



National Institute of Justice

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

Sarah V. Hart, Director

February 2002

NIJ Less-Than-Lethal Technology Solicitation, FY 2002

APPLICATION DEADLINE:

April 17, 2002

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

John Ashcroft
Attorney General

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

Office of Justice Programs
World Wide Web Site:
<http://www.ojp.usdoj.gov>

National Institute of Justice
World Wide Web Site:
<http://www.ojp.usdoj.gov/nij>

I. Introduction

The National Institute of Justice (NIJ) seeks proposals for the development of technologies that provide new or significantly improved less-than-lethal (LTL) options to conventional use-of-force methods that reduce the number of deaths and injuries to suspects, prisoners, officers, and bystanders in law enforcement and corrections encounters. NIJ is also interested in providing useful information to law enforcement and corrections officers regarding the safety and effectiveness of existing LTL weapon types.

Innovative solutions are the focus of this solicitation. This solicitation is not intended to fund the purchase of existing commercial systems. Applicants should focus on projects that can be successfully completed within one to two years.

II. Background

NIJ is the research and development arm of the U.S. Department of Justice. Created by Congress in 1968, the Institute is charged with investing public funds to develop knowledge that will reduce crime, enhance public safety, and improve the administration of justice. Through its Office of Science and Technology (OS&T), NIJ assists State and local justice systems by:

- Supporting research, demonstrations, and validations to develop new approaches, techniques, systems, and equipment to improve law enforcement and the administration of justice; and
- Developing, validating, and evaluating new technologies to deter crime and enhance criminal justice operations.

Less-than-lethal technologies are part of a diverse and dynamic array of research and development topics in NIJ's research portfolio. Each year, NIJ's research program evolves as a result of consultation with researchers; technologists and practitioners; Federal, State and local policymakers; and

partnerships with other public and private organizations. The NIJ Research Portfolio, which lists ongoing NIJ research and development, project descriptions, is available online at <http://nij.ncjrs.org/portfolio/>. NIJ encourages prospective applicants to consult the portfolio as a guide to NIJ's approach to criminal justice research and development.

III. Suggested Proposal Topic Areas

A. New or Improved Technologies. NIJ seeks technologies that provide new or significantly improved less-than-lethal options that reduce the number of deaths and injuries to suspects, prisoners, officers, and bystanders in law enforcement and corrections encounters. Examples of scenarios in which LTL devices may be used include, but are not limited to, confrontation with subjects who assault officers or refuse to comply with lawful orders and who may be armed with a weapon, and individuals who become violent or uncooperative. Officers are often in close proximity to the subject, especially in encounters that occur in small areas such as cells in a prison, rooms in houses, rooms in public buildings, or on public transportation. The same LTL device should also address, when feasible, situations that require longer range, such as out on the street, corridors in a prison or in waiting areas of public buildings. Applications should consider the "force on target" concept, where the force from the LTL device exerted on a target is independent of the distance from the target. The device may perform other targeting functions. This example is not meant to limit new concepts in seeking compliance from a suspect, to address encounters with crowds, or projects using LTL in new situations such as guard desks in public and federal buildings or on public transportation systems.

All proposals must include information on the health effects of the proposed LTL devices, including the effect produced on the subject, bystanders, and persons employing the LTL device. Any disabling effect on a suspect or bystander must be of short duration and completely reversible. The expected reduction in the incidence of injury to officers,

combative suspects and bystanders must be clearly articulated. The proposed technique or device should be shown to be quantitatively more effective or safer than that currently used to achieve the same objective.

B. Evaluation of Existing Technologies. NIJ is also interested in providing useful information to law enforcement and corrections officers regarding the safety and effectiveness of existing LTL weapon types. To gain a better understanding of these issues, research, simulation, model development, and testing of the human response (both physical and behavioral) to these weapons are needed to evaluate new and current LTL weapons as well as for the development of standards for their performance.

Whenever possible, especially in long-term development projects, the proposal should be presented in multiple independent phases with periodic evaluations and reviews. These reviews will generally occur in the Washington, D.C., area. If a report is the final product, applicants should plan a peer review iteration of a draft report.

(This solicitation does NOT seek proposals for vehicle pursuit management technology—please apply to the general “NIJ Science and Technology Solicitation, FY 2002” with proposals for devices to safely stop fleeing vehicles.)

IV. Guidance

For fiscal year 2002, NIJ will accept proposals for technology-related awards under this solicitation. It is important that applicants understand that their proposals under this solicitation will be reviewed by a peer review panel composed of technologists and criminal justice practitioners.

This solicitation is open to a wide variety of proposals in order to achieve a balanced portfolio of technology and product development, implementation, and evaluation projects. This solicitation focuses on projects that can be successfully completed within one to three years.

