

## Site Visit for UK SBS PR19062 Super Insulated Vacuum Lines (SIVL)

### Background

As detailed in the Invitation to Quote (ITQ) for the above tender, a site visit for potential bidders who expressed interest and confirmed attendance was held at 13:00 on Tuesday 9<sup>th</sup> July 2019 at the Rutherford Appleton Laboratory, Harwell Campus, Didcot, OX11 0QX, United Kingdom.

The session lasted for one and a half hours and covered the following agenda:

- Technical Presentation  
*A summary of the requirement in Power Point presentation*
- Questions and Answers  
*An opportunity for potential bidders to ask any further questions of clarification and receive responses from the UKRI-STFC project team*
- Overview of STC-2 and STC-3  
*A walk around the facility to gain a greater understanding of the install location*

Present from UKRI-STFC and UK SBS were the following:

Ryan Garrattley – Senior Project Manager (RAL Space, UKRI-STFC)  
Gary Williams – (RAL Space, UKRI-STFC)  
Mark Tucker – (RAL Space, UKRI-STFC)  
John Gallagher – (RAL Space, UKRI-STFC)  
Stephanie Davies - Category Specialist (UK SBS)  
Alistair Staunton-Lambert – Category Manager (UK SBS)  
Ilkay Akhtar – Procurement Specialist (UK SBS)

### Presentation and Questions & Answers

Ryan Garrattley gave a short presentation summarising the technical requirement. The Power Point presentation is now available as a separate attachment within Emptoris. Please see: *UK SBS PR19062 Site Visit Presentation.pptx*

During and following the presentation, questions 1 – 4 were asked and answered.



1. When is installation required by?

A: Please refer to section 13 of the Statement of Work, which addresses this. Although installation is required by 20 weeks and preferred by 16 weeks, it is beneficial to the Contracting Authority for installation to be earlier.

2. Can you confirm that the reference to duration is from the contract award date?

A: Yes, that is correct.

3. Contract award is in August, is that correct?

A: As referenced in the ITQ, we anticipate a contract award date of 19<sup>th</sup> August 2019, unless otherwise stated.

4. There is the option for the STC-2 requirement. If a bidder chose not to provide a quotation for the STC-2 option, would that automatically exclude them from this opportunity?

A: No, providing a quotation for the modification of SIVL for STC-2 is purely optional, and not providing a quote for the option would not exclude a bidder from this opportunity.

### [Overview of STC-2 and STC-3](#)

Potential bidders were then taken on a short tour to see the install locations at STC-2 and STC-3. During this tour, questions 5 – 7 were asked and answered.

5. What value will the burst disc be set to and where will it vent to?

A: The PRV and burst disc release pressures shall be set to reasonable and not-excessive values greater than 4 bar which is the release pressure for the burst disc on the phase separator. There is no requirement for this to be pumped away, as it will be released in to the atmosphere.

6. Questions were raised regarding the connections to the existing bayonet interface on the phase separator and the door boxes.

A: Please refer to section 7 of the Statement of Work, which addresses this.



7. What access equipment is there for installation?

A: Please refer to section 8 of the Statement of Work, which addresses this.

Please also see the photographs of the facility taken during the site visit which may be of use in preparing a bid, considered in conjunction with the above and the tender specification.



Image 1



Image 1 shows the SIVL entrance hole in a body valve-box which attaches to the lower side of the chamber STC-3.

Image 2



Image 2 shows some valves inside a body valve-box where these connect to the liquid feedthroughs on the chamber port (see image 4).

Image 3



Image 3 shows a possible route for the SIVL drop to the lower body valve-boxes on one side of the STC-3 chamber. See image 6 which shows existing routing as installed on STC-2.

Image 4



Image 4 shows some body valve-boxes (one lower and one upper) and, behind, the liquid feedthroughs on a port on the lower side of STC-3.

