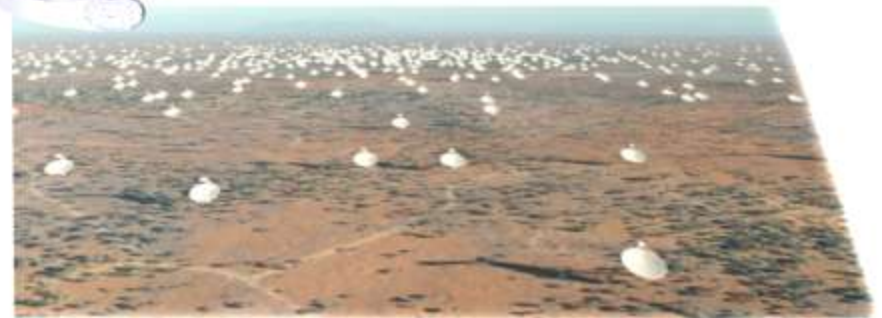
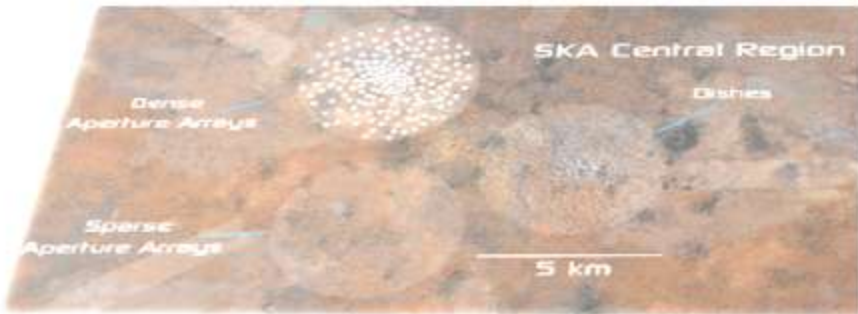
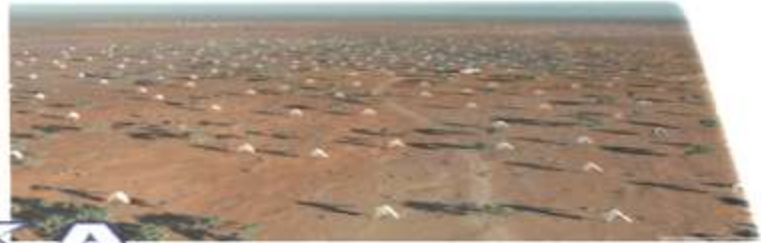




"Exploring the Universe with the world's largest radio telescope"



**WELCOME**  
to the  
**2010 Annual WP2 Meeting**



# Some Announcements

SPDO

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# THANK YOU

SPDO

- Oxford for hosting the meeting
- Vanessa and Billy for all the arrangements
  - To everybody that travelled far
- To everybody that didn't travel that far
  - Session organisers
- Contributors to the presentations
  - Presenters
  - Session Chairs
- Contributors to precursor/pathfinder/design study write ups
  - Everybody else



# Message from the Director

SPDO

**Let me add my welcome to all the participants in the 3<sup>rd</sup> annual WP2 meeting!**

**I'm sorry I won't be there in person for the next day and a half.**

**The Agencies SKA Group is meeting today to discuss weighty matters like**

- funding and governance of the next phase of the project - the Pre-Construction Phase**
- the setting up of a legal entity for the SKA Organisation, and**
- the future location of the SKA Project Office.**

**And on Thursday morning the PrepSKA Board is meeting to review progress in all the PrepSKA Work Packages, and WP2 in particular.**

