

## SKA SWG Update 21 March 2023

SWG Chairs: Aris Karastergiou, Betsey Adams, Adriano Ingallinera, Divya Oberoi, Mark Sargent, Andrei Mesinger, Barbara Catinella, Abhirup Datta, Francoise Combes, Natasha Hurley-Walker, Eduard Kontar, Sebastien Muller, Phil Edwards, Jan Forbrich, John Ilee

SKAO: Robert Braun, Anna Bonaldi, Tyler Bourke, Philippa Hartley, Harry Qui, Wendy Williams (notes), Simon Purser, Robert Laing

Apologies: Tessa Vernstrom, Valentina Vacca, Fernando Camilo, Stijn Buitink, Cherry Ng, Marta Spinelli, Stefano Camera, Jason Hessels

### Science Commissioning and Verification update: Robert Laing

\*Aris - Commissioning for pulsar search does not seem to follow the process as described?

\*Robert - Not quite one size fits all. Maybe more raw data out to the community earlier in the process.

\*Aris - Note need to capture raw data for PSS (although currently no provision to do this).

\*Betsy - Community involvement in commissioning will be important. Senior people may not need to stay 'so long' and still contribute effectively. Budgets? Secondments?

\*Robert - Have not really thought of in-kind contributions. Some travel support could be found.

\*Betsey - Data should be made public early so people can play with it themselves. To include those not part of the structured commissioning approach.

\*Robert - Can work well, or not. Will be thought about carefully.

\*Adriano - Is this the official plan? Is there room for discussion from SWGs?

\*Robert - SV plan is there. Will be made available.

Earlier versions in construction proposal / OEDP

\*Robert - Discussion is possible. There may be scope to contribute to implementation.

\*Divya - Similar to Aris' point, but for Solar. Solar always needs some tweaks to signal chain, etc. There is also a desire for data products outside of what SDP normally provides. Try to involve community early so they can contribute and benefit.

\*Robert - Noted. E.g. ALMA - commissioning workshop on specific Solar needs helped with this a lot.

\*Mark S - AA2 and onwards mentioned as being scientifically interesting time, but depending on the frequency and range of baselines, science interest could come earlier depending on observing modes availability.

\*Robert - There is some scope for that. AA0.5 - AA1 is not really scientifically useful, but they are followed by rapid growth which becomes more interesting. This will vary with the specific modes. Need to bear in mind that rollout and commissioning tends to start in core, rather than on longest baselines.

\*Mark - SRC involvement in commissioning? Have any proto-SRCs been given requirements / timelines?

\*Robert - No, still too early for that. Possible to make data public through SRCs and use for testing pipelines.

[Robert B - SRC planning update at a future meeting]

### **Time Allocation Process: Tyler**

\*Aris - Pulsar search is something of a special case, isn't it? Hardware and software provide capability for pulsar search of large fields. Search capacity is built into the design. Surely this will simply happen even if no one proposes to do so?

\*Robert B - This will still require a proposal from some team to carry out a survey and specify how to do it. Yes, the design provides the capacity, but the community still needs to request it. There are no pre-allocated projects. All proposals will participate in the same peer review process for their scientific assessment. Commensal use of time on sky will be accounted for in terms of the required access to resources.

\*Andrei - Leadership teams are good for huge collaborations. Can the contact person be rotated over years?

\*Robert - Yes. The contact person is a practical mechanism for communicating with the team. Both they and other proposal team members may well evolve over the years.

\*Barbara - Is the fraction of access for Members known?

\*Robert - Not with great precision, but certainly approximately. It is based on the total contribution to construction and early operations (the time interval extending through 2030).

\*Betsey - Are commensal observations up to an individual KSP team to organise or the Observatory?

\*Robert - We will try to stimulate discussion of commensal surveys in advance. There will be a Letter of Intent phase where KSP proposal plans for specific goals are spelled out. We will organise Workshops to bring communities together to collaborate and coordinate in advance of the actual Call for Proposals.

\*Betsey - What is the likely time limit for KSPs? Is it hundreds of hours?

\*Robert - No, this is the minimum time that might apply to a KSP; a lower limit not an upper limit.

\*Betsey - Since access is proportional to member share, should KSPs be thinking about building their teams with this proportionality?

\*Robert - This would be quite helpful. We will try to make people aware of the access accounting method and stimulate discussion in this direction.

\*Betsey - What about access for students and postdocs who move around?

\*Robert - We will do dynamic tracking of team members over the KSP duration.

\*Divya - Is there more information on how the accounting will be done? What is the thinking so far?

\*Robert - We have been iterating with SEAC on some suggestions but have not yet finalised the details. As soon as these have been finalised, they will be widely distributed.

\*Abhirup - What about the case, like EoR, of very deep observations, that might enable other science than what has been put into the proposal?

\*Robert - There is the concept of "limited data rights", whereby the proposing team is granted the rights to address the issues they are proposing for. This makes it possible for other teams to be granted complementary data rights for other uses of the same data within the proprietary period.