

## The European Spallation Source

John Womersley, Director General February 2018



### Outline



- Status update
- Organisation of installation
- Progress towards rebaselining
- Goals for 2018
- Funding for completion of construction and initial operations





## Target Monolith





## **Active Cells**





## E-buildings (long instrument halls)







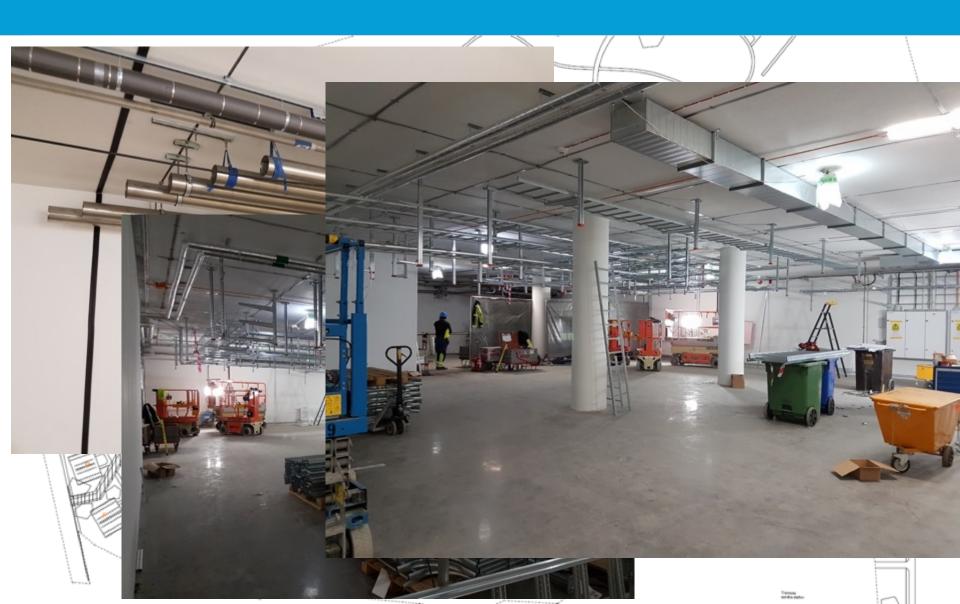
## Ion Source Delivery December 2017

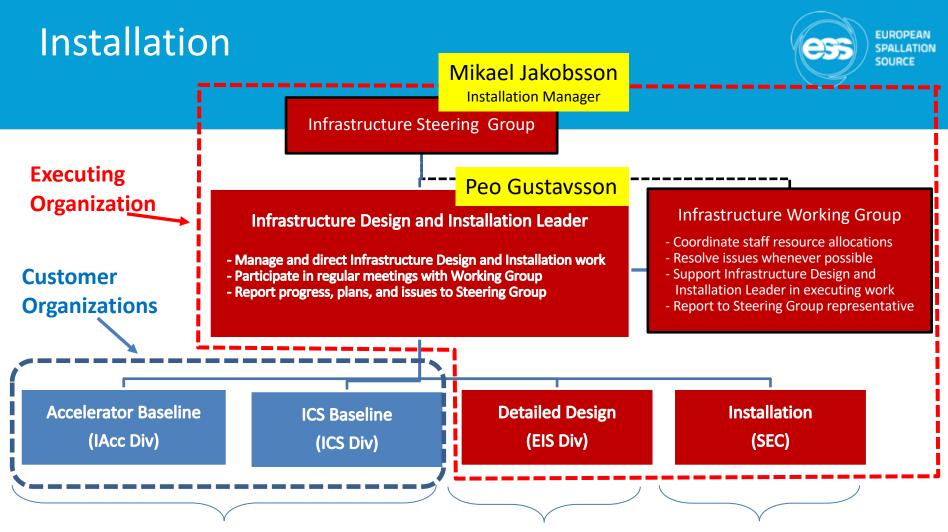




## Front End Building Installation work







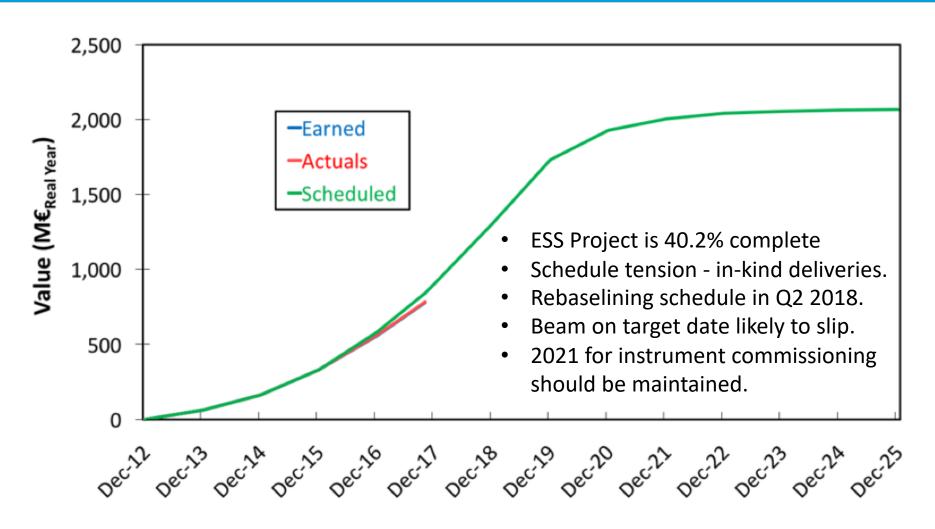
- Set overall design concept (CAD model) and requirements
- Approve Detailed Design Drawings
- Approve field (installation) changes

- Establish design plan
