CONSOLIDATED INFORMATION TECHNOLOGY SERVICES TASK ASSIGNMENT (TA)

1. **TITLE:** (B602) LaRC Full Cost Accounting Tracking System Support

TA No:	132-Rev10		
Task Area Monitor:	**Alternate Task Area Monitor:**		
NASA POC:		**Software Control Class:**	Low Control
Type of Task:	Recurring Task		

2. BACKGROUND

With a large decrease in the projected budget forthcoming, the Langley Research Center (LaRC) is facing a major transformation to manage its work force and assets in a manner that will make it competitive in winning research and development funding from governmental and commercial sources. As the Director of LaRC, Roy Bridges, stated "addressing our cost rates is a very relevant and important issue. Our projected budget is estimated to decrease by approximately $200 million (30%) over the next two years. Our current and likely future customers are moving to a new competition model for much of our Center business. In that regard, we must reduce our cost rates to match our projected future state and establish a competitive advantage for bidding and winning future work via proposals".

As part of this transformation process, full cost accounting has become essential to understand what each of LaRC's services cost, whether they are price competitive, and whether they are funded. With the establishment of service activities, full cost accounting has already established a better understanding of the costs to operate facilities, information technology services, and general administration services. With this understanding, reductions in these services have already been implemented and further reductions, such as the consolidation of laboratory facilities, are being studied with careful consideration of what technical capabilities have the high potential for winning future funding.

With LaRC's over-capacity in work force, however, particularly the in-house civil servant work force, a new full costing effort is required to determine the fully burdened rate for each civil servant. This rate is also known as the Full Time Equivalent (FTE) rate. The goal of this initiative, considered essential to the ongoing efforts to restructure LaRC, is to bring complete understanding of the cost components that make up of LaRC's "full cost" FTE rate. As once again stated by Roy Bridges, "These rates will ultimately be determined by our decisions on cost issues. Our analysis of what a competitive range should be determined that the fully burdened rates for FY 07 should be $220,000 to $240,000 per direct depending on the organization/technical area. If we take no action, our rates would be in a range of appropriately $375,000, which is clearly uncompetitive.

"The full cost concept ties all "corporate" costs directly to funding programs/projects. There are no free resources; all costs are assigned to benefiting programs/projects. Consequently, there are multiple layers of costs which ultimately determine the fully burdened FTE rate.

There are also multiple types of FTEs including general administration services, facilities and related services, information technology services, overhead (managers and administration assistances), and direct. The direct FTE□s, typically for Science and Engineering personnel, are the primary focus because the fully burdened rates for direct FTEs are what is ultimately relevant for competitive proposal bids. All of the service and overhead costs (including the associated FTEs) are part of the burden on each direct FTE. Specifically, the following cost components may apply to each direct FTE:

·Direct Salary and Benefit Cost
·Direct Facilities and Related Service Activity (F&RSA) Charge for Office
·Direct Information and Technology Service Activity (ITSA) Charge
·Organization Overhead Charge (Branch and Directorate Level)
o Overhead Personnel Salary and Benefit Costs
o Organizational Procurements
- Contracts / Work Year Equivalents (WYE)
- Travel
- Supplies
- Other
o Overhead F&RSA Charges (laboratories, test facilities, etc.)
·Center General Administration (G&A) Charge
·Corporate G&A Charge

Because of cost variations particularly for facilities, contractors, and other procurements, the burden on each direct FTE can vary considerably among the organizational branches. These branches, however, must fully understand their burden, control the cost components, and seek funding accordingly.

3. OBJECTIVE

This task revision will extend the period of performance to enable work on automating interfaces and maintaining the data in order to accurately plan the FY'07 and FY'08 budgets.

The objective of this task assignment is to provide information technology (IT) analysis, design, development, and administrative support to implement the new LaRC FTE Full Cost Accounting Tracking System (FCATS) as well as supplemental systems for reducing LaRC□s infrastructure costs. Examples of potential supplemental systems are a building closures tool and a building lease management tool for marketable facilities. This support shall include, but is not limited to, the following:

- requirements determination and source system identification

- prototyping-based software development

- data warehousing architecture

- data extraction, transformation and loading (ETL)

- data staging

- database web application development

- innovative management information approaches and database system evaluations

- software maintenance and upgrades

- database administration

- computer systems administration
- ensure optimal performance of application software

The above capabilities are necessary in the preparation of the LaRC FTE Full Cost Accounting Tracking System and supplemental applications. Developmental and production databases must be maintained (with appropriate data security), while archived data sets shall be available for restoration. Another key factor for this system is leveraging existing LaRC databases to the maximum extent possible as source data systems from which the consolidated FTE full cost picture will be constructed. Manual data entry efforts are to be avoided as much as possible.