**No doubt exceedingly boring compared to the WP2 meeting, but necessary all the same.**

- **We've made substantial progress in WP2 –related research tasks over the last couple of years, but there is still much to do to meet the milestones and deliverables set in the revised DoW**
- **However, progress on WP2 tasks is slow and we have not been able to meet the milestones and deliverables of the revised DoW**
- **To understand where the gaps are in the SKA-specific design work to be done and in the resources available, I proposed to the SSEC last Monday that the WP2 Management Team works as a Tiger Team for the next couple of months and generate a Project Plan by mid- December.**
- **This was endorsed by the SSEC, and noted by the Funding Agencies yesterday in a joint meeting of the SSEC and ASG.**
- **The MT will manage and report against the Project Plan in the future**
- **This WP2 meeting will provide crucial input to the Project Plan, so let's keep the presentations and discussion focussed!**



# Aims of the Meeting

SPDO

- The aim of this meeting is to provide a snapshot of the world-wide progress toward the design of the SKA and specifically within the PrepSKA Work Package 2 activities and those of WP3 that affect the system design.
- To provide a forum for face-to-face discussions among SPDO staff, Lead Institution representatives, Participating Organisation representatives, members of the SKA Design Groups, Liaison Engineers, the Science Working Group and other members of the science and engineering community.

## Structure of the Meeting

SPDO

- The sessions are based on the revised WP2 Description of Work and focus on the work which is aimed specifically at achieving the SKA milestones,
- Presentations arranged around the subtasks within each domain. Requested to report on:
  - Progress and achievements during the past year,
  - Contributions and inputs made by the precursors/pathfinders/design studies to the subtask,
  - Work to be performed and milestones to be achieved during the coming year
  - Challenges and risks,
- The session on science will primarily focus on the role, progress and status of the Design Reference Mission and the SKA Phase 1 science.

Day 1 : Wednesday 27 October 2010

START	END	DUR.	SESSION	TITLE	PRESENTER(S)
08:00	08:30	0:30		TEA	
08:30	09:00	0:30		Welcome and context	
09:00	09:20	0:20	Science	The Epoch of Reionization and Phase 1	L Greenhill and L Koopmans
09:20	09:40	0:20		Pulsar Timing and Phase 1	J Cordes
09:40	10:00	0:20		Cosmic Magnetism and Phase 1	R Taylor
10:00	10:30	0:30		TEA/COFFEE	
10:30	11:00	0:30	Science and Technical Requirements	Deriving Technical Requirements	P Dewdney
11:00	11:30	0:30		Requirements and Use Cases for the SKA	W Turner
11:30	12:00	0:30		Discussion	All
12:00	13:00	1:00		LUNCH	
13:00	13:30	0:30	System (WP2.1)	WP2.1.1 The System Design Plan for the SKA	K Cloete
13:30	14:15	0:45		WP2.1.1 System CoDR and Delta CoDR	P Dewdney
14:15	14:45	0:30		WP2.1.1 SKA AA technology requirements whitepaper	A Faulkner
14:45	15:00	0:15		WP2.1.2 to WP2.1.6 - Tools and Strategies	K Cloete
15:00	15:30	0:30		TEA/COFFEE	
15:30	16:15	0:45	System (WP2.1)	WP2.1.7 PrepSKA Costing - Strategy, Software Costing and the Costing Tool	R McCool, D Hall and R Bolton
16:15	16:45	0:30	Management (WP2.7)	WP2.7 Overview of WP2	K Cloete
16:45	17:00	0:15		· DVP Planning	L Baker
17:00	17:15	0:15		· AAVP Planning	A van Ardenne
17:15	17:30	0:15		· PAFSKA Planning	C Jackson
17:30	17:45	0:15		· Overall Planning	K Cloete
17:45	18:00	0:15			Beyond PrepSKA

