MINUTES

NIH Commons Working Group (CWG) Meeting

Date/Time: November 14, 2001, 1:30–5:30 p.m.
November 15, 2001, 8:30 a.m.–12:00 p.m.

Location: Washington Hilton Hotel, Washington, D.C.

Attendance

CWG Members

Ellen Beck—UCLA

Steve Dowdy—MIT

Jan Fant—UMDNJ

Ken Forstmeier—Penn State

Jill Keezer—Cal Poly, SLO

Jim Randolph—Univ. of Michigan

Sandi Robins—Univ. of Wisconsin

Pamela Webb—Northwestern

Tom Wilson—BCM

David Wright—UTMB

Others Institutional Representatives

Bob Beattie—Univ.of Michigan

Dan Dwyer—Cornell

Phil Martin—Dartmouth

Tammy Custer Ordway—Cornell

Graydon Kirk—Emory

Vendors

Chris Harker—Cayuse Software

NIH Staff and Contractors

Suzanne Fisher—NIH/CSR

Marcia Hahn—NIH/OPERA

Madeline Monheit—NIH/LTS

Richard Panniers—NIH/CSR

Bob Reifsnider—NIH, Microtechnologies Plus

Christine Rumney—NIH/LTS

George Stone—NIH/OPERA

Jerry Stuck—NIH/eRA

Carol Tippery—NIH/OPERA

Judith Turner—NIH/TCG

Tim Twomey—NIH/OPERA

Mark Weiser—NIH/RN Solutions

Greeting and Introductions

The CWG meeting was held immediately following the 43rd Annual NCURA Conference. George Stone thanked CWG members for extending their stay in Washington, DC and stressed the importance of their input on an on-going basis. He then introduced Jerry Stuck who joined the eRA project in July to lend his experience and advice to NIH Commons development efforts. Detailed from the National Science Foundation (NSF), Jerry spearheaded the implementation of FastLane, the NSF system for electronic receipt of grant applications. He also works closely with the FDP to coordinate e-grant activities between federal agencies and participating institutions.

George distributed the draft minutes of the previous CWG meeting on August 16; email comments to George at george.stone@nih.gov. Minutes of all prior meetings are available on the eRA web site at

http://era.nih.gov/projectmgnt/minutes/commons.htm. George acknowledged that there are accessibility issues with some of the attachments, which are posted in Word, Excel and PowerPoint. All Commons Version 2 project artifacts (deliverables) are also online. Use Internet Explorer (IE) for detailed documentation at http://commons2.oer.od.nih.gov.

George next reviewed the high-level agenda and distributed handouts (included as attachments and web links). In response to a request to send materials in advance, George said that he prefers to provide them in context at the meeting. He will allow adequate time for member input *after* the meeting. At the same time, he agreed that he will redouble his efforts to send any information that he has prepared in advance, if possible. Agenda items fall into two categories that correspond to the CWG's two major subgroups: Applications and Interface Specifications.

Status of SNAP BPR Recommendations

Carol Tippery, Director of the Division of Grants Policy, NIH Office of Policy for Extramural Research, reported that CWG recommendations for changes to the e-SNAP have been finalized and approved by NIH and will be announced to the grantee community through the NIH Guide in coordination with the pilot planned for late 2002. Pamela Webb suggested implementing the pilot to coincide with the new fiscal year. No changes will be made for paper submissions.

Carol continued that one point of concern and contention has been the recommendation to accept e-SNAP submission directly from the PI if an Authorized Institutional Business Official (SO) has delegated authority. For all cases where the PI is given permission to submit directly to the NIH, the NIH Commons will send a confirmation to the AO and SO when a submission has been received. The NSF has already adopted this methodology.

George reminded the group that enabling e-SNAP submission by the PI is at the discretion of each institution. Many believe that faculty will pressure their administration to exercise this option and that ultimately, the NIH will expand PI submission to other types of applications. Pam said that a survey of applications submitted through her office revealed many errors. She favors allowing PIs to submit directly to the NIH if the institution retains the right to correct discrepancies. Marcia Hahn added that e-SNAP software will incorporate edit checks designed to reduce errors. She also reminded the group that NIH will begin with a pilot and allow adequate opportunity for grantee evaluation.

