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# National Institute of Justice

## S o l i c i t a t i o n

*Sarah V. Hart, Director*

*February 2003*

## NIJ Science and Technology Solicitation FY 2003

**Notice:** The Office of Justice Programs (OJP) requires you to submit your application for funding through the OJP **Grants Management System (GMS)**. Access through the Internet to this online GMS application system will expedite and streamline the receipt, review, and processing of requests for funding. Your final application will only be accepted through our online GMS applications system. To learn how to begin the online GMS application process, please see "How to Apply" on page 4 of this solicitation. A toll-free GMS Hotline telephone number (1-888-549-9901) has been established for technical assistance as you work through the online application process. The GMS Hotline may be accessed Monday through Friday between the hours of 7 a.m. and 9 p.m. Eastern time.

**APPLICATION DEADLINE:**  
**April 2, 2003**

**U.S. Department of Justice**  
**Office of Justice Programs**  
810 Seventh Street N.W.  
Washington, DC 20531

**John Ashcroft**  
*Attorney General*

**Deborah J. Daniels**  
*Assistant Attorney General*  
*Office of Justice Programs*

**Sarah V. Hart**  
*Director*  
*National Institute of Justice*

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For grant and funding information, contact:  
**Department of Justice Response Center**  
800-421-6770

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**Office of Justice Programs**  
**National Institute of Justice**  
World Wide Web site:  
<http://www.ojp.usdoj.gov/nij>

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## I. Introduction

The National Institute of Justice (NIJ), a component of the Department of Justice's Office of Justice Programs, provides technology assistance to the Nation's State and local criminal justice and public safety agencies by undertaking technology projects that address a broad range of needs. NIJ typically funds projects that involve applied research, development, analysis, evaluation of technologies or their implementation, and the demonstration of technologies with the intent to achieve the commercial application of those technologies within criminal justice and public safety agencies. One of the principal means NIJ uses to identify and initiate promising technology projects is to periodically request proposals under the Science and Technology Solicitation.

This is an "open" solicitation, which means that applications may propose work on any criminal justice or public safety topic. To assist you, this solicitation provides:

- C Guidance on how to apply for an award and how to prepare an appropriate technical proposal.
- C Selection criteria that NIJ will use in determining awards for proposals.
- C Requirements for award recipients.

**On page 8 of this solicitation, NIJ provides a list of tips on submitting your application.**

## II. General Requirements and Advisory Information

### 1. General Requirements

A. Treatment of Technology – Your technical proposal must involve a suitable treatment of a technology or technologies. This specifically means that the proposed work must involve the conduct of applied research, development, analysis, evaluation, or the demonstration of one or more technologies.

Please note that:

- C NIJ typically *does not* provide awards for proposals that involve the conduct of basic, or "pure," research.
- C NIJ *does not* provide awards for proposals that are essentially intended to acquire equipment, materials, or supplies for criminal justice or public safety agency purposes. However, understand that your proposal may involve the acquisition of equipment, materials, or supplies if they are intended to support the conduct of applied research, development, demonstration, evaluation, or analysis work.
- NIJ *does not* provide awards for proposals that essentially seek to *provide* training to criminal justice or public safety personnel. NIJ's mission does not include the direct provision of training.
- NIJ offers directed solicitations for Forensic DNA Research and Development and for General Forensics Research and Development. If you have an interest in proposing research within these areas, you should apply to the appropriate directed solicitation when it becomes available. Please be aware that NIJ *will not* fund applications in these areas (except in the area of Electronic Crime – see page 3) under the Science and Technology solicitation.

B. Impact and Relevance – Regardless of the topic of your proposal, it *must* specify and substantiate the potential benefit (i.e., the value) that your proposed work will provide to State and local criminal justice or public safety agencies.

### 2. Advisory Information

Please consider the following when preparing your proposal:

A. Matching Funds – NIJ *does not require* you to offer matching funds for your proposed work. If you opt to provide matching funds, please ensure that the budget summary within your application package adequately indicates this.