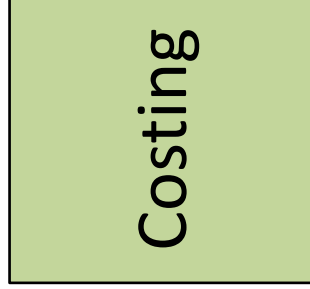
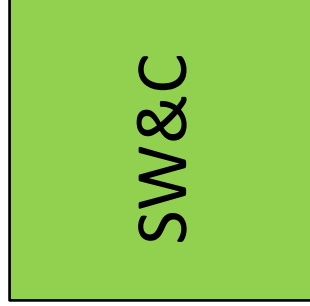
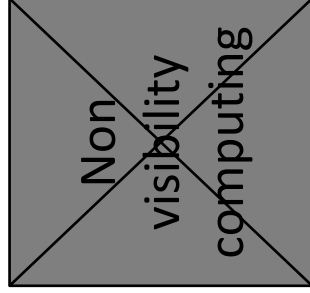
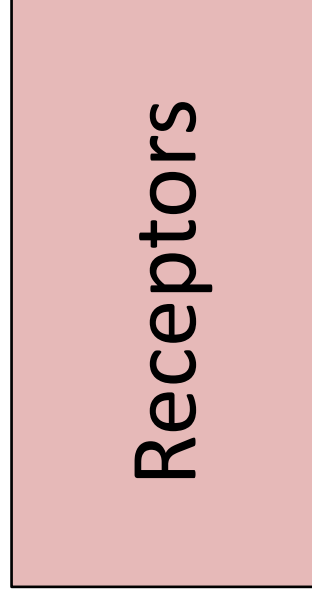
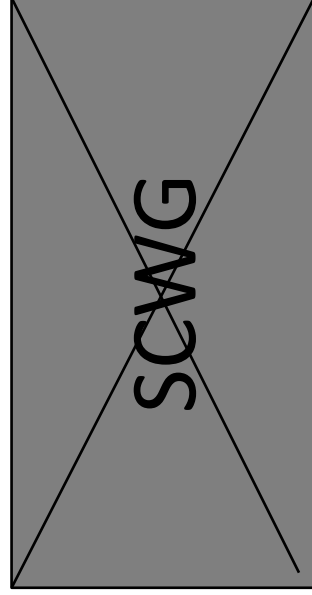
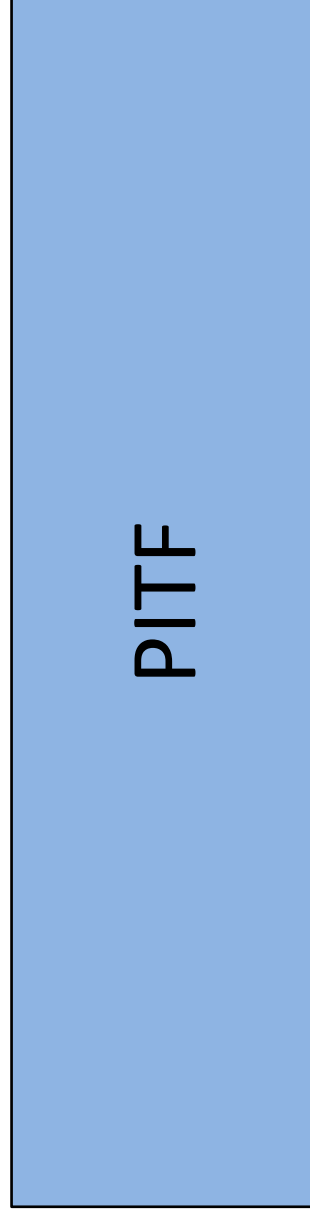


