



Welcome & opening of BrightnESS² GA

Update on ESS

PRESENTED BY JOHN WOMERSLEY
17 DECEMBER 2020

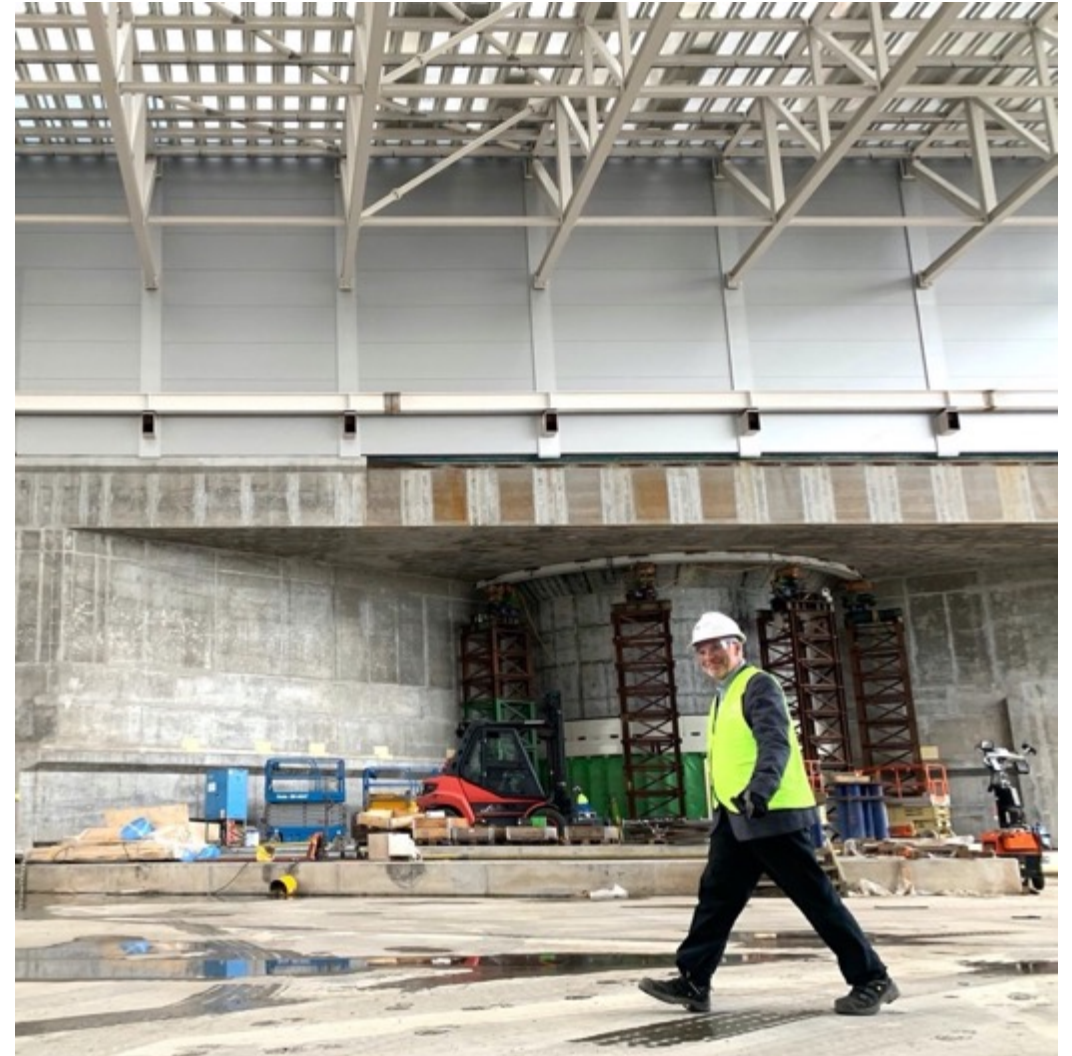


ESS status in a nutshell



Despite the many challenges of 2020, ESS has continued to make **significant progress** on delivering the project

- ESS construction is now **75% complete**
- ESS technical staff working with appropriate **distancing measures in place**
- **Work by in-kind partners underway**, though still impacted by Covid-19
- **Travel for In-kind staff remains a challenge**
- Rolling wave planning showing **delays of 3-9 months** - so far
- Will rebaseline our schedule in 2021



Covid-19 update



- From September 1 we increased the ESS office population to roughly 50% occupancy, with appropriate distancing measures in place, but **re-imposed full work-from home for office staff on November 1**
- Some **in-kind staff** are able to travel and work in Lund again, NCL commissioning resumed – but still many **travel issues**
- **An increasing number of staff members and contractors are now testing positive.** Considering additional measures in January (face masks?)
- Continuing to actively **monitor and respond to the evolving situation** in Europe
- **Tracking the impact on our cost and schedule,** and taking proactive measures to minimise



Conventional Facilities

Project Highlights



- D03 Main Control room, and Highbay enclosed.
- The last of the iconic tower cranes was dismantled and the very last heavy concrete casting on our construction site was poured – a defining moment for the project.