**B. Cost and Duration of Proposed Project Work** – Historically, the majority of proposals that have received awards under NIJ’s Science and Technology Solicitation have had a proposed cost of between \$200K to \$500K and a period of performance of 12 or 24 months. If you opt to submit a proposal that has a cost well in excess of \$500K, or a period of performance greater than 24 months, you are advised to logically structure proposed work tasks and budget into readily identifiable segments (i.e., into phases or stages). Doing this will allow NIJ to consider making an award for specific phases or stages of the proposed work. Please note, a deliverable (e.g., a final report) will be required at the end of *each* stage.

If NIJ provides an award for a phase or stage of the proposed work, additional funding cannot be guaranteed for subsequent phases or stages of the proposed work. However, because NIJ has an interest in assuring the eventual success of the project work, NIJ attempts to fund additional work segments *if* resources are available at the time subsequent funding is requested and the applicant satisfactorily completed all previous work.

**C. Validation of Proposal Ideas** – To assure that proposals received under this solicitation are technologically sound and suitable for (eventual) deployment within criminal justice or public safety agency operations, NIJ recommends that you discuss your proposal ideas with members of the technology or criminal justice/public safety communities. Technologists are encouraged to discuss their proposal ideas with criminal justice/public safety agency personnel, and vice versa. It is NIJ’s experience that proposals are generally better received by peer panel reviewers (which include both technologists and criminal justice/public safety practitioners) if the proposals were tempered by the knowledge and experience of the complementary community. NIJ does not discourage letters of endorsement, but note that they carry less weight than a proposal with clear evidence that you understand both the technology and its applications.

**Note:** Any proposal that involves an operational agency should include a letter of cooperation from that agency.

**D. Time Until Award Notification** – NIJ will use its best efforts to notify you whether you were selected to receive an award no later than 180 calendar days from the closing date of this solicitation.

**E. Number of Awards Anticipated** – The number of awards is influenced by the number, quality, and requested funding levels of the applications received; and the total amount of the money budgeted by NIJ for this solicitation. The latter factor is often unknown at the time the solicitation is released. In the past, the percentage of awards made has ranged from 6 percent to 10 percent.

**F. Submission of a Financial Audit** – Recipients who expend \$300,000 or more of Federal funds during their fiscal year are required to submit *an organization-wide* financial and compliance audit report as specified in Chapter 19 of the Office of Justice Programs (OJP) Financial Guide (<http://www.ojp.usdoj.gov>). The audit must be performed in accordance with the U.S. General Accounting Office Government Accounting Standards. Detailed information regarding the independent audit is available in Office of Management and Budget (OMB) Circular A-133 (<http://www.whitehouse.gov/omb/circulars/a133/a133.html>).

**G. Other Issues To Consider In Preparing Proposals** – Some or all of the following issues could have a significant impact on the successful implementation of technology tools or knowledge into State and local public service agencies. Please give these issues adequate consideration when preparing your proposal:

- Cost/Affordability.
- Liability, privacy rights.
- Interoperability.
- Standardization.

You are advised to use plain English in writing your proposal (refer to <http://www.plainlanguage.gov> for assistance).

### III. Suggested Proposal Topic Areas

You may submit a proposal under any topic of your choosing. However, proposals *must* meet the General Requirements as specified above. If you have a specific topic in mind but are unsure about its pertinence to issues faced by State and local criminal justice or public safety agencies, consider the following list of suggested proposal topic areas. These areas correspond to existing NIJ technology program initiatives.

- **Communications**  
**Interoperability/Information Sharing;** to provide criminal justice and public safety agencies with tools to facilitate interoperable voice communications, effective and efficient information sharing, and high band-width low-cost communications for images and videos. Proposals should include concepts to develop longer term interoperable technology solutions offering increased flexibility and capability that is currently available. Areas of interest include, but are not limited to, software defined radio; information assurance in a mixed, federated environment; information sharing and analysis in a mixed heterogeneous environment; and voice-over-internet protocol.
- **C Critical Incident/Counterterrorism Technologies;** to provide criminal justice or public safety agencies with better tools to deal with major threats to lives and property, such as terrorist acts involving weapons of mass destruction.
- **Less-than-Lethal Technologies;** to provide criminal justice and public safety personnel new capabilities to manage individuals, crowds, and vehicular pursuits. This would include new tactical devices, simulation modeling, and medical follow up for effectiveness and safety.
- **Protective Systems Technologies;** to provide personal protection and safety tools for public safety or criminal justice personnel. This would include concealed weapons detection systems, and tracking and monitoring systems for individuals.