Carol also said that the recommendation to reduce e-SNAP submission from 60 to 30 days before the start date caused considerable angst at NIH. There was agreement on 45 days as a compromise; since the deadline for paper application remains at 60 days, this change should serve as an incentive for e-SNAP. Carol also mentioned that NIH would no longer send the face page of the application, placing the onus on the institution/PI.

Carol has sent a copy of the SNAP reengineering recommendations to HHS. Thus far, she has not received negative feedback. Hopefully, NIH's approach will serve as a model for the Department.

George continued that we are about to begin the BPR for the competing application (R01), to be followed next summer by the design and development of the interface to submit the complex application (CGAP). Just when the design and development begins, of course, is contingent upon when the BPR is complete. (See attachment A, slides 7–9 for project timelines). Steve Dowdy asked if the Gantt charts are conservative; George replied that RUP experts did the estimation and have been largely on target for J2EE development.

Update on X-Train Implementation

George reported that the X-Train Version 1.5 pilot has been deployed. eRA has decided to extend the pilot phase to maximize understanding of user requirements before developing detailed system

requirements for the future Java-based X-Train Version 2.0. Delaying 2.0 development also enables resources to be diverted to e-SNAP efforts. Steve inquired if a user with an active Commons account can use X-Train. Tim Twomey replied that each institution must contact the eRA User Services Branch (USB) to enable access. For more information about the X-Train pilot and the shutdown of the e-2271 facility, see newsletter articles in *Inside eRA* at http://era.nih.gov/eranews/eranews011030.htm - 3 and *Inside eRA for Partners* at http://era.nih.gov/eranews/eranews011010.htm - 2.

There was additional discussion of the X-Train pilot during Day 2 (November 15). For purposes of coherence, the discussion is presented here. Seven institutions currently are participating in the pilot. A problem that immediately surfaced was that grantees could not process reappointments because the initial appointment information had not been recorded in Training Activities (TA). There is a considerable backlog by NIH Staff in inputting trainee appointment information previously received as paper 2271's. Also, acknowledgement of receipt of electronic 2271's appear not to be up-to-date. NIH has asked staff to ensure that all 2271 information is current in TA. Please inform USB if you are unable to process reappointments. Also, note that termination notice functionality has not been included in the pilot because of an NIH policy issue.

One member complained of not being informed of rejections. Marcia Hahn, eRA Grants Management Advocate, said that ICs should be notifying grantees when electronic or paper 2271s are rejected. Marcia will follow up at NIH.

Pamela distributed Northwestern's X-Train User Quick Guide (see attachment B). Please send technical information questions to the eRA Helpdesk mailbox at helpdesk@od.nih.gov.

Action Item for X-Train

Marcia to make sure that ICs notify grantees if a 2271 has been rejected.

Grant Applications Subgroup—Reengineering the NIH Competitive Application

The CWG members devoted the remainder of Day 1 and a substantial portion of Day 2 to discussing opportunities for reengineering and streamlining the data requirements for the NIH Competitive Application (PHS 398). George Stone, Carol Tippery, and Marcia Hahn led the discussion. This effort involves a consideration of both data requirements and business process constraints.

Working from the 398 Rev. 05/01 (available at http://grants.nih.gov/grants/funding/phs398/phs398.html), the members considered streamlining possibilities for each item. The following table summarizes the discussions; more detailed discussions are provided after the table for data elements that are marked with an asterisk (*).

Data Element	Discussion / Recommendation
Face Page (Form Page 1)	
1. Title of Project	Increase size from 56 to 180 characters.
2. Response to RFA/PA	No change for now. Eventually the RFA will include business rules that will allow validation of electronic submissions, vis a vis dollar thresholds, eligibility, etc.
3. Principal Investigator/Program Director	Electronic submission will make the New Investigator Indicator obsolete. Once data problems are resolved, each PI will have a unique identifier that triggers a funding-history query to

