

MWA POLICY ON DATA ACCESS (MWA pre-operations phase)

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Approved by MWA Board, 25 July 2012

We here present the Data Access Policy for the Murchison Widefield Array (MWA) in its pre-operations phase. The MWA Data Access Policy for the MWA in its operations phase is described in *MWA Data Access Policy (MWA operations phase)*. For reference, relevant definitions and policies from the *MWA Statement of Collaboration* (dated 4 Sep 2009) are reproduced as an appendix.

1. This policy will be periodically reviewed and revised by the MWA Board, according to changes in project conditions.
2. If users of this policy identify issues relevant to this policy, but not explicitly covered by this policy, these issues can be raised in writing to the MWA Board Chair, for consideration by the Board.
3. Raw Data are defined as the output of the MWA sub-systems up to and including the output of the MWA Real Time System.
4. The MWA Collaboration will provide access to Raw Data on a best-effort basis. Transport and processing of MWA data beyond the last point of deposition will be the responsibility of an individual researcher or relevant science collaboration.
5. This policy applies to all Raw Data taken with the full MWA during the pre-operations stage of its build out, as well as with its prototypes. It applies to MWA data acquired both with standard MWA hardware, and also with external or third party instruments. The MWA pre-operations phase ends when the MWA commissioning period is declared complete. Data access during the subsequent operations phase is described in the *MWA Data Access Policy (MWA operations phase)*.
6. This policy is superseded by any requirements on data access imposed by the NCRIS funding agreement made between Astronomy Australia Ltd and Curtin University.
7. All Individual Members of the MWA Collaboration (as defined in the *MWA Individual Membership Policy*) will have full and immediate access to all Raw Data as defined in item 3 above, with the exception of Epoch of Reionisation (EoR) data as described in item 11.
8. The proprietary period for Raw Data will be 18 months from the date of observation, with the exception of EoR data as described in item 11. At the end of the proprietary period, Raw Data will be made available to the wider astronomical community on a shared risk basis.
9. Raw Data that are still within their proprietary period may be publicly

released only on the recommendation of the MWA Project Scientist, followed by approval from the MWA Board. Such data will be made available on a shared risk basis.

10. Four Key Science Programs have been identified within the MWA Collaboration, as listed in Section 1 of the MWA Statement of Collaboration. In some cases, the respective scientific collaborations may process Raw Data into higher-order data products and/or special purpose archives. In such cases, the corresponding scientific collaborations may set their own policies for access to and public release of these higher-order data products. The enactment and any subsequent modification of such policies must be approved by the MWA Board.

11. MWA data taken specifically for Epoch of Reionisation experiments are subject to additional restrictions on data access, as follows:

a. The proprietary period for EoR Raw Data will be 18 months from the end of the corresponding observing season.

b. Access to EoR Raw Data that are still within their proprietary period will normally be restricted to members of the MWA EoR collaboration. Individual members of the MWA Collaboration who are not members of the MWA EoR collaboration and who wish to analyse these data for non-EoR purposes may seek access to these data by making a request to the MWA Project Scientist.

12. In the event of a dispute over data access, the Project Scientist will make a recommendation to the MWA Board, whose decision on this issue will be final.

APPENDIX:

RELEVANT MATERIAL FROM STATEMENT OF COLLABORATION

1. GOALS

The initial goal of the MWA Collaboration is to demonstrate technologies and techniques suitable for future application on larger scales, and to pursue targeted high-value science objectives. This includes construction of an array of up to 512 receptor tiles to be operational in the 80 to 300 MHz frequency range in order to demonstrate a new capability for the study of a number of fundamental questions in astrophysics and in heliospheric science. The demonstrator phase includes construction, commissioning, and early science operations on a site at the proposed Murchison Radio Observatory in Western Australia.

Four Key Science Programs have been identified:

- (a) Formation of structures during the epoch of re-ionization in the early universe (EOR);
- (b) Solar, heliospheric, and ionospheric phenomena (SHI);
- (c) Discovery and characterization of transient radio phenomena;
- (d) Study of Galactic and Extragalactic Phenomena, excluding items (a), (b) and (c).

2. DEFINITIONS

"Associate" means an individual who contributes to the MWA in the design, construction or operation phase but whose employer is not a member of the MWA Collaboration.