4. GENERAL IT SUPPORT SERVICES

Services Specified Through Exhibit A:
Refer to Exhibit A, Inventory of Equipment and Software that defines the required General IT Support Services. The services of System and IT Security Administration shall be provided for those systems for which "System and IT Security Administration Required" is checked in Exhibit A. The level of security shall be consistent with the information category identified by the code checked for each such system (see NPG 2810.1). Any system software, application software, or database software that is licensed to run on a particular item of equipment is

entered in the respective column for that item. Software that does not require a license is also included if it is relevant to any of the required services. The services of Hardware Maintenance (HM), System Software Management (SSM), Applications Management (AM), and Database Administration (DBA), are required for the items of equipment or software that are checked in the respective columns of Exhibit A.

Maintenance of Software Developed By or For LaRC:
Provide on-going maintenance and analytical support for the IRIS application.

Customer Support and IT Consultation and Training:
The Contractor shall provide the basic level of Customer Support and IT Consultation and Training given in Sections 4.7 and 4.8 of the SOW for all General IT Support Services.

Exceptions and Additional Requirements:
FCATS shall be initiated as a proof-of-concept prototype to access the feasibility and value of an FTE full costing tool. There are three phases envisioned for the successful completion of the FCATS prototype.

Phase 1: Define the data items, candidate sources systems, data limitations, and prototype report presentation screens.

Phase 2: Implement a web-based prototype to view the summary of the full burden FTE rate and associated cost elements.

Phase 3: Implement a web-based prototype to view actual time card charges for each FTE with the work breakdown structure charges summarized on a percentage basis to direct, overhead, and G&A charge categories to provide an insight to the funding source for each FTE.

The FCATS prototype shall be developed in a similar fashion to the original F&RSA full costing prototype using Oracle Application Server 10g on the GIS development database server.

The ultimate success of this initiative is dependent on the expertise and cooperation of NASA officials and development team members responsible for the relevant source systems providing the required FTE cost component data in a timely, accurate, and eventually automated fashion.

As a follow-on activity once the success and value of the initial effort is assessed, the rapid prototype may be evolved into a fully automated system supporting monthly source data updates and processing in order to continuously track the LaRC FTE full cost burden and funding. This Task Assignment will be revised accordingly once follow-on activities are determined.

The task is revised to incorporate the following changes into the prototype:

Implementation Phase 1

1. Incorporate revised center-wide G&A cost (value of Other G&A and Investment Account costs allocated only to code A).

2. Report the organization code for WIMS personnel no longer in LaRC FPPS.

3. Incorporate planned new employees not yet hired from WIMS.

4. Phase I data refreshes, job runs, and publish to production.

Implementation Phase 2

5. Change allocation of FTE office costs to indirect if service activity assigned.

6. Add capability to allow raw service pool procurement and travel data at a lower directorate level. Allow separation of other costs from procurement (i.e. general center-wide).

7. For S&E type branches with no direct personnel, allocate all indirect costs including branch level overhead up to directorate level for allocation back down to direct FTEs.

8. For G&A branches with no G&A personnel, allocate G&A overhead as a G&A cost for all FTE in the branch.

9. Add a summary of costs per service activity by cost component type. Also include a summary of direct costs by cost component.

Implementation Phase 3

10. Add an Intelligent refresh capability (fiscal year incremental instead of full data reload) for LaRC FPPS and Personnel Locator data (so have all relevant personnel for entire fiscal year even partial ones who came or departed).

11. Add WebTADS data and web screen calculation toggle.

Implementation Phase 4

12. Automation of WebTADS updates

13. Data Application Management

Act as Data Manager for the FTE Organizational Cost Analysis System (FOCAS): Works as part of a team to present FTE time allocation and cost data to various levels of LaRC management (branch heads, consumer unit directorates, product unit directorates, Office of the Director, etc) and to assist in concentrated meetings aimed at allocating LaRC's work force to the best extent possible. The task includes administrative support to manage and generate data books (handouts). The data manager shall assist in the identification of FTE allocation discrepancies and document corrections. Must be familiar (but not intimately so) with the LaRC Federal Personnel Payroll System (FPPS), Workforce Integrated

Management System (WIMS), Web Time and Attendance System (WebTADS), N2 eBudget System, and LaRC Programmatic Budget Development Template.

