

## SKADI Cost-Setting Meeting

**Meeting Date**  
29/09/2016

**Location**  
ESS HQ, Stora Tuna

**Chairman**  
Andreas Schreyer

**Attendees**  
Ken Andersen, Oliver Kirstein, Andreas Schreyer,  
Richard Hall-Wilton, Phillip Bentley, Gabor Laszlo,  
Shane Kennedy, Andrew Jackson, Nikolaos  
Tsapatsaris, Sebastian Jaksch, Henrich Frielinghaus,  
Romuald Hanslik, Andreas Wischnewski, Matthias  
Röder, Jacques Jestin

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Agreement could not be reached on a cost book value for SKADI, given the budgetary information provided. The following points were made by the ESS Director for Science during the close-out session:

- The experience of the SKADI scope-setting and cost-setting meetings has taught us that the proposed scope and budget need to be frozen between submission of the scope-setting report and the meeting itself. The deadline for submission of the scope-setting report is 2 weeks prior to the meeting. Any extension of that deadline needs to be agreed with ESS management. After that deadline, no further changes to the descriptions and costings will be accepted. The information presented at the meeting must be consistent with the content of the accepted scope-setting report.
- The expectation from ESS, following the June scope-setting meeting was that the instrument team would lower the estimate of the shielding cost and that the rest of the instrument project would be largely unaffected. The information presented at the cost-setting meeting did not meet that expectation.
- ESS management offers the SKADI instrument team a cost book value of 11.0 M€, including 10% contingency (1.1 M€), but not including the value of the detector modules supplied by the SoNDe project.
- The proposed cost book value covers the scope agreed at the June scope-setting meeting, outlined below, as well as the most essential sample environment equipment (SANS magazines, manpower, infrastructure) costed at approximately 250 k€.
- It is felt that there are significant cost savings to be made on the detector, which should be taken into account in the budget. The purpose of the contingency is to cope with the eventuality of not achieving that and other cost savings.
- It is also felt that there is potential for significant cost savings in shielding, neutron optics and other areas.

- A cost book value of 11 M€ constitutes a significant increase in budget, compared to the numbers presented in the June scope-setting meeting. This increase should be sufficient to cover the inclusion of essential items omitted at that time, and will allow a world-leading instrument to be built.
- ESS management encourages the instrument team to adjust their schedule so as to allow the instrument to start hot commissioning in 2021.
- All labour should be costed at ESS cost book labour rates.

Agreement was reached that the instrument team will provide an answer to ESS management by the end of the day on Wednesday 5<sup>th</sup> of October 2016 on whether the scope and cost book value outlined here are accepted.

Summary of scope agreed at SKADI scope-setting meeting on the 20<sup>th</sup> of June 2016:

- 1m<sup>2</sup> of detector arranged in a balanced way
- relaxed width of footprint at front end: >6deg
- polarised beam with polariser in first collimation section, no polarisation analysis (PA)
- 2m inner diameter tank (to allow 1m<sup>2</sup> square detector)
- moveable detectors (includes motion control)
- all choppers
- cold commissioning
- upgradeable to full scope: full detector coverage, PA, full sample environment