- **Crime Prevention Technologies;** to prevent or minimize criminal activity with sensing and surveillance systems, non-intrusive contraband detection systems, biometrics technologies that will perform facial or voice recognition, and speech translation technologies.
- **Electronic or Cyber-Crime technologies;** to develop digital forensic evidence investigative software tools, and to develop, demonstrate, and evaluate technology tools that facilitate law enforcement agency access to electronic crime investigative and forensic analysis training-related information (e.g., CD, DVD, internet-based, Advanced Distributed Learning (ADL), or other electronic formats).
- **C Learning Technology Tools;** to devise new tools for learning that address such areas as (1) event modeling and simulation, (2) interpersonal skill development, (3) officer safety, (4) threat identification and mitigation, and (5) use of force or judgement.

For additional information about these and other NIJ technology programs, refer to <http://www.ojp.usdoj.gov/nij/sciencetech>.

### IV. Proposal Selection Criteria

#### 1. The Proposal Review Process

NIJ is firmly committed to a competitive process for making awards. All proposals are subjected to an independent peer-review panel evaluation. Peer review panelists consist of technologists from academia, industry, or Federal Government organizations, along with practitioners from Federal, State, and local criminal justice and public safety agencies. To the extent practical, panelists are selected to participate in individual peer panel reviews based on their expertise in subject areas that are pertinent to the proposals to be evaluated within each respective peer panel. When peer panelists have completed their evaluations, they report to NIJ their assessment of each proposal's worthiness of award. Based on the panel's assessment, NIJ Program Management staff will recommend the award of individual proposals to the NIJ Director. The NIJ Director makes final award decisions.

## 2. Selection Criteria

The selection criteria used by the peer panel reviewers and NIJ Program Management staff to evaluate proposals are as follows:

### A. Quality and Technical Merit

- Soundness of proposed methodology, analytical approach, or technical approach.
- Innovation and creativity employed in problem solving, and in working with or applying technologies.
- Feasibility of the proposed project and awareness of potential technical pitfalls.
- Awareness of existing research or development work currently underway or previously completed, and any related applications of technologies or scientific methodologies.

### B. Impact of the Proposed Project

- Potential for significant advancement in crime prevention or remediation, law enforcement, courts, corrections, or other practice or policy areas.
- Potential for advancement of scientific or technical understanding of pertinent problem issues.
- Relevance to contemporary criminal justice or public safety agency needs for technical assistance.
- Relative importance of the criminal justice or public safety problem issues to be addressed by the proposed effort.
- Affordability and cost-effectiveness of proposed end products for criminal justice or public safety agency users, including acquisition, maintenance, and training costs.
- Perceived potential for commercialization and/or implementation into service use.

### C. Capabilities, Demonstrated Productivity, and Experience of Applicants

- Relevant qualifications and experience of proposed project personnel and organization(s).
- Demonstrated ability of staff and organization(s) to manage the proposed effort.
- Adequacy of the proposed project management plan as evidenced by the specification of project goals and objectives, a breakdown of the various tasks to be undertaken within the project (i.e., a task plan), and the specification of resources to be expended within each task.
- Adequacy of the resources specified within the proposal to perform the project effort.
- Adequacy of knowledge regarding pertinent criminal justice and public safety agency policies, practices, and procedures.

### D. Budget Considerations

- Total cost of the proposed project effort relative to the perceived benefit that will be derived.
- Use of existing or available resources to minimize the costs associated with the project.