The task is not full time, but will require full time participation in the team meetings and additional time interfacing with CONITS development team members to modify data base interfaces, generate reports, extract information, and refresh data when critical to the decision process. The expected need is for approximately .5 FTE for the term of the exercise, with consistent day to day need followed by off days.

Rev-4 Additional Requirements

1. Complete CMS data integration, graph reports, and automation of the WIMS/WPS refresh.

2. Automate the generation of the FOCAS LaRC FPPS data file.

3. Automate the full data refresh of the LaRC FPPS, Organizational Title System, and Personnel Locator data.

4. E-mail to the customer the FTE data inconsistencies and the FTE reconciliation.

5. Incorporate WebTADs/ALDS data into the FOCAS schema, processing, and reporting. Enhance the LaRC FPPS processing to do "intelligent" (incremental) processing (so history maintained for terminated employees with charges for fiscal year). Automate the ALDS refresh process.

6. Update the full cost model as necessary based on agency changes.

7. Automate part (FTE/WYE counts) or ALL (numerous cost pieces) of the extract and refresh with Programmatic Budget Development Template.

8. Reporting enhancements as requested.

9. Interface with new budget formulation applications.

10. Develop new skills requirements features. Bring over the out-year WIMS/WPS data which is by organization and competency rather than named FTEs.

11. Setup of Discoverer application end user query worksheets.

REVISION 5

FOCAS will be renamed IRIS

Requirements for Integrated Resources Information System (IRIS)

1. Meet with NASA customer to determine requirements
for Integrated Resources Information System

a) Understand the initiative and objectives

b) Obtain inputs from Office of Director &OCFO

c) Understand the related systems (BW. LP, Goddard)

d) Obtain informal user inputs

2. Prototype application display screens

3. Attend focus meetings of Branch Heads and Program Analysts (formal inputs)

4. Categorize and compile focus meeting information

5. Initiate Task revision

6. Develop Requirements and Phase 1 plan

7. Document new requirements

8. Review and finalize requirements/modifications for Phase 1 of the IRIS system

9. Develop System Design for Phase 1

10. Analyze Data Requirements to determine if there is/or is not a source for the data

11. Determine if the data field required is:

a) Currently available in the FOCAS System

b) Not currently available but available for inclusion

c) Available in the future

d) Not available

12. Review current Database design

13. Review all the current data extracts that feed FOCAS

14. Determine if current data extracts are to be modified or remain the same

15. Determine sources and method for securing the new data fields

16. Develop interface detail agreements (IDAs) as

necessary for external data

17. Document and request changes to the
architecture/framework where indicated

a) Database

b) Extracts

18. Web Development:

a) Create, Modify or Delete code as necessary to
support the new requirements

b) Test modifications

c) Verify data

19. Implement Phase 1

REVISION 6 Requirements for Integrated Resources Information System (IRIS)

1) Workforce planned and Actuals (Data from Systems: WPS, AWARE, BW)
"FTE Planned and Actuals (CM&O, Direct and Indirect)
"WYE planned only (CM&O, Direct and Indirect)
"By 2 and 3 digit organization and WBS (6 digit or lower go as low as available)
"Planned Vs Actuals for each CS employee to each WBS

2) Workforce Planning (skills and dynamic allocation) (Data from Systems: WPS, CMS, PT, PRDS)
"How can workforce be deployed better, and utilized better
"Help with making swaps and realignments
"FTE and WYE Allocated/Planned by Org and WBS
"Compliment by Org and WBS
"Numbers & Skills needed and available both in the current year and outer years: By WBS keep the lowest level available; By skill; By 2 or 3 digit organizations
"Show WYEs wherever available
"Current year and next year to name level ; outer years (3years) just numbers
"PRD, PT and WPS Reconciliation at WBS 6 digit level and Org.level (help with budget planning)
"PT and WPS Reconciliation at WBS and org.level (2 & 3 digits) help with budget planning)

3) Organizational workload (PRD, WPS, CMS)
"Deliverables & milestones from PRDs by WBS
"Deliverables & milestones from PRDs by sponsoring and performing org:
"Competencies and associated CS FTE by WBS and Organization (2 and 3 digit)

4) CM&O costs: Allocated Vs consumed (WPS, OCIO and COD databases)
"By category
"By 2 digit and 3 digit orgs
"Focus on Labor/FTE, IT and F&RS

5) Center overview of Budget and workforce information (PT, WPS, PRLS)
"Overall Center budget process and schedule
"Overall budget & workforce view
"WBS Definitions and Dictionary

6) Budget Information Planned Vs. Actuals (PT, BW)
"Planned/Allocated by WBS/Project & Funding Source and organization
"Actuals by WBS commitments, obligations, costs
"Planned and Actuals WBS levels may not match up; it is planned at higher level than the actuals captured in BW
"Center is implementing Goddard Budget Guidance & Execution tool for lower level guidance and execution ; IRIS can pull this planned & actual data once it is available

Task Revision 7

Provide IRIS operation and stablization phase support to include standardizing IRIS data tables extracts for easy maintenance; integrating and converting FOCAS to IRIS tables and moving all processing from the gisdev server to webser02; developing and implementing data extract schedules and agreements; capturing and synopsizing user feedback and document high level Phase II requirements.

