



Building a research infrastructure and synergies for highest scientific impact on ESS

Fact Sheet

Project Information

BrightnESS

Grant agreement ID: 676548

[Project website](#)

DOI

[10.3030/676548](https://doi.org/10.3030/676548)

Project closed

EC signature date

8 July 2015

Start date

1 September 2015

End date

31 August 2018

Funded under

EXCELLENT SCIENCE - Research Infrastructures

Total cost

€ 19 941 964,00

EU contribution

€ 19 941 964,00

Coordinated by

EUROPEAN SPALLATION
SOURCE ERIC

 Sweden

Objective

The science of materials has always been at the centre of scientific and technological progress in human development. The tools to understand materials that fashion them to meet our societal needs have been just as important. Thermal neutrons are one of the most powerful probes that look directly at the structure and dynamics of materials from the macro- to the microscopic scale and from nano-seconds to seconds. It is therefore natural that a group of 17 European Partner Countries have joined together

to construct the world's most powerful neutron source, the European Spallation Source (ESS). The importance of ESS has been recognised by ESFRI who have prioritised it as one of three Research Infrastructures (RIs) for this INFRADEV-3 call. However, simply constructing the most powerful spallation neutron source will not, by itself, ensure the maximum scientific or technological impact. What is needed is an integrated program that ensures that key challenges are met in order to build an ESS that can deliver high impact scientific and technological knowledge. With a timeline of 36 months, involving 18 Consortium Partners and a budget of € 19.941.964 the BrightnESS proposal will ensure that (A) the extensive knowledge and skills of European companies, and institutes, are best deployed in the form of In-Kind Contributions to ESS for its construction and operation, (B) that technology transfer both to, and from, the ESS to European institutions and companies is optimised and, (C) that the maximum technical performance is obtained from the ESS target, moderators and detectors in order to deliver world class science and insights for materials technology and innovation.

Fields of science (EuroSciVoc)

[natural sciences](#) > [physical sciences](#) > [theoretical physics](#) > [particle physics](#) > [neutrinos](#)

[natural sciences](#) > [computer and information sciences](#) > [software](#)

[social sciences](#) > [sociology](#) > [governance](#) > [taxation](#)

[social sciences](#) > [law](#)



Keywords

[IKC coordination](#)

[Innovation](#)

[ERIC](#)

[TTO](#)

[PCP](#)

[Key neutronic technologies](#)

[Detectors](#)

[Helium 3 crisis](#)

[Moderators](#)

[Realtime data management](#)

[Enlargement of membership](#)

[ILO](#)

Programme(s)

[H2020-EU.1.4. - EXCELLENT SCIENCE - Research Infrastructures](#)

MAIN PROGRAMME

[H2020-EU.1.4.1.1. - Developing new world-class research infrastructures](#)

Topic(s)

[INFRADEV-3-2015 - Individual implementation and operation of ESFRI projects](#)

Call for proposal

[H2020-INFRADEV-2014-2015](#)

[See other projects for this call](#)

Sub call

H2020-INFRADEV-1-2015-1

Funding Scheme

[RIA - Research and Innovation action](#)

Coordinator



EUROPEAN SPALLATION SOURCE ERIC

Net EU contribution

€ 10 094 672,75

Total cost

€ 10 094 672,75

Address

ODARSLOVSVAGEN 113

224 84 Lund

 Sweden 

Region

Södra Sverige > Sydsverige > Skåne län

Activity type

Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

Participants (17)