"MWA Collaboration" means the collaborative project of the Parties signatory to this SOC and the respective member organizations in Australia or the U.S. whom the Parties represent.

"MWA Science Collaboration" means a collaboration of scientists formed for the purpose of pursuing a specific scientific goal with the MWA.

"MWA Science Council" means a group appointed by the MWA Board to advise it on matters

of science policy and other matters as the Board may specify.

"Observing Time" means the time on the MWA facility that is scheduled for scientific observing, excluding the time required for engineering, commissioning activities, and maintenance.

"Open Skies" means that proposals for observing time may be submitted by any scientist or group of scientists from any country in the world for review by the MWA Time Allocation Committee.

9. COLLABORATION MEMBERSHIP AND ASSOCIATION

9.1 The MWA Board will determine subsequent membership in the MWA Collaboration, to be reflected in amendments to the Statement of Intent.

9.2 Organizational membership of the MWA Collaboration may be modified with a unanimous vote of the MWA Board.

9.3 Other Associates shall be permitted to join the MWA Collaboration subject to a unanimous vote of the MWA Board, who shall determine the terms under which the Associate shall be invited to join.

9.4 Individuals may be members of the MWA Collaboration via an organization's membership in the MWA Collaboration. Member organizations will determine the inclusion of an individual in the MWA Collaboration. The term of the individual member is indefinite so long as the individual's employing organization is a member of the MWA Collaboration. If an individual changes employer or if the employing organization withdraws from membership, the MWA Board determines if the individual should continue as an Associate.

12. MWA BOARD RESPONSIBILITIES

The MWA Board shall:

12.1 provide scientific leadership to the Project;

12.2 determine institutional membership of the MWA Collaboration;

12.3 determine the scientific publication policy of the MWA Collaboration and act as arbitrator in any disputes over authorship;

12.4 determine the policy on access to observing time on the MWA;

12.5 be the primary forum for interactions and decisions between The Parties;

12.6 ensure that MWA Project is carried out in accordance with the terms of this SOC;

12.7 be the body with overall budgetary and policy control over the MWA;

12.8 provide guidance and approves and coordinates requests for additional

MWA resources to funding agencies;
12.9 meet at least twice per year;
12.10 define, appoint, and review, as necessary, such committees as the MWA Board deems necessary;
12.11 determine the duration of Construction and Commissioning of the MWA facility, in consultation with the MWA Director and Project Office;
12.12 appoint the Managing Organization;
12.13 approve the job descriptions and appointments, by two thirds (2/3) vote, of the MWA Director and MWA Project Manager;
12.14 approve, in consultation with the MWA Director and MWA Project Manager, the job descriptions and appointments, by two thirds (2/3) vote, individuals to the key MWA positions as defined in the MWA Project Governance and Management Structure document.
12.15 provide guidance to the MWA Director and MWA Project Manager on the content of their management plans;
12.16 approve a Project Execution Plan;
12.17 ensure that all agreements and contracts on MWA matters entered into by the Managing Organization are in the best interests of the MWA and do not conflict with this SOC;
12.18 provide oversight of the MWA Director and MWA Project Manager in defining Subproject Teams and Team Leaders.

16. OBSERVING TIME, DATA ACCESS, AND PUBLICATION POLICY

16.1 Arrangements to access the MWA Facility will be developed by the MWA Board which will recognize the contributions of the U.S. MWA Consortium, the Australian MWA Consortium and the RRI. Access to the site itself will be subject to compliance with the terms

of any access agreement required by CSIRO.

16.2 The MWA Board shall establish the policy for the assignment of observing time on the MWA, considering the following principles: (a) During Early Science Operations, the EOR and the SHI MWA Science Collaborations shall be given priority. (b) During Operations, Open Skies shall be the fundamental guiding principle for allocating observing time, giving due consideration to the needs of the Key Science Programs. (c) Observing time allocation shall be determined by the MWA Time Allocation Committee, subject to policies set by the MWA Board.

16.3 Policies regarding access to the databases of each Scientific Program shall be determined by the MWA Board.

16.4 Publication policies shall be formulated by the MWA Science Council, subject to

approval by the MWA Board. While every effort shall be made to implement a uniform publication policy across the project, it is recognized that one or more major MWA Science Collaborations may require individual policy provisions.

16.5 Observing time, data access, and publication policies may vary among the Key Scienc