General IT Support Services Performance Metrics

Performance Standard: Assigned activities are accomplished satisfactorily and within the pre-determined schedule.

Performance Metrics:

Exceeds: All assigned activities are accomplished satisfactorily on or ahead of the pre-determined schedule. Suggestions are made and acted on the lead to advancements towards the goals of the projects.

Meets: Any deficiencies or slippage in one or more activities are offset by improvements or gains in other activities.

Fails: Deficiencies or slippage in assigned activities have had a detrimental effect on the objectives of the project.

5. SYSTEM AND APPLICATION DEVELOPMENT SERVICES

Project Title: REV-10 IRIS Enhancements

LaRC Software Manager:

Software Software Control Class: Low

Responsibilities of Contractor and LaRC personnel:ConITS will provide application development services which includes the analysis, design, development, integration, testing, and implementation of the application. NASA will provide testers for System

Acceptance Testing and a POC for the prioritization of errors or problems identified during SAT Testing.

Requirements:
Provide IRIS enhancements as needed to support Center reporting requirements.

Constraints:
Enhancements will be developed with existing funding.

Acceptance Criteria:
Application enhancements meet the specified requirements.

6. WORK-AREA SPECIFIC SERVICES

None required.

7. Exhibit A

Exhibit A

8. SPECIAL SECURITY REQUIREMENTS

Unclassified data and systems.

9. SOFTWARE ENGINEERING PROCESS REQUIREMENTS

The Software Control Class requirements of this TA are determined to be "Low", therefore the software acquisition & control process described in the ConITS master TA SL001 shall apply to this TA.

10. JOINT REVIEW SCHEDULE

There will be a joint review of the work of this task assignment at meeting to be held monthly, on an as needed basis, at an agreed upon time. The following persons or their alternates are requested to attend: NASA Task Area Monitor (TAM) and Contractor personnel assigned to task. Technical performance, timeliness, cost and staffing will be discussed. When requested, the Contractor shall maintain minutes of the meeting. Meeting minutes will be distributed via email to participants as requested for review and correction, when necessary. Meeting minutes will be archived on a mutually agreed upon NASA/LaRC computer.

11. PERIOD OF PERFORMANCE

This TA is effective from 03/17/05 to 04/27/09

12. TECHNICAL PERFORMANCE RATING

In evaluating Technical Performance, quality and timeliness shall be rated as follows:

Quality: 60% Timeliness: 40%

13. RESPONSE REQUIREMENTS

This Task Plan shall address the contractor's specific work plans, associated estimated labor hours, cost and schedule.

14. FUNDING INFORMATION

Funding has not been entered for this TA.

15. MILESTONES

Date	MileStones
09/30/2006	Gather Requirements
11/30/2006	Finalize Requirements
01/16/2007	Working prototype
03/30/2007	Phase I Production Implementation

16. DELIVERABLES

Number	Deliverable Item	Deliverable Schedule
1	Source Data System Identification, Limitations, and Implementation Plan.	May 31, 2005
2	Web-based Prototype of Itemized Cost Component and FTE Burden per Organization.	July 31, 2005
3	Extension of the Web-based Prototype with Categorized Summary of Actual Time Card Charges per FTE.	Per agreement with the TAM.
4	Enhancements to the Building Closure Analysis Tool.	Per agreement with the TAM.
5	Implementation Phase 1 Requirements	October 31, 2005
6	Implementation Phase 2 Requirements	November 18, 2005
7	Implementation Phase 3 Requirements	Per agreement with TAM
8	Implementation Phase 4 Requirements	Per agreement with TAM
9	CMS Skills Data Integration and Reporting Enhancements	June 30
10	WIMS Extraction / FOCAS Refresh Automation	July 14

11	Automate generation of LaRC FPPS data file	July 21
12	Automate the full data refresh of the LaRC FPPS, Organizational Title System, and Personnel Locator	July 28
13	Working prototype	01/16/2007
14	IRIS Phase I Complete	03/30/2007

17. FILE ATTACHMENTS

None.