- Roof works completed in H09
- Radioactive Waste building

- D03 Experimental Hall 2, roof is on and panel walls almost complete
- Erection of cantilever roof started

**Skanska is working at 85-90% staffing level
Some supply chain delays continuing**



Accelerator

Permit for trial operation of NC Linac received!



First Spoke RF station at TS3, already operating at 350 kW. All of MB waveguide runs have been tuned, Electrical installation (cable pulling) started in SPK and MBL. First spoke CM is under test in Uppsala.



Target

Project Highlights



Target wheel ribs in place and tack welded. Tested with dummy cassette



Neutron Beam Port Blocks
20 of 39 tubes have passed pressure and leak tests



Monolith Vessel
Arrived in Lund, lower half now installed

NSS

Project Highlights



R6 bunker system installed in D01 and D03, Electrical infrastructure installation started in E01. Labs and workshops in E03, E04 – work started again.



NMX cave completed construction and **Bifrost** started, **Bunker** manufacturing is preparing for pre-assembly of West wall in Hungary.

Integrated Control Systems (ICS)

Project Highlights



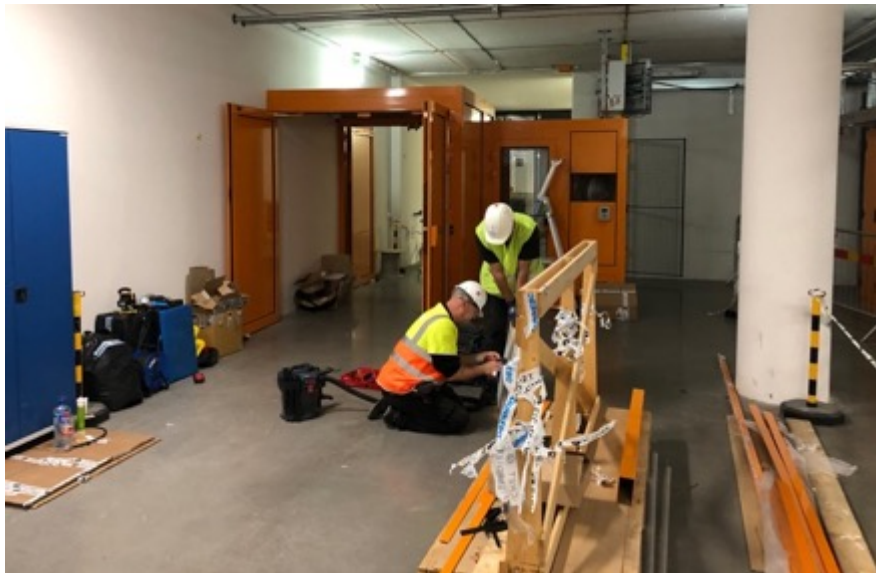
Development of standardised EPICS (E3) environment has matured



Activities in 8 ongoing projects are progressing according to plan



Components installed and SAT completed, energization of one of the server room's switch gear was conducted

