Version 9 November 2010 – Carole Jackson

**Oxford PrepSKA WP2 meeting**

**Discussion summary**

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**PAFSKA programmatic meeting Tuesday 26 October**

 *Seminar room 8, St Anne’s college, Oxford*

*Attendees:*

*Gary, Bruce – DRAO*

*Stefan (HIA)*

*Ant, Carole, Russell, Stuart, Robert, Ron, Lisa, John (CSIRO)*

*Bill (JPL)*

*Neil (SPDO)*

*Wim (ASTRON)*

*Steve (OdP/Nancay)*

*Focus of meeting:*

* *To review plans for current and longer-term PAF R&D, particularly in the light of our current understanding of the science drivers for PAFs for SKA. Note that the first item of the meeting will present the science drivers.*
* *To discuss updates from PAF development platforms, e.g. APERTIF, current PAFs at BETA test plan – timeline, USA group etc*
* *To review progress on all deliverables relating to the PAF work packages in PrepSKA, and discuss plans to complete*

Discussion.

1. **SKA Phase I science drivers**: Agreement that SKA-1 PAF focus should be to set ν\_high at 1.5 GH and attempt as wider freq coverage as possible from there. Generally accepted that ν\_low of 600 MHz should be adopted by PAFSKA as a reasonable target.
2. **SKA optics:** Stuart presented summary of analysis using 12m symmetric PAF performance as a baseline. All agreed that TDP work needed to continue to optimise offset dish for PAFs as far as possible and consider spillover and polarisation responses.

**Action:** (Bill, Stuart, Neil, TDP) To progress this through the dish optics discussions. Possible face-to-face meeting January 2011 at USA URSI meeting (Boulder) – determine who will be there from TDP. (telcon 8 Nov 2010).

1. **PAF receivers:** Russell presented options for SKA PAF receivers**;** direct sampling or RF over fibre, both to be studied/progressed within WP 2.2.3.2 (tech lead Russell).
2. **PAF specification:** outline PAF spec to be drawn up, to inform dish studies etc asap; To include PAF mass, size etc (physical characteristics of PAF and any associated equipment (digital on antenna)) for TDP.

**Action:** Carole, Wim, Stuart, John, Russell & Bruce to draft outline as part of WP 2.2.3 planning, for comment and input from all PAFSKA participants. WP 2.2.3 plan needs to be complete by mid December 2010 (via Carole’s WP2 management team action).

1. **PrepSKA progress to date viz PAFs**

**Action:** Neil to provide summaries of progress to date viz PAF related R&D captured in telecons and other discussions led by him by 5 Nov 2010.