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ESTIA TG2 comments from ESS Technology Groups

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Nov 18, 2016 Preliminary Public

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1. ESTIA TG2 COMMENTS FROM ESS TECHNOLOGY GROUPS

SAD (Scientific Activities Division) Team:

Attached: TG2_checklist_SAD_ESTIA.xls

Comment from Arno Hiess:

As far as Science Support Systems are concerned Zoe as the SAD instrument contact worked with the team. The team has taken the SAD reference documentation into account and corresponding check list is attached. The only open questions relate to the supplies are mentioned and included in the WBS. Also budget is attributed at various places in the WBS (and the corresponding excel file). Though we cannot judge if this is sufficient for all supplies incl. the specific needs for sample environment. Also the details for the labyrinths through the shielding will require more details later in the project. The instrument relies on the common infrastructure and labs e.g. does not mention the need for specific ventilation and exhaust through the stack. Zoe is working with the ESTIA team on these minor open questions.

I understand that I have to cover for Stuart in respect to safety relevant aspects. I am happy to do so but have not received any input. The instrument does not present any particularities. Most components are either in the bunker or the guide shielding and the maintenance shall follow on the generic work procedures for guides, choppers, shielding etc. Several doors (door, sliding roof) provide access to the instrument cave and the latter clearly need to have access control - as any other instrument. No specific hazard analysis has been performed.

NOSG (Neutron optics and shielding) Team:

No attachment.

Comment from Phil Bentley:

The issues with ESTIA:

1. They evidently did not perform the work in consideration of NOSG document ESS-0059811.

2. There is no mention of H1/H2 scenarios according to said document

3. Whilst the concept and work by the team, and by the experts at PSI, is of a good standard, it is not acceptable to send only one concept as "the" concept with no quantitative comparisons of risk, performance, cost. There is an appendix at the end that seems to attempt to address why their concept is better than a focus-defocus system (perhaps from some interactions with Damian) but it is an insufficient comparison.

4. There is no version control for the design work residing on ESS repositories.

Chopper Team:

Attached: Neutron Chopper Systems_TG2_Review_ESTIA v1.1.docx

No comment.

Planners:

No attachment.

Comment from Jörgen Andersson:

Except for the obvious incompatibility with bunker access dates I have one comment about the risk list.

Several of the top risks should strictly be noted as concerns and not included in the risk list.

According to NSS guidelines: 'If it is outside the instrument project's control it is a concern but not a risk.'

To consider how to minimize increased cost due to installation delay:

Can installation be done in D01 while bunker blocks are installed nov19 to jan20?

DMSC:

No attachment.

Comment from Jonathan Taylor:

There are no issues foreseen from DMSC. DMSC and ICS have a good communication going as estuary move forwards.

Cooling group:

No attachment.

Comment from Anton Lundmark:

I have no critical comments, mostly questions that we can talk about later on. I approve the design from a process utilities point of view.

Motion Control:

Attached: *MCAG TG2 Review ESTIA.pdf* No comment.

Detector Team:

Attached: ESTIA_TG2_Detectors.pdf No comments yet.

Comments from Gabor Laszlo (NSS Lead Engineer):

- 1. We need an analysis comparing the standard light shutter and the ESTIA shutter guide solution.
- 2. ESTIA Team should consider if there is any consequence of adjusting the installation schedule according to the ESS timeline.
- 3. We need more schedule details:

- See NSS Newsletter 2016.October.
- Details for the design of the major components
- 4. There are a few typos those should be corrected.

2. GLOSSARY

Term	Definition
< <sample term="">></sample>	< <sample explanation="">></sample>

3. REFERENCES

[1] <<Sample reference to CHESS document: ESS Document (ESS-00XXXXX)>>[2]

DOCUMENT REVISION HISTORY

Revision	Reason for and description of change	Author	Date
1	First issue < <keep full="" number="" only="" revisions="" when<br="">approving document>></keep>	< <name>></name>	< <yyyy- MM-DD>></yyyy-