CGAP Process and Policy Issues
Version 1.5

Source Documents: NIH Action Items—list maintained by George Stone/David Wright
CWG Presentation—presentation by George Stone to CWG, 01/2002
Mongan e-mail—e-mail from Michael Mongan of RAMS
CWG Discussion Topics—document from CWG meeting of 01/2003
DRR issues—document written by Sara Silver, based on conversations with Suzanne Fisher
Specified focus group meetings

Issue	Description	Resolution	Status/Date	Source Document
Formatting and Configuration				
What is the distribution of PDF files to be transmitted with the XML data stream?	Introduction (for revised applications)	Not for version 1. One file, limited to three pages.	Closed 2/3	NIH Action Items 1/27 Focus Group
	Research plan	Rich text, limited to 25 pages. One file for A-D, one file for E-F, one file *each* for G-J	Closed 2/3	1/27 Focus Group
	Biosketch	Two rich text sections (the second section is related support), each limited to two pages. Two files.	Closed 2/3	1/27 Focus Group
	Abstract (Description) (Title will be part of XML data stream)	Rich text Issue: CRISP indexer cannot deal with rich text; need product to convert PDF into Word.	Closed 2/3 Pending 1/27	1/27 Focus Group
	Appendices	Rich text. For version 1, will reserve a slot for the appendix—will be there if anyone wants to use it.	Closed 2/3	

Issue	Description	Resolution	Status/Date	Source Document
How to submit appendices	From a reviewer perspective, can appendices be received electronically, rather than in hard-copy? Will appendices be sent as a separate transaction?	Yes, appendices can be received electronically. They can be submitted as one separate electronic transaction (attached or not attached to the application). In version 1 a place will be made in the message to allow for an appendix PDF file. To submit an appendix as a separate transaction, an XML schema will be defined. NIH will require that the identifiers provided for the grant application be submitted as part of the transaction. Need to determine the best way to distribute this information to the reviewers. Electronic submission will give the ability to make sure that all appropriate parties receive the information (e.g., the program official for the official grant folder). After assignment, status should give a notification that the application has been received, and the appendices could be uploaded through the Status screen. (There might be problems encountered if the SRA is not assigned in a timely manner.)	Closed 2/3 Pending 2/3	CWG Discussion Topics
	Can appendices be sent in paper after assignment?	Yes, after assignment the appendices can be dumped in paper separately and sent directly to NIH and to the SRA. The physical shipment must have the identifier of the electronic submission to route and reconcile. We will provide a transmittal sheet to be printed out from the Status screen and attached to the hard copy.		

Issue	Description	Resolution	Status/Date	Source Document
Versions of an application	What mechanism, if any, should be used to distinguish between the content in two versions of an application?	For version 1, the entire application will need to be submitted for revision. Before application deadline, the system will match for duplicates and overwrite the original submission. If the application has already been referred, will need to send notification to Referral Officer, SRA, IC. After deadline, the applicant will need to send the revised application in hard copy to the SRA. In subsequent versions, a more flexible mechanism will be defined for error corrections or addendums after submission and before review.	Closed 2/3	1/27 Focus Group
Tags on applications	Application will need to come in with tags and bookmarks, so sections are clearly identified.	In order to view the application on line, any system displaying the application must have links or bookmarks to access the different sections of the application. Will need to be able to bookmark within each file. Consider manual bookmarking for Version 1.	Closed 2/3 Pending 2/3	Suzanne Fisher DRR issues
PDF version	Verify version of PDF for datastream submission.	For version 1, all rich text sections will be submitted by service provider as PDF files in a specified version of PDF. Use e-Grant's conversion service for PDF. Tie version to NSF service center version. In the first iteration of CGAP, only PDF will be allowed to be submitted. After successful piloting of datastream transmission and of a conversion service, other file types may be allowed as part of upload. Existing conversion services such as the FSR or Summary Statement conversion service or the NSF service will be considered.	Pending 1/27	

