

Guidelines on In-Kind Contributions for the Square Kilometre Array

Version 1.4.1

4 April 2009, R.T. Schilizzi

1. Definition of an acceptable in-kind contribution

An activity funded by national, regional and/or institutional funds that would have been commissioned by the SKA Program Development Office or its predecessors had the SPDO or its predecessors had sufficient central funding of their own.

Acceptable in-kind contributions will be registered as either “completed” or “in progress”.

Such activities include:

- 1) development of engineering solutions applicable to the SKA sensors, data transport and networks, data processing system, and software and computing. Engineering solutions include prototypes and verification systems as well as knowledge about relevant manufacturing processes;
- 2) development of observational tests both simulated and real - the latter with SKA precursors or other relevant instruments - that explore new capabilities at flux density and dynamic range levels similar to, or scalable to, the full SKA;
- 3) testing of methods of scheduling and allocating observing time similar to, or scalable to, that needed for the SKA;
- 4) site-selection-related activity including measurement of levels of Radio Frequency Interference at candidate sites;
- 5) hosting members of staff of the SKA Program Development Office and its predecessor, the International SKA Project Office;
- 6) “common fund” and extra-ordinary payments to fund operating costs of the SKA Program Development Office;
- 7) time spent by Chairs of SPDO Working Group and other SKA committees (10% threshold of time spent on such activities before it can be counted).

Examples of activities that should not be proposed as in-kind contributions:

- rollout costs of the SKA precursors and other SKA pathfinding telescopes; and
- salary or travel costs for participation in SPDO Working Group or other SKA committee activities.

2. Evaluation of proposals for in-kind contributions

The Contributions Audit Committee (CAC) will evaluate proposals for in-kind contributions made after 2001 according to the relevance of the R&D, science development, operational development, or site-selection-related work to the SKA project, and its timeliness measured against the overall SKA timeline.

3. Guidelines for submissions

Proposals for in-kind contributions should make use of the Microsoft WORD template provided by the SPDO. There are no page limits. Sufficient information should be provided that the justification is clear for all members of the CAC, particularly those who are not associated with the SKA project.

Three periods of SKA development have been identified as being eligible for inclusion in the In-Kind Contribution Register in a quantitative sense:

1) *from April 2008 - Mar 2011*

The relevance of R&D to the SKA program should be justified in terms of the PrepSKA Description of Work, and SKA Memos 69 (Reference Design) and 100 (Preliminary Specifications). See:

www.skatelescope.org/documents/080225_PrepSKA_WorkProgramme_v6_5.pdf

www.skatelescope.org/PDF/memos/69_ISPO.pdf

www.skatelescope.org/PDF/memos/100_Memo_Schilizzi.pdf

Specific mention should be made of the relevant section and page number.

2) *from January 2006 to April 2008*

Submissions should be justified in terms of Memos 69 and 100, as mentioned above, and specific reference made to the relevant section and page number.

3) *from 2002 to 2005*

Prior to 2006, much important work was carried out to develop early concepts and these should be considered as valid contributions to the SKA. For a technology to be considered for inclusion in the Register, the technology must have been evaluated by the SKA program and thus mentioned in at least one of the following papers in the SKA Memo Series:

Memo 15: Guidelines for Description of SKA Concepts

www.skatelescope.org/documents/Descriptions_of_SKA_Concepts_Guidelines.pdf

Memo 27: SKA Concept Designs - EMT Comments

www.skatelescope.org/documents/EMT_concept_review_final.pdf

Memo 41: Report to the ISSC by the Engineering Working Group

www.skatelescope.org/documents/EMTreport_%20031003.pdf

Memo 55: EWG report on SKA demonstrators

www.skatelescope.org/PDF/Demonstrators%20Final%20Report%20Sept%202022%202004a.pdf

Memo 67: 2005 EWG demonstrator report

www.skatelescope.org/PDF/memos/67_Hall.pdf

Memo 86: SKA Demonstrators, Pathfinders & Design Studies - EWG Comments on 2006 Updates

www.skatelescope.org/PDF/memos/EWG_SKA_demonstrators_2006_v1a.pdf

Memo 91: An SKA Engineering Overview

www.skatelescope.org/PDF/memos/memo_91.pdf

Again, specific reference should be made to the relevant section and page numbers.

4. Prior to 2002

For in-kind contributions completed prior to 2002, there is little supporting documentation available. The SPDO Director will decide on a case-by-case basis whether a contribution should be recognised, in a qualitative sense, in a separate section of the In-kind Contributions Register. Submissions should include references to Memos or Reports (or include copies thereof) in which the results of the work are presented.