Day 2 : Thursday 28 October 2010

START	END	DUR.	SESSION	TITLE	PRESENTER(S)
08:00	08:30	0:30		TEA	
08:30	08:55	0:25	DVP (WP2.2)	Aims of DVP	N Roddis
08:55	09:20	0:25		WP2.2.1 and WP2.2.2.1 Dish optics and Feed Integration	B Imbriale
09:20	10:00	0:40		WP2.2.1 Dish Design	M Flemming and G Lacy
10:00	10:30	0:30		TEA/COFFEE	
10:30	10:55	0:25	DVP (WP2.2)	WP2.2.3 PAFs	S Hay
10:55	11:20	0:25		WP2.2.2.2 Wide Band Feeds, LNAs and Cryogenics	B Imbriale
11:20	11:45	0:25		WP2.2.2.3 Receivers	R Gough
11:45	12:05	0:20	AAVP (WP2.3)	AA-low LOFAR results, lessons learned	M van Haarlem
12:05	12:55	0:50		LUNCH	
12:55	13:10	0:15	AAVP (WP2.3)	AA-low MWA results, progress system	M Waterson
13:10	13:25	0:15		Path to HERA	C Lonsdale
13:25	13:45	0:20		AA-mid EMBRACE demonstration	D Kant
13:45	14:05	0:20		WP 2.3.1.1/2/3 AA-mid elements/front ends	A Brown
14:05	14:25	0:20		WP 2.3.1.1/2/3 AA-low elements/front ends	E de Lera Acedo
14:25	14:40	0:15		WP 2.3.1 Innovative LNA design	D George
14:40	14:55	0:15		WP 2.3.1.4 Tsys AA-mid design and demonstration	B Woestenburg
14:55	15:10	0:15		WP 2.3.2 AA station simulations	S Salvini
15:10	15:35	0:25		TEA/COFFEE	
15:35	15:50	0:15	AAVP (WP2.3)	AA-lo to SKA1, spec, demonstrators and purpose	JG bij de Vaate
15:50	16:05	0:15		AIP: AA-mid initial design	J Pragt
16:05	16:25	0:20	STaN (WP2.4)	STaN overview	R McCool
16:25	16:55	0:30		WP2.4.4 LO & Timing for the SKA	S Garrington
16:55	17:25	0:30		WP2.4.3 Digital Data Back Haul Networks for the SKA	R Nogueira
17:25	17:45	0:20		WP2.4.1 Analogue Fibre Transmission for the SKA	P Maat
17:45	18:05	0:20		WP2.4.2 Site network installations - TBD	

Day 3: Friday 29 October 2010

START	END	DUR.	SESSION	TITLE	PRESENTER(S)
08:00	08:30	0:30		TEA	
08:30	09:00	0:30	DSP (WP2.5)	WP2.5.1 Correlator and Central Beamformer	B Carlson
09:00	09:30	0:30		WP2.5.1 Software Correlator	J Kim
09:30	10:00	0:30		Non Imaging Computing	B Stappers
10:00	10:30	0:30		TEA/COFFEE	
10:30	11:15	0:45	DSP (WP2.5)	WP 2.5.2&3 Station Beamforming	M Jones
11:15	12:00	0:45		WP2.5.2.1 PAF Beamforming	J Bunton
12:00	13:00	1:00		LUNCH	
13:00	13:05	0:05	SW&C (WP2.6)	Introduction: Structure of WP2.6 presentations	D Hall
13:05	13:30	0:25		WP2.6.1 Software Engineering and Architecture Development	R Nijboer
13:30	13:40	0:10		WP2.6.2 Computing Hardware Architecture	D Hall
13:40	14:00	0:20		WP2.6.7 the Path to Exascale	T Cornwell
14:00	15:00	1:00		WP2.6.3.X Calibration and Imaging Techniques	A Kemball, T Cornwell, R Nijboer
15:00	15:30	0:30		TEA/COFFEE	
15:30	15:55	0:25	SW&C (WP2.6)	WP2.6.5 Data Products, Storage, & Distribution	P Alexander
15:55	16:20	0:25		WP2.6.6 Interfaces for Users and Operators	C Kiddle
16:20	16:30	0:10		Questions and answers for WP2.6 presentations	
16:30	17:00	0:30	WP3	RFI measurements at candidate sites	R Millenaar
17:00	17:30	0:30		Configurations for SKA1, as a step towards SKA2	R Bolton
17:30	18:00	0:30		Investigating tropospheric turbulence at SKA sites	R Millenaar



- Event Dinner
  - Thursday (28 October) at 20:00
  - NB DRESS SMART CASUAL
  - Drinks reception in the Margaret Thatcher room followed by 3 course dinner in the Dining Hall.
  - Location: Somerville College ( Dining Hall )
- Will upload all the presentations to the Indico site
- Booklet with precursor/pathfinder/design studies status updates available on the Indico site