Data Element	Discussion / Recommendation
New Investigator Indicator* a. Name b. Degrees c. Position Title d. Mailing Address & Email e. Department, Major Subdivision, Service, Laboratory, or Equivalent f. Major Subdivision g. Telephone and Fax	IMPAC II. A profile should identify a PI's multiple affiliations at one institution. Delete Degrees (item 3b), Mailing Address (item 3d), and Telephone and Fax (item 3g), which will be in the PI profile. Name (item 3a); Position Title (item 3c); Department, Service, Laboratory, or Equivalent (item 3e); and Major Subdivision (item 3f) will remain on the application. The standardization of organizational hierarchy of each institution will allow for more complete identification of each P.I. even to the level of the department from which a particular application is being submitted.
4b. Human Subjects Assurance #	Delete; will be captured by the Institutional Profile for MPAs and FWAs. Project-specific assurances will still need to submitted with each application.
4c. NIH-Defined Phase III Clinical Trial	Should PIs or the NIH Program Official complete this element?
5a. Animal Assurance #	Delete; will be captured by the Institutional Profile.
5b. IACUC Approval Date	Consider making this just-in-time.
6. Project Dates	No change for now. For Competing Supplements, consider a business rule prohibiting extension beyond parent grant
7. Costs Requested for Initial Period 8. Costs Requested for Proposed Period of Support	Reengineering item (after Phase 1): if business rules associated with an RFA implement a cost threshold, this information would be available and would be validated by the eRA system at the time of submission.
9. Applicant Organization Information* Name, Address Type IPF (or Successor DUNS)	Delete Applicant Organization Name and Address (item 9). These items are part of the Institutional Profile Leave IPF (or DUNS). The data stream transaction will use the DUNS to identify the organization.
10. Type of Organization	Delete (item 10); will be captured in Institutional Profile.
11. Entity Identification Number, DUNS, Congressional District	The EIN is used only by the accounting system; there is no exact correlation between the EIN and IPF. DUNS No. will remain on the application. Possibly delete Congressional District (item 11).
12. Administrative Official to be* Notified if Award is Made	To be determined. Currently, NIH defines this element (item 12) as the project-specific individual with whom NIH should negotiate an award. The email address of an individual who receives and disseminates NIH notices at the institution may

Data Element	Discussion / Recommendation
	need to be added.
13. Official Signing for Applicant Organization	Delete item 13. This information will be derived from the unique user ID or from the Federal Commons.
14. Signature of PI/PD and Date	Delete item 14.
15. Signature of Official Signing for Applicant Organization and Date	Delete item 15.
Form Page 2	
Description (Abstract)*	PIs need the ability to revise the Abstract. NIH will research how this information is used and whether rich text within the abstract will be supported. Currently, PIs include scientific symbols, which are lost when the Abstract is read by optical scanners.
Performance Sites	Add DUNS number. NIH will determine how this information is used.
Key Personnel*	Possible reengineering item. An outstanding question regarding role is how NIH recognizes Co-investigator vs. Collaborator vs. Consultant.
Table of Contents (Form Page 3)	This page will be system-generated.
Detailed Budget (Form Page 4)	
% Effort on Project*	Two streamlining options will be considered: Annual: Percent of effort and salary per person. Modular concept: Report percent of effort only per category (lump sum).
Supplies and Equipment*	Possible reengineering item.
Biographical Sketch Format Page	Duplicates Other Support information. Positions and Honors (item A) and Selected Peer-Reviewed Publications (item B) are part of the PI Profile.
Checklist Form Page*	The checklist could be deleted if items are moved to the PI profile or elsewhere. The Foreign Application or Significant Foreign Component data element must be addressed.
Personal Data on PI / Program Director*	The members agreed to push for elimination of this page; data elements will be in the PI profile.
Other Support Format Page*	Possible reengineering item.
Personnel Report Format Page	The members agreed to push for elimination of this page. This information currently is available on request, and no one requests it.

Form Page 1

3. New Investigator Indicator

PI Profiles in the Commons will include funding histories. If there is no history (i.e., no previous PHS-supported research), then by default, the PI will be "New." Carol explained that NIH databases contain minimal information about PIs. If professional profiles were kept current, then NIH would have better data.

Pamela suggested that PIs be encouraged to maintain up-to-date profile information.

George said that key data elements would be used to identify PIs. After People Data problems are resolved, PIs can be uniquely identified. The PI Profile adds value because users need not provide the same information multiple times. Profiles should be able to identify a PI's multiple affiliations at one institution.

In response to a question on how transfers between institutions are handled, George stated that records would be removed from the predecessor institution and moved to the successor institution.

9.–13. Applicant Organization Information

The 194 transaction set includes two address types that can appear on a grant application: awardee and performance site. George asked what purpose applicant organization address types serve in an electronic world. There will be no need to mail the institution any information routinely: use of "snail mail" will become a backup to be used only when systems are down.