Useful resources and expertise are available from the NIJ National Law Enforcement and Corrections Technology Center (NLECTC) located in Rockville, Maryland, and the regional NLECTC's located in Rome, New York; Charleston, South Carolina; Denver, Colorado; El Segundo, California; Anchorage, Alaska; the Rural Law Enforcement Technology Center, Hazard, Kentucky; and the Border Research and Technology Center (BRTC), San Diego, California. More information about the NIJ National Law Enforcement and Corrections Technology Center system is available on the Internet at <http://www.justnet.org>.

Keep in mind that the acquisition costs associated with the development and deployment of technology products are a major concern for criminal justice agencies. Most law enforcement and corrections agencies have limited financial resources to apply to the evaluation, development, implementation, purchase, and maintenance of technology products. This is especially true for State and local agencies. These and related factors all influence the timeliness and the degree to which new technologies are accepted by agency administrators.

Proposals should incorporate information that addresses the general themes posed by the following questions; however, it is not necessary to answer explicitly each question.

- How important is the new technology to law enforcement and corrections officers?
- What will be its impact on policing or correctional organizational structure and personnel requirements? What value will be provided to police or correctional officers or agencies in using the proposed product?
- What is the technical goal and the objectives to be achieved in working the proposed project?
- What is the breakdown of the various tasks that will be undertaken within the proposed technical work to accomplish the objectives? What resource expenditures are planned for each proposed task? (The consideration of this information helps assure that the proposed

technical and costs are appropriate. Specifying this information also enables better management oversight for the execution of the project).

- How many units will be needed?
- What are the hidden costs? For example, new computers may require additional labor hours expended by personnel to accomplish data input personnel, the purchase of additional software or peripheral equipment, or highly specialized and complex equipment may incur expensive maintenance costs.
- What, if any, are the net savings in labor or other costs that would be achieved by implementing the technology product(s) of the proposal, as opposed to maintaining the status quo?
- How much training is required to use, maintain, and repair the technology? Is the required level of sophistication of the training conducive to understanding by state and local law enforcers or corrections officers?
- How will the courts view the operational use of the technology with regard to issues of liability and of civil and privacy rights? What constitutional or other legal issues may arise from use of the technology?
- How will the technology developed, evaluated, or implemented in the proposed project work with existing technology or within the existing technical infrastructure?
- What technical standards will be employed in the development, implementation, and evaluation of this technology?

NIJ encourages partnerships between developers and members of the criminal justice community. Such partnerships foster a greater understanding of criminal justice technology needs and applications on the part of the applicant. Cooperative agreements between U.S.-based organizations and international organizations are also encouraged in order to advance technology development in the U.S., however NIJ is unable to fund foreign companies directly.

If proposed, teaming arrangements need to have clearly defined technical milestones, leadership plans, business strategies, intellectual property sharing agreements, and participant cost sharing plans. A coordination plan should also be developed identifying technology users, training institutions, government test facilities and laboratories, legal and legislative bodies, and others that should be part of bringing a technology to market.

V. Selection Criteria

NIJ is firmly committed to the competitive process to make awards. All proposals are subjected to an independent, peer-review panel evaluation. Peer review panelists are academicians, technologists, or practitioners from law enforcement or corrections agencies, each of whom possess expertise in the subject areas of the solicitation. After the peer review panelists have completed their proposal evaluations, they will provide NIJ staff a determination of each proposal's worthiness of award. NIJ staff will then recommend the award of specific proposals to the NIJ Director. The NIJ Director will make a final decision regarding the issuance of awards to individual proposals.

Selection criteria that will be used by the peer panel reviewers and NIJ staff to evaluate proposals are as follows:

1. Quality and Technical Merit

- Soundness of methodology, analytical approach, or technical approach.
- Innovation and creativity.
- Feasibility of the proposed project; awareness of pitfalls.
- Awareness of existing research and developmental work currently underway or completed, and related applications.

2. Impact of the Project

- Potential for significant advance in crime prevention, law enforcement, courts, corrections, or other practice or policy areas.

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- Potential for advancement of scientific understanding of the problem area.
- Relevance to law enforcement or corrections practices.
- Importance of the law enforcement or corrections problem to be addressed by the proposed effort.
- Affordability and cost-effectiveness of proposed end products for law enforcement or corrections users as appropriate, including acquisition, maintenance, and training costs.

3. Capabilities, Demonstrated Productivity, and Experience of Applicants

- Relevant qualifications and experience of personnel.
- Demonstrated ability to manage the proposed effort.
- Adequacy of 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, and the specification of the resources to be expended in each task.
- Adequacy of proposed resources to perform the proposed effort.

4. Budget Considerations ¹

- Total cost relative to perceived benefit.
- Use of existing resources to minimize the costs associated with the project effort.

VI. Post-Award Requirements

For each project funded under this program, the recipient will provide NIJ with a final written report containing, as a minimum, sections on the criminal justice problem(s) addressed; goals and objectives; methodology used; results and findings, conclusions; and recommendations. The report should also include the nature and number of discussions with practitioner agencies. In addition to the final report, the recipient may also be required to provide other deliverables (e.g., a prototype device, working model) depending on the nature and goals of the project.

