## **Post 2022 October STAP**

| Recommendations from STAP   | DMSC comments /planned actions   |
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| Because of the hard time hiring into computing related vacancies, the STAP encourages DMSC to leverage the many universities that are relatively close by -   | status of 13 Apr 2023 - 2 student workers (DTU) have been recruited by DST for 10h/week each for 1 year. The experience is positive. SWAP will try to do the same.   |
|   | DMSC having talks at universities have triggered interest from students.   |
| The STAP urges ESS senior management to come to a swift decision on housing situation as well as the head of DMSC and GL for Data reduction roles   |  |
| DST   | DST comments /planned actions  |
| The STAP supports imaginative solutions to help with the problem of not filling open positions, such as that proposed by the DMSC to seek approval to hire students to cover more routine tasks to free up core DST staff effort for critical work. This could be attractive to students to gain useful experience, and expose the ESS as an attractive workplace for long-term employment  | As of 14 Apr 2023 two student worker positions has been filled. The initial experiences are good and hirering student workers seems to be a good option for picking up on lost effort. The novel hope is also that having student workers will also promote DMSC and DST in particular has an interesting workplace whether this part is a success or not remains to be seen.  DST has also engaged in student oriented activities at local universities and this also seems to have resulted in some applications for vacant positions. At this stage none of the vacant positions has been filled though.  |
| While there are benefits to the DMSC developer staff being colocated with the data centre, it is not a necessity, and decoupling may open up a broader set of options. What is needed is a long-term commitment to a home for the data centre to enable the DST team to plan the provision and growth of computing infrastructure required for the ESS. This could be with a partner university or institute in Denmark (and couples with the point about student hires above).   | DST has been part of the work on the future housing of DMSC primarily focusing on the hosting facilities of DMSC. In that process a number of solutions has been investigated, including:  • Keeping the server room in the current building • Building a new server room close to the future housing location • Moving to co-lo or dedicated data center hosting • Hosting the entire DMSC system park on the ESS site in Lund  |
|   | For all these solutions assessment and SWOT analysis has been done and handed over to senior management to be part of the decision process of the future housing situation for DMSC.  Parallel to the above consideration, DST and the ADMIN team has engaged wit  |
| ECDC  | BII to extend the lease of the current server room.  ECDC comments /planned actions  |
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| General concern remains on the relationship between ECDC and ICS. A general consensus on planning and priorities has still to be found.   | Between ECDC and ICS WP 12 the day to day planning is well joined up and stretches to a reasonable 6-18 month horizon.   |
|   | Planning and linking of higher level milestones is in progress with management.  |
| It is still not very clear who and how within the ESS will deal with the high-level motions which require software implementations (e.g. virtual axes on hexapods).   | Correct. This is determined on a case by case basis in open dialogue with the concerned groups and equipment vendors (where appropriate).  |
| The STAP has concerns about the progress on interfacing between sample environment hardware and control in time for instrument hot commissioning. We hope that the recent reorganisation of sample environment group will help with this planning.  | A large part of that concern lies with the sample environment group(s). Both the (2022) sample environment group and ECDC are proactive in improving and defining the interface.   |
| At the next meeting the STAP particularly would like to hear about the progress of integration of detectors and sample environment into instrument control.   | That can be arranged. Might be an idea to invite someone from the detector group to the DMSC STAP. Due to SD reorganisation there are now two sample environment groups.   |
| DRAM  | DRAM comments /planned actions   |
| The STAP thinks it is best to push EasyDiffraction to be ready for users before starting on EasyQENS. Easy-to-use powder structural refinement has a potentially large user community already that would welcome it. EasyDiffraction would gain traction before ESS operations, and this would also give valuable feedback to DRAM to feed into the EasyScience developments in general well before DRAM becomes embroiled in hot commissioning. The STAP also thinks a broader survey of end users and instrument staff from other facilities would provide a more expansive gauge for community | EasyDiffraction is our main focus now, and we want to bring it into a state where it can be presented to a selected group of users. To achieve this goal, we have among other things strengthened our collaboration with ILL related to the work on the CrysFML Python backend calculation engine. We have established monthly video meetings with the ILL team and we also had a productive code hackathon with them at DMSC in December 2022. To continue the collaboration, another code hackathon is scheduled to be held in Grenoble in early summer 2023. Additional activities for promoting EasyDiffraction will include an oral presentation at the IUCr-2023 conference and a tutorial session |