## V. How to Apply

### 1. How to Prepare and Submit An Application

NIJ *requires* you to submit applications through its automated **Grants Management System (GMS)**. GMS is an online system that is accessible through the Internet. It is intended to expedite and streamline the receipt, review, and processing of applications. To use the GMS system, complete the following steps:

- **Step 1.**  
Using the Internet, go to:  
<http://www.ojp.usdoj.gov/fundopps.htm>. An online GMS Application Procedures Handbook is available on this page, and you may link directly to OJP's Grants Management System (GMS), which will provide online help screens.

- **Step 2.**  
Select: **“Log on to the Grants Management System (GMS)”** to obtain an OJP application for grant funding.

- **Step 3.**  
Applicants without a GMS password, click on: **“New User? Register Here,”** and follow the on-screen instructions to register with GMS. After registering, you must pick the **FY 2003 NIJ Science and Technology** solicitation.

Applicants with a GMS password, click on: **“Login.”** If your password has expired, you will receive an “Authentication Error” or “Unauthorized User” message. In this case, click on “Having Login Problems?” for assistance in updating passwords.

Please Note: You must ensure that the information for the authorizing official and alternate contact is entered correctly. The authorizing official is the individual authorized to accept grant funds in the applicant's organization (e.g., a corporate officer, comptroller, bursar). If the person applying online to GMS is not the signing authority, that person must list the authorizing official's name and contact information.

- **Step 4.**  
Complete the online application, including the three required file attachments. After submission of the finalized application, the online system will inform you that the application has been received and sent to NIJ. The GMS system will provide an application identification number for future reference.

Questions about GMS will be answered by the toll-free **GMS Hotline** at **1-888-549-9901**. The GMS Hotline is available Monday through Friday between 7 a.m. and 9 p.m. Eastern time.

You are *highly advised* to: (1) obtain access to the GMS online application system; and (2) initiate the process of preparing the application forms ***as soon as possible!*** If you procrastinate in undertaking these actions, you will essentially assume a greater risk that your application will not be submitted by the closing date and time of this solicitation, or that your application will be incomplete at the time of its submission. Bear in mind that *the GMS Hotline is only available for use during a limited portion of each weekday*, as noted immediately above this text box.

## 2. What Must Be Submitted

**The following is a list of application forms that *must* be completed and included within your application package for it to be eligible for consideration of an award by NIJ:**

- Application for Federal Assistance (SF-424) This form is completed as part of the GMS process. The CFDA number required for this solicitation is 16.560.

**NOTE:** In box 11, please make sure your project title is descriptive of your proposal so that we may easily distinguish it from other applications.

- Certifications/Assurances  
You will "sign off" on these certifications and assurances electronically through GMS.
- Budget Detail Worksheet  
This is submitted as a single file *attachment* to the GMS-generated application forms. The file must include a Budget Detail Worksheet and a Budget Narrative. A sample Budget Detail Worksheet is available at the following URL:  
[http://www.ojp.usdoj.gov/nij/funding\\_app.htm](http://www.ojp.usdoj.gov/nij/funding_app.htm).
- Proposal  
This is submitted as a single file attachment. The file must include the following items:
  - C Proposal Abstract (see description below).
  - C Table of Contents.
  - C Technical Narrative (see description below).

- C Resumes for key personnel that will participate in the proposed project effort, including subcontractors, consultants, and collaborating organizations. Applicants should include point of contact information (including business telephone, fax telephone, and e-mail address) for the person(s) who will serve as Principal Investigator for the proposed project. NOTE: Provide no more than three pages describing qualifications of proposed staff and organization(s) involved in the proposal.
- C References cited in the technical narrative.
- C Appendices, if any (e.g., a list of previously received NIJ awards including grant numbers; letters acknowledging collaboration in the proposed project by other organizations; or other proposal-relevant materials).

• Other Attachments

A *single* electronic file containing each of the following items, collectively, must be submitted as an *attachment* to your application:

- C Privacy Certificate.
- C Assurance of Protection of Human Subjects Identification (Form 310).
- C Geographic Areas Affected Worksheet.
- C Disclosure of Lobbying Activities.

Description of Proposal Abstract

Your proposal abstract should provide a succinct and accurate description of the proposed work. In no more than 400 words, the abstract must describe: the criminal justice or public safety problem(s) addressed by the proposed project; the project's goals and objectives; the proposed methodology to be used to achieve the goals and objectives; and the final product(s) to be derived from the project.

