**Director's response to ATUC Report – April 2020**

| ATUC Recommendation | Director's Response | Traffic Light |
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| **2. Commendations and successes** | | |
| ATUC commends CASS on:<br>• Excellent and timely response to the serious challenges arising from COVID-19<br>• Robin Wark for CSIRO medal for Lifetime Achievement for decades of service<br>• Karen Lee-Waddell for John Phillip Young Scientist of the year<br>• Sarah Pearce for the NSW Telstra Business Woman of the year award<br>• Rob Hollow for award from the Science Teachers Association, NSW<br>• Douglas Bock for election as a Fellow of the Academy of Technological Sciences and Engineering in recognition of the work done in radio telescopes<br>• LIEF success on both Cryo-PAF and BIGCAT bids<br>• Tasso and his R&D team for the continued development of cutting edge new instruments for radio astronomy, with broader digital technology significance | Noted and thanks | |
| **Recommendations** | | |
| **3. Covid-10 Response** | | |
| a) CASS to maintain a prominent and regularly updated webpage, accompanied by regular emails, detailing current responses to the COVID-19 challenges. | News item on home page has been added. Current ATCA and Parkes users were contacted in mid-March with an update on changes due to COVID-19, and a further update was sent with the call for proposals in mid May. Information for ASKAP users was included in the April ASKAP Update. | |
| b) CASS to continuously evaluate the likely impact of a longer shutdown on telescope operations and advertise contingency planning to the community. | This was done as part of the call for proposals | |
| **4. LIEF success and Technology developments** | | |
| a) CASS to consider prioritising the development of BIGCAT over other upgrade plans, particularly if the choice is driven by shared resources. | These two projects are not in competition with each other: they share the same design of the RFSoC board, and the BIGCAT GPU correlator work is being done by a team that is not working on cryoPAF. Work can proceed | |

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| | simultaneously on both. | |
| b) Actively pursue plans around UWB-M/H to develop a 2021 LIEF proposal, and seek broader community engagement. | We will host (virtually) a meeting prior to the commencement of a LIEF proposal to consult the community and coordinate a case, likely in August/Sept 2020 |  |
| **5. ASKAP** | | |
| a) Advertise contingency plans to continue ASKAP operations in the case of any delays in procurement or commissioning of the new supercomputer at Pawsey. | The Galaxy system will continue to be supported by Pawsey for as long as it takes to overlap with the new machine and verify functionality side-by-side. |  |
| b) ATUC would like more clarity on what the re-evaluation of the ASKAP-X project will mean going forward and any impacts on the users and their science outcomes, particularly the evaluation of cost (FTE) vs. scientific merit for the projects. ATUC would also like to see a list of capabilities that will no longer be prioritised and a list of now separated projects communicated to the user community. | CASS is currently reviewing the ASKAP-X project structure and, while there is no intention at present to deprioritise any planned new capabilities, the complexity of ASKAP means we need to streamline and consolidate existing operations in order to make more resources available for enhancements and new features. CASS will communicate the outcome of this review process (which will include cost vs. merit considerations) to the community and identify which 'big ticket' items will be managed as separate projects. |  |
| c) Delays in the commissioning of a split-frequency mode have a substantial impact on the execution and feasibility of some SSPs. ATUC requests that CASS investigates what options and timescales may be available (weighing required resources against overall benefit) and to provide clarity on the likelihood and timeframe of this implementation such that impacted SSTs can plan accordingly. | CASS recognises that the split-frequency mode has been identified as an important feature for some SSPs and acknowledges that a delivery date for this feature cannot yet be given with any certainty. CASS will investigate the possibilities of expediting delivery of this capability through additional resourcing and set a timeframe for delivery. |  |
| <u>Additional Pilot Surveys and Survey Project Review</u><br>a) ATUC recommends that CASS communicates and consults with the SSTs as soon as a plan is formalised for a second round of pilot surveys and this process be undertaken well in advance of the proposal submission deadline, with details including the format, timeline, any external review process, etc. | A detailed plan for the second round of pilot surveys will be circulated to the science teams in time for the June science forum. One of the first items to appear on the timeline will be a workshop to discuss how existing survey strategies could be combined to maximise commensality. We propose to hold this workshop later in 2020, no sooner than August. |  |
| b) CASS to provide sufficient lead time for the SSTs to prepare for the Survey Project Review. ATUC recommends that all SSTs obtain their 100 hours of | The survey project review will be held after survey teams have had a chance to evaluate observations from the second round of pilot surveys. CASS will certainly |  |

