MAX4ESSFUN
- 2. Proposals: Call text; evaluation procedures
- 3. Website (www.max4essfun.ku.dk) check for meetings of the Steering Committee
- 4. Database of researchers to facilitate networking
- 5. Workshops and Summer/winter schools







#### The projects – 176 "experiments"

- Every partner university has guaranteed co-financing of certain no. of experiments
- Preconditions for an experiment
  - Cross-border. You need to have a co-supervisor from another country or from one of the two facilities
  - If necessary, beamtime should be granted at an existing facility
  - Duration of the experiment = 6 months
  - Final approval of the experiment by the Steering Committee comprised of one representative per partner







#### Status of the proposals

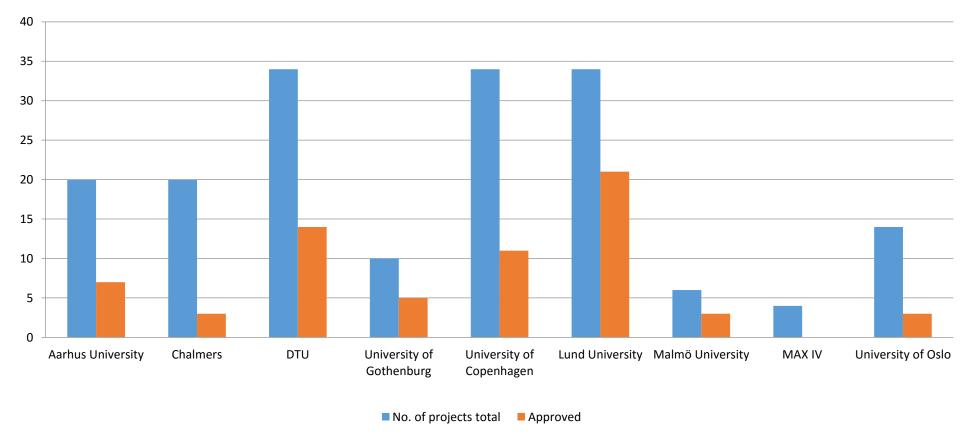
- 84 proposals received, 67 approved
- Relation to the use of neutrons and synchrotrons
- Cover a wide range of research from materials science to biology
- Based on both old and new collaborations
- Networking (Database)







### **Distribution of MAX4ESSFUN Projects**









#### **MAX4ESSFUN Database**

 Contains the researchers from the MAX4ESSFUN partners that are engaged in the use of neutrons and synchrotron radiation

Can be used to identify collaborators among the partners and for industry

Information is extracted from the databases at the individual partners

Researchers are identified by keywords







#### MAX4ESSFUN list of keywords

Research areas	Techniques
Hard condensed matter science	Imaging
Applied material science	Small Angle Scattering
Engineering	Diffraction
Chemistry	X-ray Spectroscopy
Soft condensed matter science	Neutron Spectroscopy
Life sciences	Reflectometry
Structural biology	
Medicine	
Earth science	
Environment	
Cultural heritage	
Methods and instrumentation	
Magnetism	







#### First MAX4ESSFUN workshop

Workshop on Synchrotron and Neutron Scattering in Biomaterials and Soft Matter

26 – 28 October 2016 in Malmö

171 participants







#### Planned workshops/summer schools in 2017

March: X-rays and neutrons in industry/Applied science: (MAX IV, ESS)

May-June: Magnetic and strongly correlated electronic behaviour (ESS,KU)

June 26-30: Nanoscience (KU, DTU, AU; ChTh, LU, MH, UiO, ESS)

August: Data collection in macromolecular crystallography (AU, UiO, ESS, MAX IV, KU, Astra Zeneca)

August/September: Imaging (DTU, MAX IV, GU, KU, LU, UiO)







#### **Networking in MAX4ESSFUN**

Workshops and summer schools

Start-up Meeting October 7, 2015

Annual Meeting October 6-7, 2016