While the IDS have the responsibility to translate instrument The DRAM group has a close collaboration with the rest of the DMCS groups. software requirements into software in conjunction with the DRAM The IDS's are involved in data reduction, analysis and modeling software core developers, the STAP wishes to emphasise the importance of development in several ways. For example, the IDS for reflectometry is actively instrument scientists being closely engaged in the iterative developing EasyReflectometry, the IDS for SANS is actively developing development and as active testers of software prototypes. As well as SasView, and the IDS for diffraction is attending the data analysis group being the users of the software during hot commissioning, they are meetings as well as helping with testing and reviewing user documentation. The the representatives of future users, and data reduction/analysis IDS's are also scheduled to have one-to-one meetings with the data reduction applications should be user-ready at the start of commissioning. team to develop data reduction workflows. This sometimes leads to IDS-Scipp There is always the risk that the IDSs could end up as 'service pair-programming for working on a task. Additionally, IDS's are also actively providers' to 'customers' rather than truly integrated into the involved in - or acting as superusers for McStas modeling of neutron instrument teams as the pressure on instrument scientists builds instruments. In summary, there are frequent and recurring interactions between during the final stages of instrument construction. the IDS and DRAM team members. To this end, we commend the DMSC for using Jira in theday-to-day We are working on making our milestones more transparent and visible to the management of the software projects. The ECDC group seems to organization. As mentioned at previous STAP meetings we are using a mixture have come to the right balance of detail in P6, perhaps ECDC could of GitHub, Zenhub, Jira, Confluence, and P6 in order to accommodate the provide advice or a tutorial to DRAM and the IDSs on this point. different needs as seen from a developer perspective as well as for the ESS project organization point of view. IDS IDS comments /planned actions We welcome the fact that IDS key role interfacing with the Management is paying close attention. This role may be impacted by the instrument teams is reflected in their direct reporting to the DMSC upcoming relocation. division head. The STAP urges the management of DMSC and Neutron instruments to continue to pay close attention to ensure this important working relationship continues to work well. While the IDS have the responsibility to translate instrument The instrument data scientists involve instrument scientists in development of software. Moreover, it has become common procedure that the instrument data software requirements into software in conjunction with the DRAM core developers, the STAP wishes to emphasise the importance of scientists also report to their associated instrument STAPs, and examples of instrument scientists being closely engaged in the iterative that will be provided by the IDSes during the DMSC STAP meeting. development and as active testers of software prototypes. As well as The DMSC, jointly with the Science Director is working on clarifying the role of being the users of the software during hot commissioning, they are the representatives of future users, and data reduction/analysis the DMSC. The vision and mission document is part of this effort. applications should be user-ready at the start of commissioning. There is always the risk that the IDSs could end up as 'service' providers' to 'customers' rather than truly integrated into the instrument teams as the pressure on instrument scientists builds during the final stages of instrument construction. To this end, we commend the DMSC for using Jira in theday-to-day Project reporting and planning is now getting into a regular process, where P6 management of the software projects. The ECDC group seems to milestones are updated on a monthly basis and discussed in DMT to work out have come to the right balance of detail in P6, perhaps ECDC could potential schedule conflicts (e.g., due to competing milestones asking for the provide advice or a tutorial to DRAM and the IDSs on this point. same resources). The process is however still in its infancy but the experiences so far are positive. In the next meeting, the STAP would like to have the IDS present That's arranged their work to the STAP because of their crucial role in enabling hot commissioning and first science. **SWAP** SWAP comments /planned actions no recommendations. Admin comments /planned actions **Next meeting** Face2face meeting emidietly before SAC settled by mid January SAC set to Thursday-Friday April 27-28. Agree on sending out save-the-date for f2f STAP Tuesday - Wednesday April 25-26? Ideas for charge for next STAP: DMSC office location Do they still want old agenda + the IDSs and ECDC scope?