Image 5

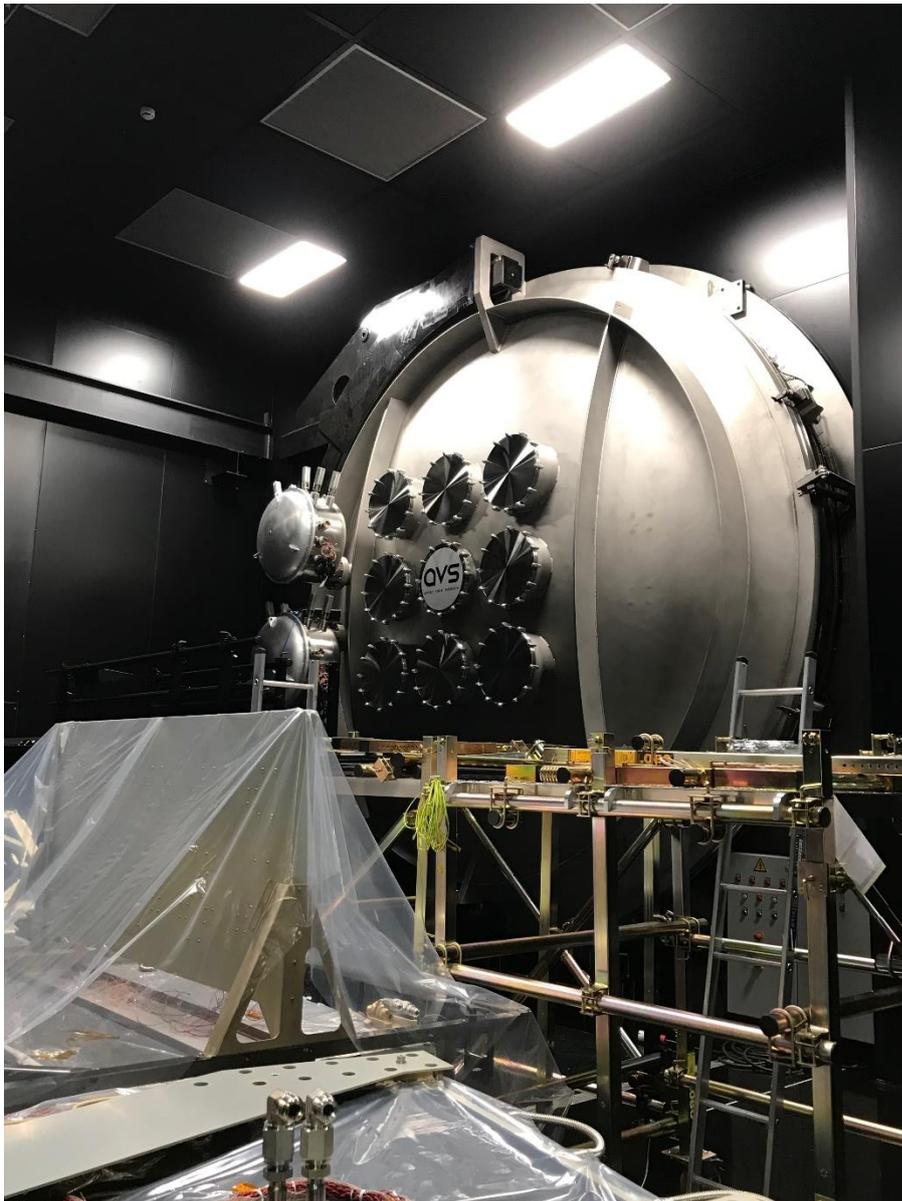


Image 5 shows the new vacuum-insulated door valve-boxes near the hinge on the dark-side door of STC-3.

Image 6



Image 6 shows the upper part of the flexible portions of the SIVL for the drop to the body valve-boxes on the lower part of STC-2.