CESKE VYSOKE UCENI TECHNICKE V PRAZE

 Czechia

Net EU contribution

€ 170 500,00

Address

JUGOSLAVSKYCH PARTYZANU 1580/3

160 00 Praha 

Region

Česko > Praha > Hlavní město Praha

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 170 500,00



KOBENHAVNS UNIVERSITET

 Denmark

Net EU contribution

€ 694 560,00

Address

NORREGADE 10

1165 Kobenhavn 

Region

Danmark > Hovedstaden > Byen København

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 694 560,00



TEKNOLOGISK INSTITUT

 Denmark

Net EU contribution

€ 512 965,00

Address

GREGERSSENSVEJ 1
2630 Taastrup 

Region

Danmark > Hovedstaden > Københavns omegn

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 512 965,00



COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES

 France

Net EU contribution

€ 544 641,25

Address

RUE LEBLANC 25
75015 PARIS 15 

Region

Ile-de-France > Ile-de-France > Paris

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 544 641,25



INSTITUT MAX VON LAUE - PAUL LANGEVIN

 France

Net EU contribution

€ 668 937,50

Address

71 AVENUE DES MARTYRS

38000 Grenoble 

Region

Auvergne-Rhône-Alpes > Rhône-Alpes > Isère

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 668 937,50



FORSCHUNGSZENTRUM JULICH GMBH

 Germany

Net EU contribution

€ 457 090,00

Address

WILHELM JOHNEN STRASSE

52428 Julich 

Region

Nordrhein-Westfalen > Köln > Düren

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 457 090,00



HUN-REN WIGNER FIZIKAI KUTATOKOZPONT

 Hungary

Net EU contribution

€ 1 478 687,50

Address

KONKOLY THEGE MIKLOS UT 29-33

1121 BUDAPEST 

Region

Közép-Magyarország > Budapest > Budapest

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 1 478 687,50



ELETTRA - SINCROTRONE TRIESTE SCPA

 Italy

Net EU contribution

€ 919 625,00

Address

SS 14 KM 163.5 AREA SCIENCE PARK

34149 Basovizza Trieste 

Region

Nord-Est > Friuli-Venezia Giulia > Trieste

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 919 625,00



ISTITUTO NAZIONALE DI FISICA NUCLEARE

 Italy

Net EU contribution

€ 363 125,00

Address

Via Enrico Fermi 54

00044 Frascati 

Region

Centro (IT) > Lazio > Roma

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 363 125,00



TECHNISCHE UNIVERSITEIT DELFT

 Netherlands

Net EU contribution

€ 297 858,75

Address

STEVINWEG 1

2628 CN Delft 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 297 858,75



CONSORCIO PARA LA CONSTRUCCION, EQUIPAMIENTO Y EXPLOTACION DE LA SEDE ESPANOLA DE LA FUENTE EUROPEA DE NEUTRONES POR ESPALACION

 Spain

Net EU contribution

€ 498 125,00

Address

CL BIZKAIKO TEKNOLOGI ELKARTEGIA 207 B-SS-2

48160 Derio 

Region

Noreste > País Vasco > Gipuzkoa

Activity type

Research Organisations

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 498 125,00



LUNDS UNIVERSITET

 Sweden

Net EU contribution

€ 459 187,50

Address

Paradisgatan 5c
22100 Lund 

Region

Södra Sverige > Sydsverige > Skåne län

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 459 187,50



MITTUNIVERSITETET

 Sweden

Net EU contribution

€ 251 750,00

Address

HOLMGATAN 10
85170 Sundsvall 

Region

Norra Sverige > Mellersta Norrland > Jämtlands län

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 251 750,00



PAUL SCHERRER INSTITUT

 Switzerland

Net EU contribution

€ 1 143 766,25

Address

FORSCHUNGSTRASSE 111

5232 Villigen Psi 

Region

Schweiz/Suisse/Svizzera > Nordwestschweiz > Aargau

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 1 143 766,25



UNITED KINGDOM RESEARCH AND INNOVATION

 United Kingdom

Net EU contribution

€ 484 250,00

Address

POLARIS HOUSE NORTH STAR AVENUE

SN2 1FL Swindon 

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 484 250,00



ORGANISATION EUROPEENNE POUR LA RECHERCHE NUCLEAIRE

Switzerland

Net EU contribution

€ 715 375,00

Address

**ESPLANADE DES PARTICULES 1 PARCELLE 11482 DE MEYRIN BATIMENT CADASTRAL
1046**

1211 Meyrin

Region

Schweiz/Suisse/Svizzera > Région lémanique > Genève

Activity type

Research Organisations

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

€ 715 375,00



DANMARKS TEKNISKE UNIVERSITET

Denmark

Net EU contribution

€ 186 847,50

Address

ANKER ENGELUNDS VEJ 101

2800 Kongens Lyngby

Region

Danmark > Hovedstaden > Københavns omegn

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

€ 186 847,50

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European Union, 2025