- Create detailed design models and assembly and installation drawings
- Approve field (installation) changes
- Create as-built models

- Establish installation plan
- Perform installation work
- Provide buildability input to Detailed Design team

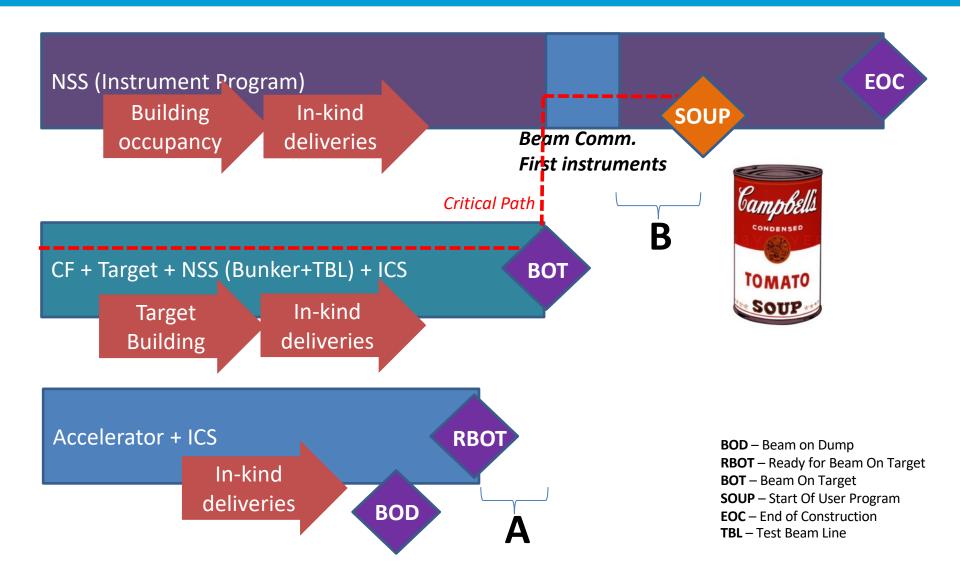
### ESS schedule





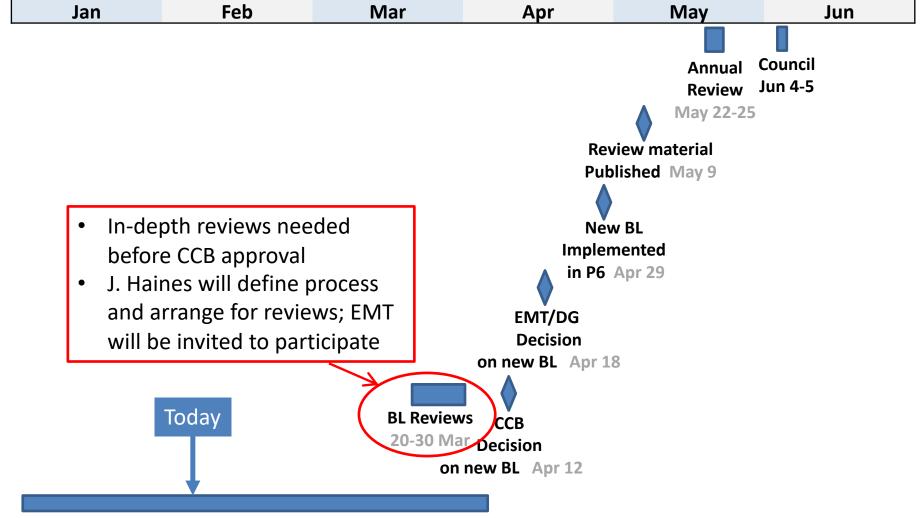
### Rebaselining Schedule













#### ESS project

- Construction > 50% complete in December
- A detailed plan for first two years (2019 & 2020) of Initial Operations ready end of 2018
- Secured funding for completion of construction and initial operations funding
- Detailed plan and new working processes for integrated installation following lessons learned in Front End building