Issue	Description	Resolution	Status/Date	Source Document
Page length	Page limits will be set for each section as defined by the NIH current or amended rules.	Use page definition as rendered from service center to establish the page limit for each file. PI needs to be able to confirm and validate after processing by service center. Service provider will reject application if page count >25 pages.	Pending 1/27	
Font and size	Can NIH specify uniform font and size?	Need to get policy resolution. Specification would also need to include all scientific characters and maximum number of lines/inch. Figures will not be included in font specification.	Pending 2/3	
	Need algorithm/utility to check font size conformance within the research plan portion of the application.	NSF uses a product called Pitstop from Enfocus to extract document properties from their PDF files. There are other tools available that will allow PDF document properties to be searched. NIH will need to test these applications to see what we can actually test for and then design the algorithm around the formatting guidelines and the capabilities of the application. If standard is set, product will need to identify any problem applications, for QA function based on exception.	TBD, based on technology 1/27	
Table of Contents	Will need to be generated by system.	Will be links to other sections, not page numbers, unless generated as a report. Need to research how to generate Table of Contents. For pilot, only applications with correct titles for each section will be accepted.	Pending 2/3	
Budget	Will need to be generated by system.	??? Ask Michael what we meant here??	Pending 2/3	

Issue	Description	Resolution	Status/Date	Source Document
Biosketch formatting	Will biosketch be transmitted for all key personnel?	Yes. There will need to be a way to link each biosketch to the corresponding key personnel in the XML datastream.	Pending 2/3	2/3 Focus Group
	How important is it for reviewers to see consistent content and format in the biosketch? How important is it for PIs to be able to freely define the content and format of the biosketch portion of the grant application?	Reviewers felt that both format and content are important. Within each section format doesn't matter, except page length & font size guidelines. It's important that correct content is included and in the proper order. In Version 1, biosketch will be received from a PDF file. PIs said structured information is an acceptable burden as long as the format does not change. Format consistency and content was more important than the issue of structure and the requirement to format a specific way.	Closed 2/3	CWG Discussion Topics
	How does Review use Related Support?	Reviewers want to see this information to assess experience and expertise. Also, both program and reviewers use this information to assess the potential for scientific and budgetary overlap. CSR is open to streamlining this in some way, also sees the redundancy of effort between related support on the biosketch and other support JIT information.		

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Black and white versus color images	The ability to easily generate multiple copies of color images may be offset by the lack of absolute control of image color or quality. What means should be allowed to ensure uniform quality of color images?	Where the color definition is critical, the applicant needs to send hard copy to the SRA. Otherwise, color will be allowed in the electronic transmission. There will need to be a Section 508 disclaimer. However there will be a disclaimer that NIH does not guarantee color rendition as each display device will show graphics and colors differently. NIH will print in gray scale, not in color. Confirm that PDF can determine if color is used.	Closed 2/3 Pending 2/3	CWG Discussion Topics
	Should there be procedures for primary & secondary reviewers to evaluate images with guaranteed quality (e.g., by submission of hard copy color), while other reviewers evaluate images of potentially lesser quality?	No.	Closed 2/3	CWG Discussion Topics
Word Processor formatting issues	Does NIH need to provide conversion service to render PDF from either MS Word or WordPerfect? Independent conversion service pre-application? Or receive Word attachment to XML in the final application?	NIH is currently providing a conversion service for the eSnap module and the newly released IAR module. Only text and MS Word documents for versions 97 & 2000 are supported. For version 1 the participant service providers are expected to perform the conversion of files. NIH may use a conversion service center to do the conversions. That service may be NIH, NSF or contractor-provided.	Pending 1/27	CWG Discussion Topics
	PI needs to be able to preview prior to submission.	PI will need to be able to preview the converted file prior to submission, using a service center utility.	Pending 1/27	CWG Discussion Topics