To help ensure that the goals of the program are met, for a proposal to be eligible to receive an award, it must include:

- A description of the deliverables that will result from the proposed effort.
- Acknowledgment of the understanding that the written final report is required as a separate deliverable item. To the extent possible, provide any details of an outline of the final report.

VII. Performance Measures

The goal of this program is the study, development, improvement, demonstration, and implementation of less-than-lethal technologies and tools with demonstrated value to public safety agencies. Performance toward that goal is measured by the knowledge gained and the number of technologies or tools successfully developed, improved, demonstrated, or implemented versus the number funded; as evidenced by written reports submitted to NIJ and prototype devices described in the award.

VIII. How to Apply

Persons interested in submitting proposals under this solicitation must submit the application materials specified below. (See below for instructions on obtaining application forms and guidelines.) Please be aware that your application must include the following information or completed forms to qualify for an award of funding:

- Standard Form (SF) 424—Application for Federal assistance
- Geographic Areas Affected Worksheet
- Assurances
- Certifications Regarding Lobbying, Debarment, Suspension, and Other Responsibility Matters; and Drug-Free Workplace Requirements (one form)
- Disclosure of Lobbying Activities
- Budget Detail Worksheet
- Budget Narrative
- Negotiated indirect rate agreement (if appropriate)
- Names and affiliations of all key persons from applicant and subcontractor(s), including advisors,

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consultants, and advisory board members. Include the name of the principal investigator, with title, organizational affiliation, department (if institution of higher education), address, phone, e-mail, and fax.

- Proposal abstract²
- Table of contents
- Program narrative or technical proposal
- Privacy certificate
- Form 310 (Protection of Human Subjects Assurance Identification/Certification/Declaration)
- Environmental Assessment (if required)
- References
- Letters of cooperation from organizations collaborating in the project
- Resumes for key personnel that will participate in the proposed project
- Appendices, if any (e.g., list of previous NIJ awards, their status, and products).

Confidentiality of information and human subjects protection. NIJ has adopted policies and procedures regarding the confidentiality of information and human subjects protection. Please see the *Guidelines for Submitting Proposals for National Institute of Justice-Sponsored Research* for details on the new requirements at <http://www.ojp.usdoj.gov/nij/funding.htm>.

Page limit. The number of pages in the “Program Narrative” part of the proposal must not exceed 30 double-spaced pages, no matter the amount of funding requested.

Due date. Completed proposals **must be received** at the National Institute of Justice by 4:00 pm on **April 17, 2002**. Extensions of this deadline will not be permitted.

Award period. In general, NIJ limits its grants and cooperative agreements to a maximum period of 12 or 24 months. However, longer budget periods may be considered.

Applying. Applicants need to obtain two packets: (1) application forms (including a sample budget

worksheet) and (2) guidelines for submitting proposals (including requirements for proposal writers and requirements for grant recipients). To receive these documents, applicants can:

- Access NIJ's Funding Opportunities Page on the World Wide Web: (<http://www.ojp.usdoj.gov/nij/funding.htm>).
- Request hard copies of the forms and guidelines by mail from the National Criminal Justice Reference Service at 800–851–3420 or from the Department of Justice Response Center at 800–421–6770 (in the Washington, D.C., area, at 202–307–1480).
- Request copies by fax. Call 800–851–3420 and select option 1, then option 1 again for NIJ. Code is 1023.

Guidance and information. Applicants who wish to receive additional guidance and information may contact the U.S. Department of Justice Response Center at 800–421–6770. The Response Center staff can provide assistance or refer applicants to an appropriate NIJ professional. Applicants may also discuss their prospective research topics with the NIJ professional staff. To do so, contact Mr. Amon Young at (202)514-4338 (younga@ojp.usdoj.gov). However, applicants are expected to obtain and carefully review application forms and proposal guidelines in advance.

Send completed forms to:

NIJ Less Than Lethal Technology Solicitation
c/o Ann Marie Boyer
National Institute of Justice
810 Seventh Street N.W.
Washington, DC 20531
[NIJ's overnight courier ZIP code is 20001.]

Ten (10) copies of fully executed proposals must be received by NIJ by 4:00 P.M. on **April 17, 2002**.

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Notes

1. When estimating budget requests, investigators should note that NIJ policy prohibits the use of grant funds for operational, training, or other nonresearch costs of the project.
2. The proposal abstract is meant to serve as a succinct and accurate description of your proposed work. Your abstract must minimally describe: the criminal justice problem to be 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. Descriptions of past accomplishments made by yourself, or your organization, in the relevant field or topic area are to be avoided in the abstract. **DO NOT include company proprietary information in the abstract because the abstract WILL be made available to the general public if an award is made based on the proposal.** The total length of the abstract must not exceed 400 words.

For more information on the National Institute of Justice, please contact:

National Criminal Justice Reference Service
Box 6000
Rockville, MD 20849-6000
800-851-3420
e-mail: askncjrs@ncjrs.org

SL# 000557