Image 7

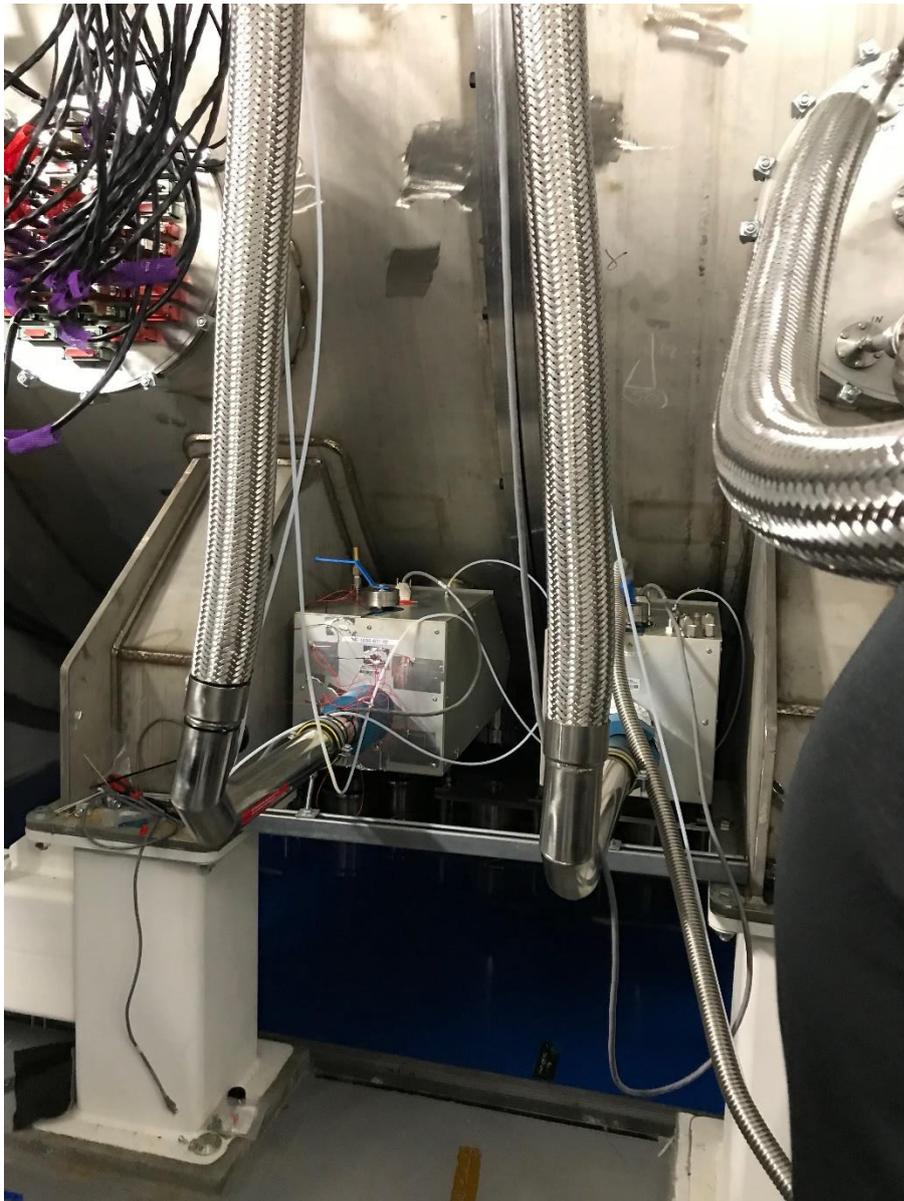


Image 7 shows the lower part of the flexible portions of the SIVL for the drop to the body valve-boxes on the lower part of STC-2.

Image 8



Image 8 shows the phase separator for STC-2.

Image 9



Image 9 shows the phase separator for STC-3.

Image 10



Image 10 shows the connections on the underside of the STC-3 phase-separator as seen from the mezzanine floor.

Image 11



Image 11 shows the connections on the underside of the STC-3 phase-separator as seen from the mezzanine floor. The top of chamber STC-3 is also visible.

Image 12

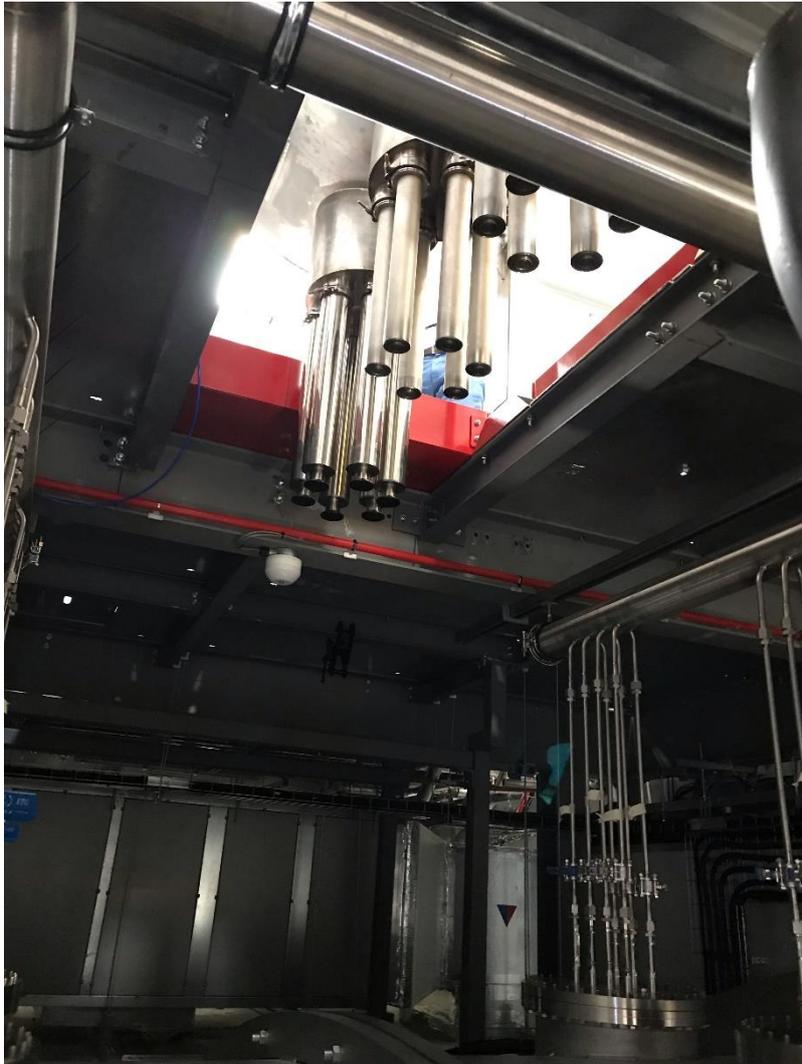


Image 12 shows the connections to the underside of the STC-3 phase-separator as seen from the platform around the chamber STC-3 and below the mezzanine floor.

Image 13



Image 13 shows some liquid feedthroughs on a chamber port for a valve-box on the upper side of the chamber STC-3.

Image 14



Image 14 shows the connections to the underside of the STC-3 phase-separator as seen from the platform around the chamber STC-3 and below the mezzanine floor. This is a wider view than the close-up in image 12.

Image 15



Image 15 shows available space for possible routes of the new SIVL for STC-3.

Image 16



Image 16 shows the existing rectangular door valve-boxes on the white-side door of STC-2. These will be replaced with vacuum-insulated valve-boxes, as already installed on STC-3. The requested option includes the modification of the existing pipework & SIVL which would be required to interface to the future door valve boxes.