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Viewing and printing	Viewing and printing internally to NIH	Proposed: PDF as-is, and remainder as a standard format inside NIH (for Version 1, standard format will be 398). For primary and secondary reviewers, need to be able to route to print shop for printing at 600 dpi.	Pending 1/27	
Structured Data				
IPF number/DUNS number	Used by NIH staff for conflict checking.	If the institution has submitted previously and has a profile set up. DUNS will be required in Version 1 even though it is not in the paper process. Will need crosswalk to IPF; will use IPF for conflict checking.	Pending 2/3	
EIN	Used by NIH Finance staff. Should be part of the IPF.	Now just check for valid EIN format; idea of using lookup table to validate EINS, possibly as part of organizational hierarchy. Service Provider should validate EIN.	Pending 2/3	
Congressional District	Used by NIH staff in generating reports.	SQAIB fills in the ones that are missing and verifies most of the others that are submitted. Does not make sense that this item is on the form if this work is being done anyway. Should use a lookup.	Pending 2/3	
Application and Performance addresses	Is contact information (Box 12) needed for grant negotiations, other purposes, and for award notification?	Needed for both negotiations and awards. It is the first place the GMO will contact for information.	Closed 2/3	NIH Action Items List
	Applicant Organization (Box 9)	Irrelevant in a stream because it is used only for new institutions to populate the IPF. No institutions can send applications unless they have registered.	Closed 2/3	

Issue	Description	Resolution	Status/Date	Source Document
	PI/Program Director signature (Box 14) and Official signing for Applicant Org. signature (Box 15)	EGrants: Applicant orgs will register in Business Partners Network (BPN). Credential providers behind e-authentication gateway will authenticate inst and SO credentials of submitting orgs. Does not authenticate PI. For NIH, both PI and SO signatures will be necessary. Will need to wait for the e-authentication platform to be ready before integrating with E-Grants. For phase 1, authenticate SO at submission (based on information gathered from registration). PI will need to log on to NIH eRA Commons site after submission of application to verify the submission. If application is accepted and assigned, e-mail will be sent to PI with link to site where they must verify; verification link will also be available from Status screen. The site will display any applications sent by the PI, either within this council round or for a defined time range. For verification, will need checkbox for PI to indicate "application is mine". Until PI verifies, won't be able to see status of application (or will see status "pending PI verification"), and appl won't be reviewed. Need to determine how much time PI should get to respond. Also can "nag" SO to get PI to respond. Ask legal question: do we need to collect a valid digital dated PI signature, or will it be enough to provide message popup that PI needs to check off to indicate he has submitted this application.	Pending 2/10 Pending 2/10	

Issue	Description	Resolution	Status/Date	Source Document
	Performance sites	Required	Pending 2/3	
Budget Justification	Part of XML stream	Budget numbers will be structured	Pending 2/3	
Percent Effort on Project (Form Page 4).	How does Review use this? Is it ok that the value for percent effort stated on the application may not be accurate relative to what PI or other key personnel will actually devote? Is the inclusion of a percent effort value in the narrative budget justification (as opposed to the budget table) sufficient for reviewer purposes?	Establishes baselines and expectations; used to see if effort is reflective of goals and scope. For modular grants, is done as part of budget justification. If included on p. 4, calculate % effort based on average amount of effort on the project over a year. 50% during the academic year and 100% over the summer is 63% (62.5%) total effort or 100% during the academic year and 0% over the summer is 75%.	Pending 2/3	
Personal Data Page	From profile or from application?	From profile; will not be included in data stream. Based on single point of ownership, if the PI needs to update the race/ethnicity, gender, etc. for the application, will need to update the profile through Commons.	Closed 2/10	
Checklist	How much of the checklist needs to be included in the data stream?	Business rules to be built into both the service provider and the NIH validation can take the place of large parts or all of the checklist. More validation analysis will need to be done.	Pending 2/10	

Issue	Description	Resolution	Status/Date	Source Document
Equipment, Supplies, and Other Expenses fields	How do Program, Grants Management, and Review business areas and Congress use itemized budget information from each field?	For Program and Review staff, don't need itemized information for each category. Instead, only need one "bottom line" number for each category. If a cost might be viewed as out of line, then an explanation should be entered. Therefore, two fields each will need to be transmitted for equipment, supplies, and other expenses: the cost and a descriptive paragraph.	Pending 2/10	
Other Support	For JIT information.	Will be handled in a later phase. See also "Related Support" under Biosketch Formatting.	Pending 2/10	
Modular or non-modular	Need to decide whether the prototype will be for modular or for non-modular grants, or for both.	Modular for Version 1, but will design XML schema for non-modular at this time as well.	Closed 2/3	
Human/animal subjects	Will they be included for phase 1?	Both Human and Animal Subjects will be included for Phase 1	Closed 2/10	2/10 Focus Group meeting
Budget	Need to map EDI budget categories to those on the 398	Michael to raise issues.		
Resources (398 section after Biosketch)	Any special considerations?	Resources and equipment will come in as one PDF each instead of structured text. We will provide guidance for page limits, but will not enforce any actual limit.	Pending 2/10	