The discussion regarding this item centered on what NIH considers the use of this information. Is this the institutional representative for NIH to contact to negotiate an award? If so, this information would need to be project-specific. In addition to this project-specific contact, NIH would prefer to have a single point of contact for each grantee institution. The information for each institution would be in the IPF. Other uses of addresses by NIH require review. Marcia agreed to solicit NIH staff as to possible uses of this information. This contact could be used for NIH-wide communications (e.g., T-5 notifications, Stem Cell info) and requests for info (e.g., Conflict of Interest plans). The IPF currently includes a separate central e-mail for NGAs.

The members agreed that the Institutional Profile should provide for multiple signing officials. Jerry suggested using a table of user IDs for all authorized signing officials. An audit trail would verify the location of the individual who signed for the applicant organization.

Form Page 2

Abstract

The members agreed that the purpose of the Abstract must be clarified—is it intended primarily for laypersons or for Review and Referral (R&R) staff? NIH will research the Abstract's function and will determine whether the use of the abstract warrants the ability for the P.I. to include rich text in the abstract.

Some PIs include scientific symbols in the Abstract; optical scanners convert them to alpha characters. Carol suggested that the instructions be revised to preclude use of symbols.

PIs need the ability to revise the Abstract because negotiations may change the scope of the investigation. The members agreed that a size restriction should be imposed; currently two typed pages (4096 characters) are the maximum size permitted.

Key Personnel

NIH must determine whether key personnel are to be reported for the applicant organization or the performing organization, or both. Richard noted that Review needs information about collaborating institutions to oversee potential conflicts of interest.

Members suggested deriving this information from other sources, such as biosketches or budget records (possibly using National Science Foundation (NSF) budget category codes, which would include role information). The Key Personnel data element could be removed if the information can be obtained using another method, e.g. link to info on itemized budget page when applicable (non-modular).

Many grantees are tying key personnel information to RCR training. Some suggest requiring that professional profiles be required as a means to track all key personnel.

George noted that a standardized organizational hierarchy, that will be implemented as part of Commons V 2.0 will provide an improved way to positively identify key personnel. Professional profile information can be used to uniquely identify a person. When combined with how that individual fits into an overall organizational hierarchy, positive identification of the individual is reinforced. George suggested requiring institution-related hierarchy information to positively identify an individual.

Form Page 4

Percent (%) Effort

The members agreed that % effort information is hardly ever accurate and can not be handled well as part of a data stream. The CWG challenged NIH staff to provide rationale for use of such values if they all parties concede to the inaccuracy of the information. There was consensus that the need for this type of information and its format be visited across the government. Steve finds the NSF transmittal by calendar month more useful than percentages because amounts can be added. NIH currently uses percentage for non-modular grants. Richard noted that from a Review perspective, an annualized percentage would be more useful than the current methodology.

CWG members would like to submit one data stream to all federal agencies. Each agency could aggregate the information according to its reporting requirements. The Federal Commons, Office of Management and Budget (OMB), and the Federal Demonstration Project (FDP) may need to be involved in developing a resolution for this issue.

NIH will present two streamlining options to user and functional groups and will report feedback to the CWG:

1. Annual: Percent of effort and salary per person. This is the more conservative solution.
2. Modular concept: Report percent of effort only per category (lump sum); provide detailed budget information in text fields.

Detailed Budget Information

The members discussed a suggestion to combine the Supplies and Other Expenses categories on the Detailed Budget (Form Page 4). If they are not combined, distinctions between these data elements need to be clarified. Marcia explained that even if they were combined, institutions would still need to provide line-item justifications. The need to collect this information begs the question of the value of itemizing these budget categories. Who uses the detail and how? One possibility is only itemizing costs that affect F&A cost base.

Checklist and Personal Data

The CWG agreed to push for elimination of the Checklist and Personal Data pages. Checklist items can be moved to the PI Profile or elsewhere. Personal data information will appear in the PI Profile. Marcia noted that the Foreign Application or Significant Foreign Component element must be accommodated.

Other Support Format Page

One objective of the potential reengineering process is to parse competitive applications and show reviewers the information they are accustomed to seeing. Richard said that Review would like to use the old method of reporting Other Support information. This points to related questions as to what peer reviewers use the information for? Do they need to see amounts awarded to ascertain the relative size of specific projects, or is % effort sufficient to determine if the PI or other key personnel are over committed. George asked if Other Support information should be added to the PI Profile. One argument against this is that the support is quite dynamic. As such, concern was expressed by CWG members that if made part of the PI Profile, the PI would not necessarily be willing to maintain it.

