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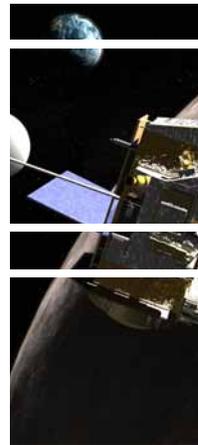
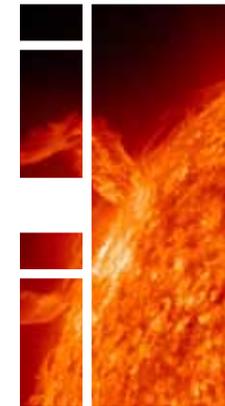
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NASA OFFICE OF EVALUATION Cost Analysis Division

Cost Analysis Data
Requirement (CADRe)

One NASA Cost
Engineering (ONCE)



National Aeronautics and Space Administration

NASA Headquarters

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Washington, DC 20546

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- Cost-Estimating Relationship (CER) and Schedule-Estimating Relationship (SER) development
- Time-tagged studies for cost, schedule, and mass changes over time
- Cost research studies

CADRe/ONCE data can yield insights into the following questions:

- What is driving cost growth across NASA projects?
- At what phase in development are different types of growth occurring?

How To Access CADRe and ONCE

CADRe ACCESS

- Go to <https://nsckn.nasa.gov/> and apply for an account

ONCE ACCESS

- Go to <https://oncedata.msfc.nasa.gov>
- From login screen, download access form
- Fill out form and e-mail to Eric Plumer
- A valid NASA identity in IdMAX is required for ONCE

CADRe Mission Statement

Provide the NASA Cost-Estimating Community with cost, schedule, and technical data to facilitate cost studies and analyses for current and future missions.



“The CADRe has been refined over time to efficiently capture technical, schedule, risk and cost data already available from projects and now represents a ‘one-stop-shop’ . . .”

—Jonathan G. Bryson
Flight Projects Directorate, GSFC

CADRe Process

CADRe is a requirement per NPR 7120.5. The NASA Headquarters Cost Analysis Division (CAD) prepares documents for projects to ensure consistency and quality for database purposes.

- 1) The process starts with a kickoff meeting with the Project Manager (PM) and staff.
- 2) The PM provides access to current project documents so the CAD can prepare the CADRe.
- 3) The PM reviews and approves the completed CADRe.

To date, there are over 150 completed CADRes providing estimated and actual cost with associated technical parameters supporting cost research studies and improving analysis capabilities.

CADRe provides a historical record of cost, schedule, and technical project attributes so that analysts can understand cost-growth trends and develop better estimates for future analogous projects.

One NASA Cost Engineering (ONCE)

ONCE DATABASE

- NASA-certified Web-based system
- Controlled access
- Automated CADRe search and retrieval



RETAINS FORM AND FUNCTION OF CADRes

- Easy browsing of parts A, B, and C
- Structured reporting features to quickly pull specific data.



Application and Uses of CADRe Data

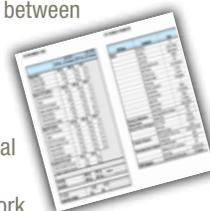
- Analogy-based cost analysis
- Explanation of change studies
- Calibrating cost models

CADRe is a three-part document that describes a NASA project at each milestone (SRR, PDR, CDR, LRD, and End of Mission).



PART A

Narrative project description in Word includes figures and diagrams that note significant changes between milestones.



PART B

Excel templates capture key technical parameters to component-level Work Breakdown Structure (WBS), such as mass, power, and data rates.



PART C

Excel templates capture the project's cost estimate and actual life-cycle costs within NASA cost-estimating WBS to the project's lowest WBS level.

COMPLETED CADRes



ONCE DATABASE