Avoid describing any accomplishments that your organization obtained in working on previous NIJ awards.

**Please *do not* include company proprietary information in the abstract! Your abstract *will* be made available to the general public for general reference purposes if an award is made for your proposal.**

Description of Proposal Technical Narrative

Your proposal's technical narrative (also referred to as the technical proposal) must sufficiently specify and/or describe the following:

- C The nature of the problem(s) addressed.
- C Project goals and objectives.
- C The methodology or approach to be pursued to achieve the project goals and objectives.
- C The nature of the technology(ies) that are to be developed, demonstrated, evaluated, analyzed, or subjected to applied research within the project.
- C A task plan that specifies the various tasks to be undertaken in performing the proposed project work.
- C Key milestones (i.e., activity timelines) for each task specified within the task plan, as well as for key events or decision points within the project. Note: Do not designate the project's milestones using actual calendar dates. Instead, specify the milestones as the duration in days, weeks, or (preferably) months from award by NIJ.

**You *must* limit your proposal narrative to 30 double-spaced pages, regardless of the amount of funding requested in the application.**

**3. Application Due Date and Time**

You *must* submit your entire completed application materials *by way of the online GMS system, on April 2, 2003*. If NIJ does not receive your application by this time, it *will not* be considered. Faxed, mailed, or e-mailed applications *will not* be accepted by NIJ, and *no extensions* will be made to this deadline.



## **VI. Post-Award Requirements**

If you receive an award from NIJ, you will be required to provide NIJ with the following reports:

- Final Report.
- Quarterly Financial Status Reports (Standard Form 269-A).
- Final Financial Status Report (Standard Form 269-A).
- Semiannual Categorical Assistance Progress Reports (OJP Form 4587).
- Final Categorical Assistance Progress Report (OJP Form 4587).

### **Final Report**

The formal written final report shall contain the following: a description of the nature of the criminal justice or public safety problem(s) that were addressed; the project's goals and objectives; a description of the methodology used in conducting the project; a description of any pertinent problem issues that were or were not resolved; and the findings and conclusions that were obtained. Your report may recommend additional future efforts or actions that would enable the better understanding of, or resolution of, the criminal justice or public safety problem(s) identified within the report.

### **Financial Status Reports**

Financial Status Reports (SF 269-A) are to be submitted quarterly no later than 45 days following the end of each calendar quarter. Two copies of the financial status report must be submitted to the Office of the Comptroller every quarter during which the award is active even if there has been no financial activity during the reporting period.

Additionally, a final financial report is due 120 days after the end date of the award. Future awards and fund drawdowns will be withheld if financial status reports are delinquent.

## **Progress Reports**

Recipients of funding are also required to submit semiannual Categorical Assistance Progress Reports (OJP Form 4587). Two copies of the progress report must be submitted to the Office of the Comptroller twice a year even if there has been no substantive activity during the reporting period. The progress report should describe activities during the reporting period and status or accomplishment of objectives as set forth in the approved application for funding. For the duration of the award, progress reports must be submitted within 30 days after the end of the reporting periods (January 1 through June 30 and July 1 through December 31).

Additionally, a Final Progress Report providing a summary of achievement of the goals and objectives of the award, significant results, and any products developed under the award, is due 90 days after the end date of the award. Future awards and fund drawdowns may be withheld if progress reports are delinquent.

Forms for submitting financial and progress reports are available at the NIJ Web site. Report formats will also be provided by the Office of Justice Programs at the time of the grant award.

## **Confidentiality of Information and Human Subject Protection**

NIJ has adopted new policies and procedures regarding the confidentiality of information and human subjects protection.

The Department of Justice (DOJ) regulations at 28 Code of Federal Regulations (CFR) Part 22 require recipients of NIJ research funds to protect personally identifiable information that is collected from all research participants. The regulations at 28 CFR Part 22 require applicants for NIJ funding to outline specific procedures for protection of private information about individuals as part of the Privacy Certificate submitted with the application package.