Action Items for NIH Competitive Application Reengineering

- NIH will research how NIH staff use the following items on Form Page 1: IPF Number (item 9), EIN (item 11), and Congressional District (item 11).
- NIH will define Application and Performance addresses and determine how they are used.
- NIH will analyze whether the Abstract (Form Page 2) is used for Review/Referral, for laypersons, or for multiple purposes. The analysis will determine whether symbols and rich text should be supported in the Abstract.
- NIH will research the use of box 12, i.e., whether contact information is needed for grant negotiations and other purposes as well as for award notification.
- Steve will email Jerry details of how the Key Personnel element (Form Page 2) could be changed to reduce the burden on the data stream.
- NIH will research how to calculate % Effort on Project (Form Page 4) and explain how Review uses this information.
- NIH will present user and functional groups with two options for streamlining % Effort on Project (Form Page 4). NIH will present the annualized and modular approaches to user and functional groups for comment.
- NIH will research how the Program, Grants Management, and Review business areas and Congress use itemized budget information from the Equipment, Supplies, and Other Expenses fields (Form Page 4). NIH will determine the level of detail required for each category and which fields are processed as data and which as text.
- NIH will map EDI budget categories to those on the 398.
- NIH will research how Review uses Other Support information.
- George will provide a survey instrument to solicit additional input.

Update on Other Commons Initiatives

Commons Version 2.0 Platform—George explained that eRA has adopted the Rational Unified Process (RUP) for J2EE efforts for the Commons redesign. RUP is a complex, multi-phase methodology that uses “best practices” to incorporate community input by means of “use cases” (how users interact with the system to do their job). Instead of taking a linear path, RUP proceeds iteratively to ensure

continuous improvement. For more information on this methodology, visit the external RUP web site at http://www.rational.com/products/rup/index.jsp.

George reiterated that Commons Version 2.0 documents (a.k.a. artifacts) can be viewed with MSIE at http://commons2.oer.od.nih.gov/. RUP uses Unified Modeling Language (UML) visual notation to depict flow and relationships. Al D'Amico explained that bubbles on the use cases are clickable to drill down for more detail. Jerry added that the data for each activity is also documented. CWG members are encouraged to review Commons artifacts and send comments.

George reported that the first release of Version 2 will be internal to NIH and is on target for end of January, 2002. Regarding the Version 1.0 interface, ASCII text summary statements have been deferred; summary statements in PDF will be available in January.

Commons Version 2.0 GUI Standards – See attachment A, slides 23-31. George announced that a Human Factors Analyst (HuFA) is now on board to analyze and assist with screen design. The draft GUI standards document has been posted on the web site and a canned, self-contained demo of draft Commons screens will be distributed soon for CWG evaluation. The new screens reflect the group's recommendations, including:

- Instructions up front
- Columns aligned
- Reduced navigation; fewer clicks
- Integrated log on screen
- Context-sensitive help and FAQs
- Pop-up boxes to confirm decisions
- Menu bar at the top
- Cascading menus based on role
- Ability to limit and search hitlists

One dilemma is whether it is better to have one long screen requiring scrolling or multiple pages. The HuFA is doing an analysis. Steve stressed that the screens need to look good and work well in both Netscape and Internet Explorer. In response to a question about institution codes, George replied that user names will be unique; therefore, institution codes will not be required at logon. Steve asked about PIs affiliated with multiple institutions. Al said that developers have not yet studied this requirement. Pam remarked that FastLane presents a choice of institutions where applicable.

Action Item for GUI Standards

- CWG will provide comments on appearance and usability of draft screens in canned demo.

Other Commons Functionality – The eRA Commons team has been working with the Information Management Module (formerly IPF) team to incorporate four standard levels of institutional hierarchy (institution, unit/school/college/ institute, division, and department). Pam suggested adding projects as a fifth level. There has been progress toward adopting the concept of single-point-of ownership of the professional and institutional profile; however, there are still outstanding NIH issues. A major project is underway to identify duplicate profiles in IMPAC II, to clean existing People data, and to restrict NIH staff from changing profile records. This data cleanup is a prerequisite to handing over update responsibility to the grantee.