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Key personnel	Information collected in several places on the 398. How can NIH consolidate collection to reduce the burden on an applicant? Is it mandatory to have a profile for key personnel in IMPAC II?	Currently collected on page 2, on detailed budget page (for non-modular grants only), and in biosketch. Consider asking for information once, to reduce burden. Key personnel will be required to register in the Commons, and profiles will be stored in IMPAC II. Will need to modify Commons registration and Persons module to accommodate new type of person. For phase 1, will not store information for personnel coming from foreign institutions, for collaborators (unless they are within the same institution), for consultants, or for "to be announced" personnel slots. Phase 2 will need to address the issue of affiliated and non-affiliated key personnel.	Pending 2/10	2/10 Focus Group meeting
Security				
Electronic Signatures		For phase 1, SO is identified by system authentication; PI signature is obtained through verification of application submission in Commons. See full details under "PI/Program Director signature (Box 14) and Official signing for Applicant Org. signature (Box 15)"		
Format				
Presentation Concerns				

Issue	Description	Resolution	Status/Date	Source Document
Receipt, Validations, and Corrections				
Receipt deadlines	Should NIH adjust the deadlines for application receipt? Advantages include risk reduction of system failure due to overloading; and incentives to encourage electronic submission.	For the small pilot group, won't make any adjustments in deadlines. Long-term, deadlines will be adjusted based on volume received. The deadlines will most likely be switched from midnight to 5:00 PM, with a rolling deadline based on time zones. Changed deadlines can be used as an incentive for submitting electronic applications.	Deferred to October	Focus group meeting, 2/24/03
	How should receipt processing be adjusted to decide whether or not to accept late applications?	Adjustment of receipt processing will be deferred until the majority of applications are submitted electronically. Alternatives are turning electronic receipt "off" after deadline, or leaving it on and letting DRR decide whether to accept each late application. Consider having system send a "late" message to submitter, also posting submission to "late" box. Because of rolling deadlines, will need to identify the different kinds of applications to be able to control "late" submissions (will need to be able to accept some things late). As alternate flow in use case, will take in late applications, with rejection process built into a "late box". Need to customize with "soft dates" for cutting RFAs off, for example.		Focus group meeting, 2/24/03
Receipt processing	Consider electronic replacement for elements of manual receipt processing: date stamp; accession number; special handling considerations (e.g., RFAs);	Ticket issued by NIH will need identifying information: date stamp, PI, institution, title, RFA, file identifier.		Focus group meeting, 2/24/03
		Accession Number: Issued with ticket, need to coordinate the ranges with the paper process (look at digits acceptable for accession number on screen).		Focus group meeting, 2/24/03

Issue	Description	Resolution	Status/Date	Source Document
	letters and special instructions; links to appendices.	All electronic processing and look ups currently performed should also be done for streams		Focus group meeting, 2/24/03
		Letters: Section 1 collaboration letters are part of the application; original to be sent to SRA as just in time. All other letters deferred for later release.		Focus group meeting, 2/24/03
Receipt rules	Which rules can be automatically enforced upon submission?	All rules based on structured data should be added to the e-receipt system. Examples: limitation on amendments, amendment limited in amount to amount of parent grant. Rules based on format need to be defined.	Sara will compile list	
	How will validation be processed for form page data: page 1, budget, checklist, Personal Data page?		Needs to be defined	
	How will validation be processed for special handling requests (e.g., ARAs)?	For ARAs coming from the PI, will use the accession number to identify. For ARAs coming from an IC, will use the institution and the unique profile to identify. Can have multiple applications for a PI who has an ARA, or can have multiple ARAs for an application. Will need manual intervention in those cases.		Focus group meeting, 2/24/03
	For non-ARA applications, what will be the first contact?	Will first contact be breakout? Referral Officer? For phase 1, will go through same as now, with additional screen for breakout and for Referral Officer (also amended applications, renewals). Later, self-referral may be captured as structured part of the data stream.		Focus group meeting, 2/24/03
	Applications>$500k	To be validated by Service Provider. Don't accept unless it's been matched to approval from IC.		2/3 Focus Group

