



# Concept Study Guidelines: Science

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First things first...

**CONGRATULATIONS!**



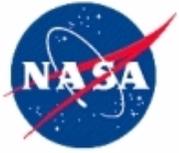
# Notes on Important Points in your Award Letter

- NASA intends to fabricate **only one** DSOC flight unit.
  - If you proposed to carry DSOC, in your CSR describe the science, engineering, risk, and cost impacts of **not** carrying DSOC.
- If NASA selects two projects to proceed to flight, the Discovery Program budget might require that one of the selectees delay launch for **two years**.
  - In your CSRs, include a detailed discussion of the science, engineering, risk, and cost impacts of moving your LRD by two years. Include budget profiles assuming an extended Phase B.



# A word on archiving

- NASA is placing a renewed emphasis on the archiving of mission data and higher-order data products.
- An evaluation of your draft Data Management Plan is part of the Step-2 review process.
- A realistic assessment of the complexity and volume of your data and the effort needed to produce a mission database along with adequate documentation and a PDS4 data set is needed for cost assessment.
- Like many things, it's best to start early
  - Designate someone on your team to serve as the POC for archiving.
  - Work with the designated Lead Node of the PDS in developing your DMP.



# Schedule

- The 9-month Phase A clock will start on **Friday, 13 November 2015**
- Concept Study Reports (CSRs) will be due on **Monday, 15 August 2016**
- Site visits will take place between **10 November 2016 and 6 December 2016**
- Down-selection announcement will be made in **late December 2016 or early January 2017.**