Grants Closeout and Financial Status Report Initiatives

Marcia Hahn reported on two concurrent and inter-related eRA initiatives: the development of a Grants Closeout System (GCS) and the migration of Financial Status Report (FSR) functionality from IMPAC I to IMPAC II. Ultimately, the GCS will be integrated into the redesigned Grants Management module for NIH Staff and will interface with the Commons and FSR modules. Since the NIH has been cited on GAO CFO audits for closeout deficiencies, GCS development is a high priority for 2002.

There are three mandatory reports for closeout: the Financial Status Report, the Final Progress Report and Final Invention Certification. Marcia handed out the corresponding OMB forms. eRA will enable electronic submission, however, there is little opportunity for BPR. Online forms are available as follows:

Financial Status Report (Short Form) OMB 269A (http://www.whitehouse.gov/omb/grants/sf269a.pdf);

Financial Status Report (Long Form) OMB 269 (http://www.whitehouse.gov/omb/grants/sf269.pdf);

Final Invention Certification HHS 568/OMB 0925-0001 (http://www.iedison.gov/hhs568.pdf).

Marcia mentioned that for certain NIH ICs, program officials have recommended accepting the Competing Continuation Application (Type 2) in lieu of the Final Progress Report. Discussion is beginning as to whether this should be an NIH-wide process, and Marcia expects some opposition given that the information would be nine months old at closeout.

CWG members questioned the need for dual entry and reconciliation of data on the Final Invention Report **and** in Interagency Edison. The preference is that final certification be performed in iEdison by the Technology Transfer Office of the grantee institution. George indicated that eRA is working toward single data entry. In the interim, there was a suggestion that institutions delegate final invention certification to the Technology Transfer Officer. Ken Forstmeier believes that the reconciliation should occur at the institution rather than at NIH. George will prepare a survey for CWG feedback on the Final Progress Report and Invention Certification process.

Steve inquired about the timeline for iEdison integration. George indicated that the new version of iEdison is on schedule with deployment planned for next summer. John Salzman currently is working on use cases with Paul Markovitz.

Action Item for Grants Closeout

- NIH will solicit feedback from the CWG regarding reporting requirements for closeout.

eRA SBIR Initiative

Dr. John McGowan, eRA Project Manager, said that NIH is considering using a Small Business Innovation Research (SBIR) mechanism to stimulate partnerships between the NIH and the private sector for development of applications and services that will assist the research community with electronic grant submission. Although larger universities already have data stream capabilities, many smaller institutions do not have the information technology resources to support development of such capabilities.

Steve inquired why the government should subsidize this endeavor. Dr. McGowan responded that it would expedite the federally mandated transition to e-grants. These tools would also help implement a secure and standardized protocol for international markets. JJ compared the proposed eRA partnership to TurboTax's relationship with the IRS.

JJ distributed copies of the draft RFA (see attachment C). Steve asked why limit the solicitation to small businesses? JJ said that the cash pool for the grant was only $1–1.5 million; ScienceWise and Community of Science have already expressed an interest. George emphasized that NIH will issue an

RFA, not an RFP. The awardee must agree to work cooperatively with the eRA Project and Development Team and with the community over time.

Pam made a motion to approve the SBIR concept; the CWG voted to approve. Next steps will be for JJ to take the proposal to the NIH Extramural Program Management Committee (EPMC) to get further approval and identify financing for the initiative. Once full support is gained, the final RFA will be formally announced to the extramural community via publication in the NIH Guide. An announcement of the funding opportunity will appear in the eRA newsletter.

As part of the discussion a question was raised concerning NIH's plans to scan all incoming paper applications beginning in January. JJ explained that scanning is a way to introduce the NIH staff community to the advantages of electronic files. NIH may reduce the number of required paper copies by next fall.

CWG Decision on SBIR RFA

- The CWG voted to approve NIH's plan to issue an SBIR RFA to establish partnerships between NIH and the private sector for the development of applications and services to assist grantee institutions with electronic submission.

Action Item for SBIR RFA

- CWG will send comments on draft RFA to team with eRA on applications and services to assist the research community with electronic submissions.

Attachments

A. George Stone's Presentation at CWG Meeting on November 14-15, 2001

B. Pamela Webb's X-Train User Quick Guide

Next Meeting

The next CWG meeting will be held on Sunday afternoon, January 6 at 1:00 pm in conjunction with the FDP meetings in Austin, Texas. The purpose of the meeting will be to continue discussion of streamlining data requirements for the competing application, to consider opportunities for process reengineering, and to review CWG comments on draft screens for Commons Version 2.0.