

Proposed LSST DESC Builder Status Policy

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DESC Builder status definition

“DESC Builder status” is considered an award given by the LSST DESC to those members who have made significant contributions to building the collaboration, both its community and its simulation and analysis pipeline and infrastructure software. According to the publication authorship rights defined in the **Publication Policy**:

“DESC Builders can join the list of authors of all Key Papers; they can also join the list of authors of any Standard Papers enabled by their contributions. DESC Full Members can join the list of authors of any Key or Standard Papers to which they made significant contributions.”

Proposed DESC Builder policy

The MRBS committee has made progress in defining a DESC Builder status and establishing its implementation. The proposed policy for DESC Full Members to become Builders is as follows.

- **Principle:** DESC Builder status is awarded to recognize extensive contributions to our collaboration that enable a wide array of DESC papers.¹
- **Eligibility:** Full members with typically at least 1 year full-time-effort (FTE) on building work for DESC, as defined below.
- **Implementation:** The existing Membership Committee will evaluate nominations (including self-nominations) in consultation with the Working Group co-conveners and, as needed, relevant coordinators.² Calls for nominations will be advertised

¹ A simple way to view this is that allowing DESC Builders to join the list of authors of all DESC Key Papers should not represent a major change; DESC Builders should have made contributions that would be considered significant enough and broad enough to already entitle them to authorship on most Key Papers.

² Upon assessment of the builder status application, the Membership Committee might decide between granting the award or providing feedback on how to achieve the eligibility criteria and a timetable for

semi-annually, but nominations will be welcome at any point throughout the year. The nomination must demonstrate that the building work has made a sufficient contribution to be awarded builder status. DESC Builder awards will be announced to the collaboration by e-mail and at collaboration meetings.

- **Authorship:** DESC Builders can join the list of authors of all Key Papers; they can also join the list of authors of any Standard Papers enabled by their contributions. Announcements of Key Papers and Standard papers will be sent by e-mail to the collaboration; DESC Builders will be invited to request authorship. Publication rights associated with buildership are retained as long as the DESC builder is a member of DESC.

Proposed Detailed Requirements

(1) Definition of building work

Building work encompasses work on DESC infrastructure, software, hardware, operations, management, community service, and is defined as essentially anything that builds or maintains our collaboration. Examples of building tasks include: development of DESC-specific software and related research notes (Core Cosmology Library, PhoSim upgrades for DESC, etc.), infrastructure work to enable Data Challenges, construction of collaboration-wide pipelines (e.g., fake object injection pipeline), crafting amendments to the governance plan, writing the Science Roadmap, committee service time, fundraising, hosting meetings, training and acting as ombudsperson or meeting contact person, and so on. It is the responsibility of the Working Group conveners (in consultation with DESC Management and Leadership) to identify tasks that can count towards builder status and communicate this information to their working group via the group's confluence page. In the case of committee service, these tasks can be self-reported and the Membership committee will consult with the committee chair and Collaboration Council if any query arises. *The DESC Builders are the people who built the DESC software and the DESC community.*

(2) Time contribution

The suggested minimum of "1 year FTE" refers to an effective 1 year full-time-effort on building work, where an year should be understood in absolute terms (i.e., a full calendar year). This could be achieved over several years.³

reconsideration. If an appeal is made, the Collaboration Council will set up an ad hoc committee to consider it.

³ For example, consider a graduate student developing analysis methodology and algorithms identified by the Working Group conveners as "building work", and devoting 40% of their time to implementing those algorithms and demonstrating them at scale using DESC computing resources. This level of effort for 2.5 years would lead to a 1 year FTE contribution to DESC building work. Note that a DESC Spokesperson who has made 50% of their time available for DESC management work would be entitled to be nominated to earn DESC Builder status by the end of their term - so one way to think about a 1 FTE minimum requirement is that DESC Builders make the same level of contribution to the collaboration as a Spokesperson does.

Suggested criteria to recognise the work of LSST Builders

1. We would like to recognise the work of LSST Builders by giving them new, specific publication rights under an amended DESC Publication Policy, while retaining DESC Builder as a separate status in its own right that recognizes contributions to the creation of the DESC infrastructure and collaboration. LSST Builders who are Full Members of DESC are welcome to be nominated or to self-nominate for DESC Builder status. The same criteria as for any other Full Member of DESC will apply.
2. All LSST Builders, provided they are Full Members of the DESC, should be invited to join DESC Key Papers as recognition of the enabling contribution of the LSST system in that work.
3. LSST Builders who are Full Members of the DESC should be invited to join the list of authors of any Standard Papers enabled by their contributions⁴ (in the same way that DESC Builders are).
4. LSST Builders who are DESC Members, but who are neither DESC Builders nor DESC Full Members, can join specific projects announced to the collaboration and will be listed as authors on the resulting publications if they make significant contributions to those projects.

Note that adopting the suggested criteria 3, 4 and 5 above would involve amending the Publication Policy to cover LSST Builders explicitly.

Additional Information & Timeline

This policy is the result of discussions between the members of the “Membership Review and Builder Status (MRBS) policy committee”, whose members are: Elisa Chisari, Eric Gawiser, Eric Aubourg, Phil Marshall, Andy Connolly, Andrei Nomerotski, Michael Strauss and Joe Zuntz.

The committee started discussions in the summer of 2016 when preparing a set of initial guidelines about Builder status to help the collaboration think through the advisory vote on the Publication Policy.

The committee met in person at the SLAC meeting in February 2017, leading to a slightly more detailed proposed policy that is consistent with the initial guidelines.

A summary document was produced which was presented to the Collaboration Council for discussion in March 2017. The CC gave feedback and requested that the discussion be opened to the collaboration.

⁴ For example, a DESC Full Member who is the LSST Builder who built the telescope optics alignment could cite this key contribution as enabling a weak lensing Standard Paper making use of the LSST shape measurements and be added to the author list.

The MRBS committee produced a second summary document and a feedback form that were presented to the CC and the spokesperson team in June 2017. After some feedback, these were made available to the collaboration in June 2017 for feedback via e-mail & Slack.

The committee met in person at the SBU meeting in July 2017, and received comments from DESC colleagues at an open town hall. Those comments, and the replies to the form, have been incorporated in this document.