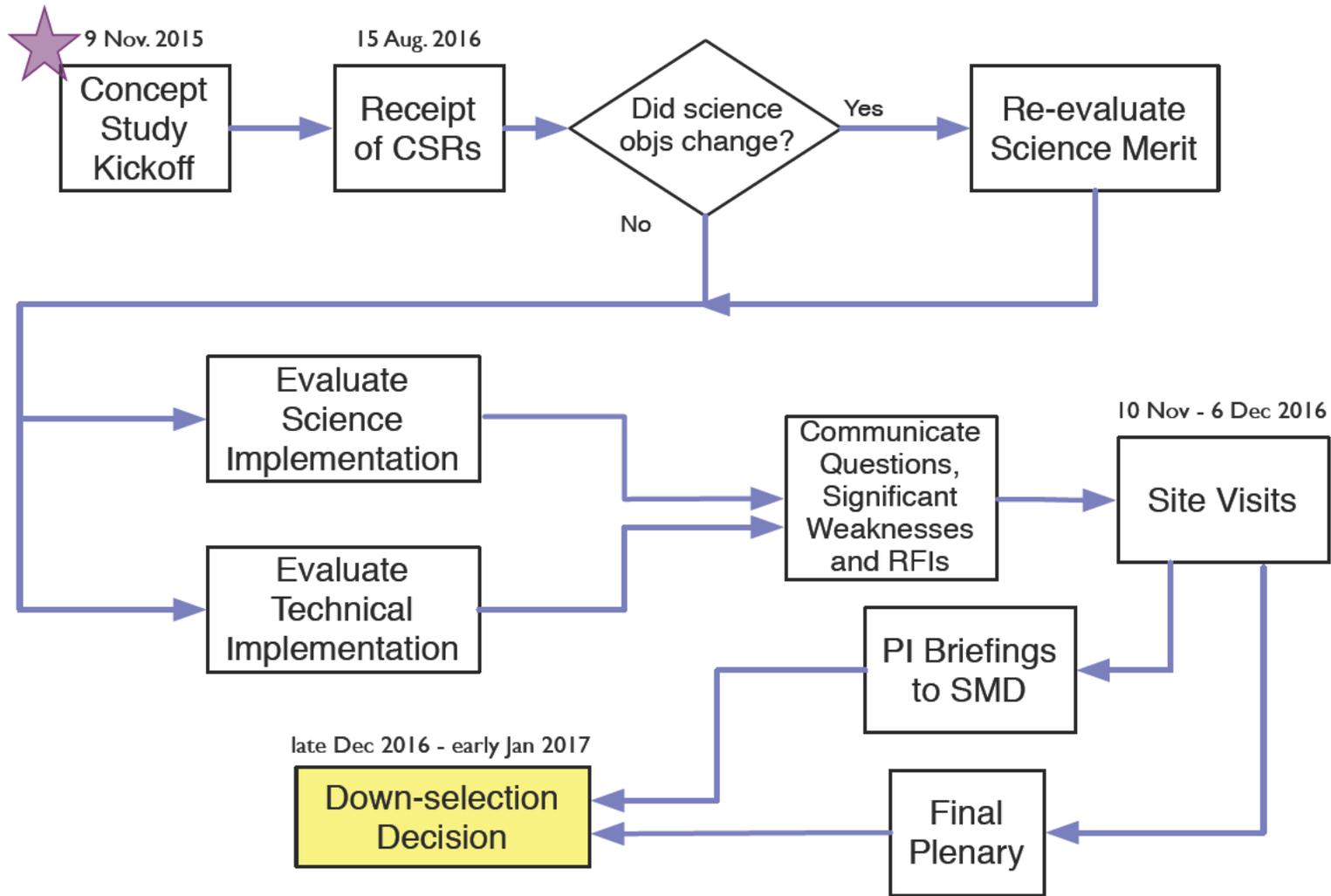


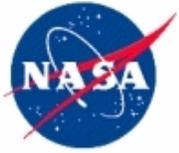
# CSR Guidelines

- Draft CSR Guidelines may be found at the Discovery Program Acquisition Website. These have been updated today.
  - <http://discovery.larc.nasa.gov/dpl.html>
  - Please review it and send us comments.
- We will review your comments and issue the final Guidelines by **Friday, 4 December 2015**



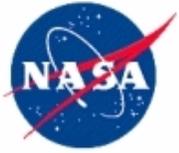
# Step 2 Process





# Major Evaluation Criteria

- All three criteria from the AO will be used:
  - Scientific Merit
  - Science Implementation Merit and Feasibility
  - TMC Feasibility including Cost Risk
- Some factors will be changed or added.
- Weighting between criteria will be different.



# Evaluation Emphasis

- Step 1 selections were primarily based on *science balanced by feasibility*.
- The evaluation of the CSRs *will emphasize feasibility*.
- This is evident in the CSR evaluation criteria weighting.



# Criteria Weighting

- Scientific merit of the investigation: **approximately 25%** (was ~40% in Step 1)
- Scientific implementation merit and feasibility of the investigation: **approximately 20%** (was ~30% in Step 1)
- Feasibility of mission implementation, including cost risk: **approximately 50%** (was ~30% in Step 1)
- Quality of plans for small business sub-contracting, and for an optional SC, if proposed: **approximately 5%**



# Scientific Merit Evaluation Criterion

- Unless directed by NASA or CSR results demand it, objectives of BSM/TSM should **not** change.
- Science section from Step 1 proposal **must** be repeated in the CSR.
- Any and all changes **must** be highlighted with change bars
- If it is determined by the Lead Program Scientist that the science objectives have changed significantly, then the Science Merit of the CSR will be re-evaluated.



# Science Implementation Evaluation Criterion

- All of the factors defined in Section 7.2.3 of the AO apply to the CSR and will be evaluated from the data supplied in the CSR and at the site visit.
  - Details have been added to one of the sub-factors of Factor B-1, “Merit of the instruments and mission design.”
  - An additional sub-factor has been added to Factor B-2, “Probability of technical success.”
  - Factor A-3 defined in Section 7.2.2 of the AO will be re-evaluated as Factor B-8, “Likelihood of Scientific Success.”
  - Factor B-9, “Maturity of proposed Level 1 science requirements and Level 2 project requirements” has been added as a new evaluation factor.



## CSR Scientific Implementation Merit and Feasibility Factors (based on AO § 7.2.2 & 7.2.3)

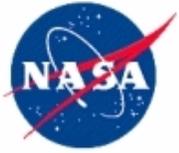
*Will the data proposed to be collected answer the science objectives?  
Will the instruments proposed provide the needed data?*

- Nine factors:
  - B-1: Merit of the instruments and mission design for addressing the science goals and objectives.
  - B-2: Probability of *technical* success.
  - B-3: Merit of the data analysis, cartography, data archiving plan, and/or sample analysis plan.
  - B-4: Science resiliency.
  - B-5: Probability of *science team* success.
  - B-6: Merit of any SEOs.
  - B-7: Merit of any TDOs.
  - B-8: Likelihood of Scientific Success
  - B-9: Maturity of proposed Level 1 science requirements and Level 2 project requirements



# TMC Feasibility Evaluation Criterion

- See next presentation...



# Additional Criteria

- Overall Merit of Student Collaboration (SC), if proposed
- Small Business Subcontracting Plans



# Competition Conditions

- Make use of the PS and PE to answer questions and cc me and Washito:
  - Dr. Jared Leisner (PS), [jared.s.leisner@nasa.gov](mailto:jared.s.leisner@nasa.gov)
  - Ms. Diane Brown (PE), [dbrown@nasa.gov](mailto:dbrown@nasa.gov)
  - Dr. Michael New (Lead PS), [michael.h.new@nasa.gov](mailto:michael.h.new@nasa.gov)
  - Mr. Washito Sasamoto (Discovery Acquisition Manager), [washito.a.sasamoto@nasa.gov](mailto:washito.a.sasamoto@nasa.gov)
- Generic versions of questions and answers will be posted on a “Questions and Answers” document available from the Discovery Program Acquisition Website



# QUESTIONS?