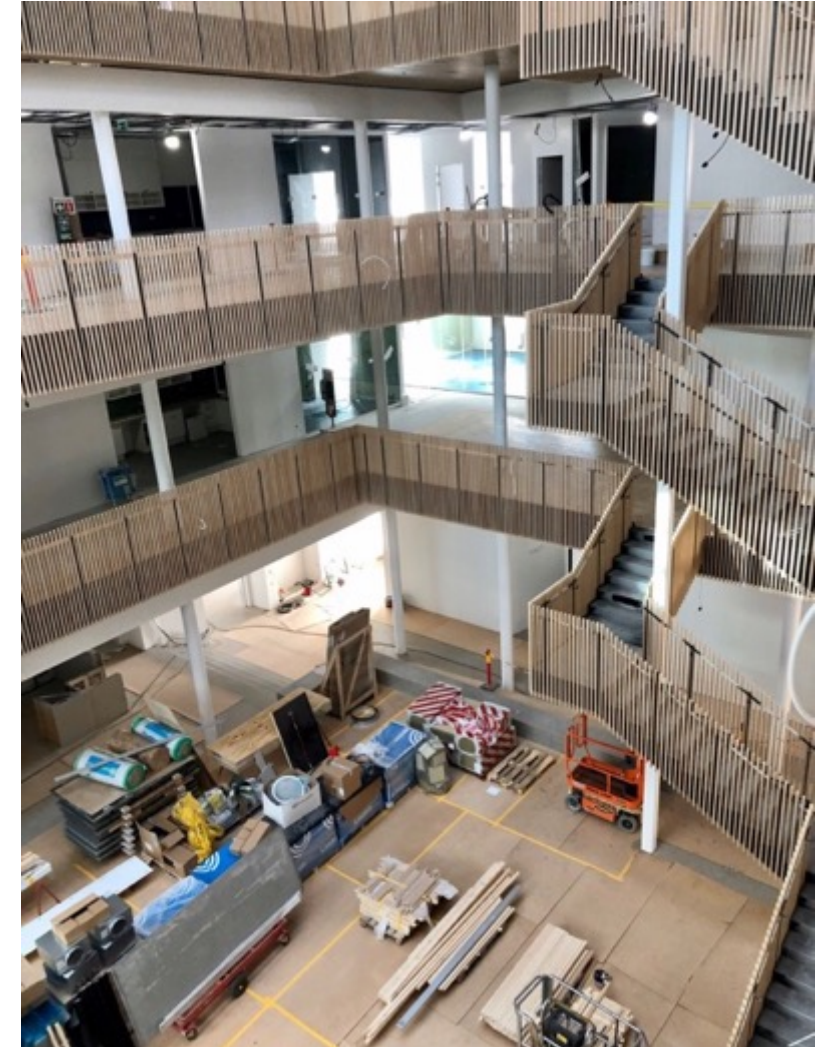
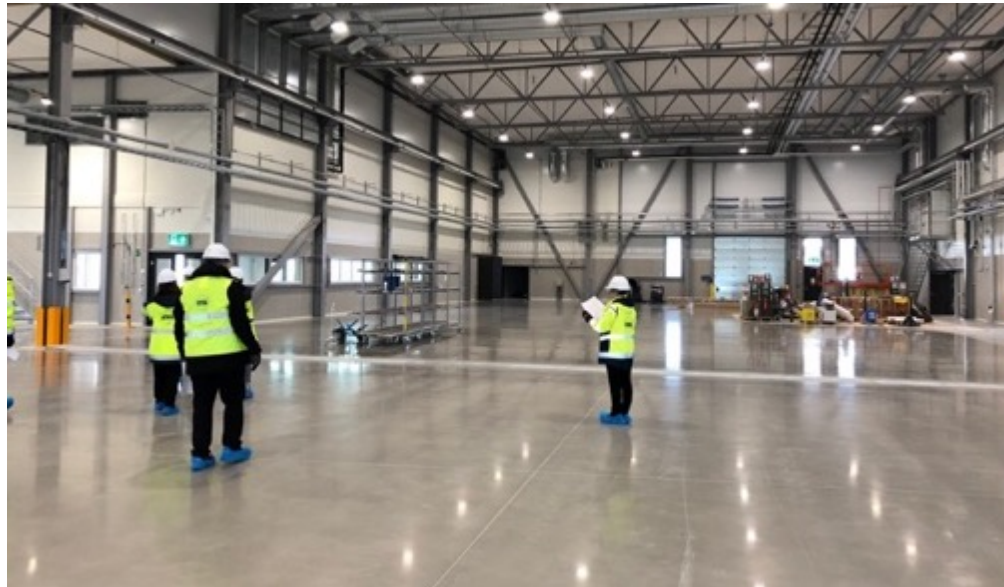


PSS gates

Campus

Project Highlights

- Internal fit-out underway
- Complete by Christmas
- Occupancy in Q1 2021



Bi-annual ESS-ILL user meetings



#1 10-12 October 2018, Grenoble

hosted by ILL

Focus sessions

- Scientific Potential for Combined or In-Situ Neutron Spectroscopy
- Laue Diffraction for Biology
- Laue Diffraction for Materials
- Spectroscopy in Biological Systems
- Imaging



Credit: Marie Ramparany, ILL

#2 23-25 September 2020, online

Jointly hosted by ESS and ILL

Topical workshops in Oct./Nov.

- ESS - ILL Topical Workshop on Fundamental and Particle Physics
- ESS - ILL Topical Workshop on Chemistry and Magnetism
- ESS - ILL Topical Workshop on Imaging, Materials and Engineering
- ESS Polarisation Workshop
- GISANS Meeting

777 registrants, 508 Zoom accounts active (not all times)

~ 350/session of which ~ 85 via YouTube

NEUTRONS for Europe
**USER MEETING
2020**

ILL ESS

More information
neutrons4europe.com

The next physical joint user meeting will be hosted by ESS in Lund in 2022



**Merry Christmas
and a Happy New Year
2021!**