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| pilot survey observations, and are in a position to validate the data prior to this process. | provide sufficient lead time for the SSTs to prepare. | |
| **6. ATCA** | | |
| a) ATUC requests a separate line item in the ATCA subscription statistics for tracking ASKAP-related follow-up observations. | ATUC is correct that ASKAP-related follow-up observations have increased this semester, and future ATUC ATCA updates will show the requested statistics. |  |
| b) CASS to seek wider community input as the draft document on the future science case for ATCA evolves. | The ATCA Science Case was released after the ATSC meeting and made available via the ATUC webpage. Wider community input is invited. |  |
| **7. PARKES** | | |
| a) Wider consultation of the user community regarding receiver rationalisation, including further consultation with ATUC before finalising plans. | We will provide the receiver rationalisation plan with the call for proposals in May, presenting it to both the current Parkes user base and the ASA exploder. We will formalise a rationalisation proposal following the 2020OCT proposal review and present this to ATUC and the community before finalisation. |  |
| b) Wider consultation of the user community regarding prioritisation of UWL upgrades and UWB-M/H science cases and band split. | This will be incorporated into the virtual meeting held to discuss future plans (referred to in response to section 4) |  |
| **8. LBA** | | |
| a) Include an LBA update at the next ATUC meeting. | Recent practice has indeed been to include an LBA update once a year. |  |
| b) Advertise a timeline for developing a science case and development plan for the LBA-Low (including a consideration of the likely impact on National Facility operations). | A timeline and progress report will be presented to ATUC at the next meeting |  |
| **9. Diversity & Inclusion** | | |
| a) CASS to continue to include D&I related metrics in annual progress reports. | Agreed |  |
| b) CASS to assess the impact of the new proposal layout on equity outcomes via appropriate statistical analysis and report back to ATUC. | Agreed |  |
| **10. Financial Reporting** | | |
| a) CASS to consider presenting headline figures (costings) for various groups/facilities (Parkes, ATCA, | Agreed |  |

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| ASKAP, LBA, R&D) in the next ATUC meeting, and annually thereafter. | | |
| **12. User Feedback** | | |
| <u>ATCA remote training</u><br>a) Clarify the length of time that a lack of retraining is sustainable. | This length is flexible given prior observing experience. Our current advice (as can be found now at the top of the ATCA Observing Information page) is that observers who would need requalification at the SOC are permitted to continue observing remotely. For those observers who have not observed or requalified within the last 2 years, permission may be requested to observe by contacting observatory staff. |  |
| b) Develop capability to train observers remotely, noting the benefits to the climate of reduced air travel and flexibility for those who have travel constraints. | Observers are being trained remotely in the COVID era. Consideration is being given to the "post-COVID" era and we will discuss this with ATUC at the next meeting. |  |
| c) Continue successful institutional visits for observer training where appropriate (e.g. this may be a better option than remote training for large groups). | We thank the ATUC for their feedback. We will continue to consider supporting institutional visits (when interstate travel is possible again), and we encourage institutions who would like this to happen to contact Vanessa and Jamie. |  |
| d) Consider maintaining in-person DA training and allow DAs to perform their duties from the currently approved sites. | CASS takes its role in training the next generation of radio astronomers very seriously, and we will encourage Duty Astronomers to come to Marsfield whenever possible, and will favour DAs who can come to the currently approved sites. |  |
| <u>Pre-grading requests</u><br>a) Personal/special circumstances leading to short, foreseeable career gaps, such as maternity leave, to be advertised as acceptable reasons for requesting pre-graded status from the TAC. The requirement to submit a cover sheet in the following semester should also be waived. | Pre-graded status is generally awarded to ongoing, highly ranked, projects where the TAC is satisfied with their progress. For proposal teams, we would hope another team member could act as PI if the original PI is unavailable for some time, but are willing to consider requests for pre-graded status on their individual merits.<br><br>The requirement to submit a cover sheet cannot easily be waived as schedulers rely on this information (revising fields to be observed, and preferred or unsuitable date ranges) to construct the telescope schedule. If the PI on a project is unavailable, any team member is able to submit the cover sheets. |  |

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| <u>RFI in the X band (ATCA)</u><br>a) Investigate the source of newly reported RFI at 9-10 GHz and mitigate if possible. | We thank ATUC for the report of this RFI. It is certainly not a new phenomenon and current thinking is that it is strongly correlated with the appearance of mid-week RFI in the 16cm band. From the ACMA Australian Radiofrequency Spectrum Plan 2017 (https://www.legislation.gov.au/Details/F2016L02001) we can see that the affected frequency range (9.2 – 10 GHz) is licensed for Radiolocation and Earth exploration-satellite (active) purposes. Given our knowledge of the purpose of mid-week RFI, we can see the potential overlap with these licenses. While mitigation of the source is not possible, we remain hopeful that future correlator RFI-mitigation strategies may help. We will update our documentation to indicate the presence of this RFI. |  |
| <u>Public use of ASKAP data from CASDA</u><br>a) ATNF to mediate the issue forwarded by ATUC. | ATNF has communicated with the Survey Team involved and understands this issue has been resolved. |  |
| <u>Availability of the pulsar backend at Tidbinbilla</u><br>a) CASS to clarify the situation with regards to use of the Tid pulsar backend. | Clarification is underway and the result has been included in the next call for proposals. |  |
| **13. The role of ATUC** | | |
| *a)* ATUC strongly supports a proposal to be notified by CASS throughout the year when issues or future plans arise for which a wider community consultation would be of benefit, or necessary for effective representation and informed recommendations such that this consultation can occur throughout the year and be reflected in our biannual reports. | Agreed |  |