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	How will business rules be incorporated to control eligibility (budget limits, modular formats, A2/two-year limit, virtual A3s)?			
	How will other business rules be accounted for: whether required sections (e.g., introduction) have been submitted, duplicates, new/revised/supplement processing, text format and page limits; variation in paper form version, changes in policy?	Quantitative rules, format rules. Human intervention for all items that don't fit into defined rules.		
	Need to provide validation engine to external sources	Yes		
	Application quality check after computer validation for all other rules (or for failed applications)?	Yes		

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Electronic submission of cover letter	What are applicant expectations for confidentiality if, for example, the letter speaks of the possibility of reviewer bias? What precautions need to be taken to ensure confidentiality?	Cover letter needs to be confidential. Electronic process will eventually need to be able to handle proprietary information.		
	Should cover letters be replaced by standard user interface fields that allow for optional recommendations for IC or IRG?	For phase 1, no. Long-term, yes.		
Corrections, additions, and changes	How to handle "oops" situation on transmission? How to process errors of omission in research plan, letters of reference, etc.? Will corrections be handled by resubmission, or will corrections be made by DRR?	For phase 1, will need approval process if application has been processed and referred. PI will need to call SRA after assignment, and submit changes if approved to SRA in hard copy. As long-term alternative for replacement before deadline, applicant will send accession number, along with replacement.		
Citations	How to represent citations in the stream or accept them as JIT. How to associate citations from NIH PPF or IPF. If associating citations, how to measure page length.	PDF for now. Later alternatives to investigate: • Provide utility to download selected citations in proper format in PDF from PPF • JIT upload through Status • JIT upload through stream • JIT association from PPF		

Issue	Description	Resolution	Status/Date	Source Document
Possible change to ARA process	With electronic submission will come IC access to all applications much earlier in the process. Does the system need to build in a sort of "after the fact" ARA process, for applications in which a particular IC may express interest?	Policy question		Focus group meeting, 2/24/03
Breakout	How will breakout be handled in electronic receipt?	Needs to be designed.		
Pre-referral	How much of a prereferral function will still need to exist manually? There will need to be some sort of automated link between the electronic submission from the PI and the IMPAC II database for existing ARAs for the applications, the PI's IMPAC II person profile, RFAs that need to be assigned, and ORI sanctions.	First contact will need an acceptance function. ORI sanction limits how application can be submitted, but does not prevent submission. Need to compile list of items that need to be checked.		

Issue	Description	Resolution	Status/Date	Source Document
PI/grant history; previous applications; summary statements	Users will need to be able to access while reading an application.	Provide grant folder.	Closed 2/3	Suzanne Fisher DRR issues
Automatic routing	Should we enhance the current automatic routing for electronic receipt?		Deferred	
	How can we institute workflow and management control to the process? Provide all users access to applications waiting in the queue, but also provide the ability to indicate clear routing to the next Referral step?		Deferred	
	Make sure management has the ability to find out from the system what transactions are in the queue: how many came in during a given time period, and how many are at each stage of the process.	Will need management reports. Take operational concerns into account.	Deferred	

Issue	Description	Resolution	Status/Date	Source Document
424 Questions				
Requirement for including 424	Entire 424 or just the cover page?	Five parts: need cover page. Non-construction certifications as well?		
Duplication between 424 and 398	For example, 424 has "Type of Applicant" and 398 has "Type of Organization", each with its own pick list.			
424 "plus" draft standard defined by E-Grants initiative	How important is this? Can/should it be used—does it supercede data definitions in the 398?	Likely no net change.		
Referral Issues				
Monitors	Referral Officers will need two monitors: one for viewing the application, and one for processing the referral.			
Subprojects	How should subprojects be transmitted?	Should be considered in XML schema construction.		

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Amended applications	How will the Introduction be sent for amended applications?	Will need to be transmitted as a separate section.	Pending 1/27	1/27 Focus Group
	Need external validation engine			