#### Conventional Facilities

- All in-situ concrete works for target building D02 ready (doesn't mean target building is ready)
- All E buildings weather tight

#### Accelerator

- Start of commissioning of ion source and LEBT
- Test Stand 2 ready for testing cryomodules
- RFQ installed and ready for conditioning



#### Target

- complete manufacturing and Factory Acceptance Tests of Moderator plug,
  Cryo-Moderator System and Cryoplant.
- Delivery of Helium Compressor on site.

#### **Integrated Control Systems**

 temporary control room operational for the needs of accelerator commissioning.

#### Instruments

All instruments have started Tollgate 3 process and begun procurement

#### **Project Support & Administration**

- Establish Campus project including financing
- Staff plan for the Initial operations phase
- Move ESS Lund organisation to site, incl up and running infrastructure
- Clarify and actively work towards solving remaining issues related to VAT as well as tax issues on seconded and in-kind staff.



#### ESH&Q

Submit to SSM the application for the trial operations of the Warm Linac

#### Communications

 Strategic communication plan developed by new Head of Communications – and endorsed by Council by end December

#### High level planning

- Revised schedule baseline for the ESS construction/initial ops that is deliverable but minimises delays to start of user operations (with external review in May)
- Agreement with Council on modified milestones for construction and initial ops.
- Establish sustainable plan and funding for Completion of Construction secured in December
- Initial ops budget 2019 and 2020 secured in June
- General scheme ops 2021 2025 agreed with Council in December at the latest



#### ESS membership

- Secure Spain as an ERIC member
- Reach preliminary agreement with Canada on the way forward
- Open discussion with one more country with an indicative route towards an agreement with ESS

Strengthened ESS position in the European Science and innovation landscape

- Joint user meeting with the ILL
- Take an active role in the preparation of the FP9.
- Detailed planning together with ILL to establish a neutron initiative (like "LEAPS") that is recognised by the commission in their planning for the FP9

### **ESS Council December 2017**

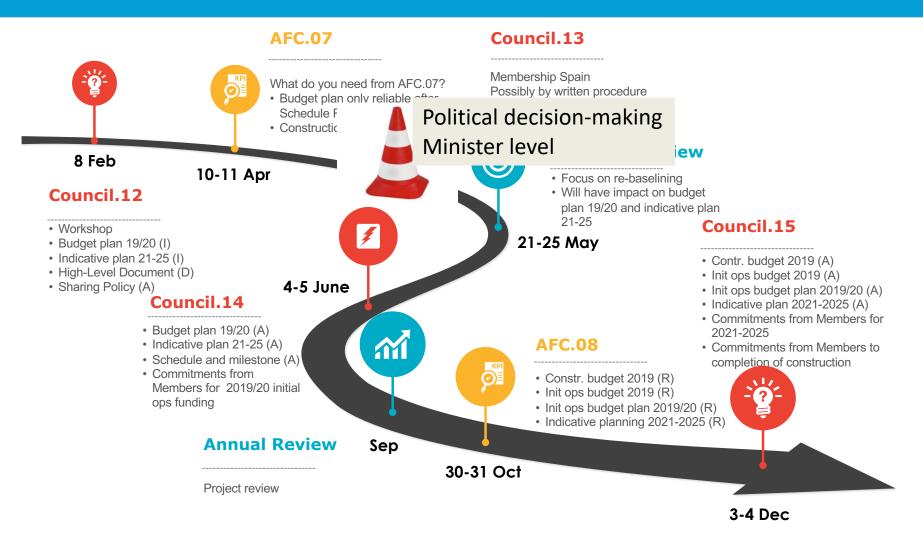
- Council were informed at the meeting about the financial status of the project and took note of the challenges that have arisen.
- These are related to the impact of new construction requirements covering radiation safety and an increased attention to security.
- Council thanked management for the large amount of work done in evaluating the impact of these issues.
- Council agreed to continue to address these challenges with a goal of resolving them by the end of 2018.
- Council also discussed the initial operations funding for the facility, which will start in 2019 as foreseen.





## ESS Council Strategy workshop February 2018







# Thank you!

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