In addition to the regulations in Part 22, DOJ has adopted policies concerning protection of human subjects which are the same as those established by the Department of Health and Human Services in 45 CFR Part 46, Subpart A, also known as the "Common Rule."

The DOJ regulations are set forth in 28 CFR Part 46. In general, 28 CFR Part 46 requires that all research involving human subjects conducted or supported by a Federal department or agency be reviewed and approved by an Institutional Review Board (IRB) before Federal funds are expended for that research. If IRB approval is required for this project, a copy of the IRB's approval as well as supporting documentation concerning the IRB's institutional affiliation, its policies and procedures, and necessary assurances must be submitted to the National Institute of Justice prior to the initiation of any research activities that are not exempt from the provisions of 28 CFR Part 46.

Further information regarding Confidentiality and Human Subjects Protections may be found in Guidelines for Submitting Proposals for National Institute of Justice-Sponsored Research.

### **National Environmental Policy Act Requirement**

All awardees are required to comply with the National Environmental Policy Act (NEPA) of 1969 (Public Law 91-190; 42 U.S.C. § 4321 *et seq.*). Therefore, some awardees may be required by NIJ to submit additional information to ensure NEPA compliance.

## **VII. Performance Measures**

To ensure compliance with the Government Performance and Results Act (GPRA), Public Law 103-62, you will be required to collect and report data that will enable the measurement of the effectiveness of NIJ's various technology assistance programs *if* you receive an award under this solicitation. You will be required to collect and report data for each of the following performance measures, with regard to your proposed project:

- C Number of technology demonstrations conducted.
- C Number of technologies introduced into criminal justice or public safety agency use.

- C Number of informational guides, standards, and assessments in progress.
- C Number of informational guides, standards, and assessments completed.
- C Number of prototype technologies developed.

To the extent possible, you should identify and report any additional quantifiable indicators of performance that may be used to measure the impact of the technologies developed.

## **VIII. Further Guidance and Information**

For additional information on applying for NIJ solicitations, please read "Guidelines for Submitting Proposals for the National Institute of Justice-Sponsored Research." This publication may be obtained by:

- C Downloading it from the NIJ Web site:  
<http://www.ojp.usdoj.gov/nij/funding.htm>.
- C Requesting a paper copy by mail from NCJRS at 1-800-851-3420 or from the Department of Justice Response Center at 1-800-421-6770 (in Washington, DC, call 202-307-1480).
- C Requesting a faxed copy by calling NCJRS at 1-800-851-3420 (select option (1), then select option (1) for NIJ, then enter code 1023 following the prompt).

Please be aware that the instructions given within this solicitation, including those for submitting applications through the GMS system, supercede those provided within the "Guidelines for Submitting Proposals for the National Institute of Justice-Sponsored Research."

If you need further assistance that is not related to the GMS online application process, contact the U.S. Department of Justice Response Center at 800-421-6770. You may also discuss prospective research topics with the NIJ professional staff by contacting Mr. Amon Young at 202-514-4338 or e-mail at [younga@ojp.usdoj.gov](mailto:younga@ojp.usdoj.gov).

**SL 000607**

## **Tips on Submitting Your Application**

We recommend that you review the reminders listed below to help assure that your application received consideration.

- C Applications that propose simply the acquisition of equipment, materials, or supplies for criminal justice or public safety agency use will not be funded. Please understand that your proposal may rightfully include an acquisition of equipment, materials, or supplies *if* such is done in support of proposed work that involves the conduct of technology-related applied research, development, demonstration, or analysis work. (The Bureau of Justice Assistance provides grants for equipment, materials, and supplies to be used by criminal justice and public safety agencies. You may contact them at 202-616-6500 or <http://www.ojp.usdoj.gov/BJA>).
- Applications submitted after the closing time and date of this solicitation, which is 4:00 p.m. Eastern time on April 2, 2003, will not be considered.
- Applications that do not include an abstract, budget, and a technical narrative (i.e., a technical proposal) within the proposal will not be considered.
- C Applications that do not include a sufficiently completed Form SF-424, Application for Federal Assistance may not be considered.