

PROSPECTUS

- Title:** INTERNATIONAL TRAINING COURSE ON THE PHYSICAL PROTECTION OF NUCLEAR MATERIAL AND FACILITIES
- Place:** Albuquerque, New Mexico, USA
- Date:** 30 April to 19 May 2006
- Deadline for Nominations** **9 January 2006**
- Organisers:** The International Atomic Energy Agency and the Department of Energy of the United States of America.
- Language:** The language of instruction will be English.
- Participation:** The training course is open to participants from IAEA Member States. Preference will be given to Member States eligible to receive technical assistance. Candidates from other Member States will also be considered provided that the nominating government will bear the full cost of their participation.
- Objective:** The objective of the course is to establish awareness of the need for an integrated system of physical protection of nuclear material and facilities that is effective against threats of radiological sabotage and theft of nuclear material. The course will familiarize participants with current concepts and technology and provide information that will assist in developing and implementing physical protection systems with reference to systems engineering, state-of-the-art technology and facility analysis.
- Participants' Qualifications:** The course is intended mainly for persons who are responsible for designing and/or assessing physical protection systems, for operators and managers of such systems and for those preparing associated regulations or from the competent authorities. It is assumed that they will have a basic technical background or some experience in physical protection. Representatives of other organizations may attend the course, as their needs require, their backgrounds permit, and if space is available.
- Nature of the course:** The working language of the course is English. It is essential, therefore, that participants have a good knowledge of that language.
- The course consists of lectures and small-group working sessions. The course sessions are grouped and presented in the same sequence, as these principles should be applied in an actual physical protection design and evaluation process. During the small group sessions, the participants apply course concepts as they work through practical exercises on a hypothetical facility. Visits to selected facilities are included where feasible. Information on specific countries' concepts for physical protection is also included.

**Brief description
of the contents:**

1. ***Introduction***
The course will begin with an introductory session on the physical protection design process, which will familiarize the participants with the total integrated process they will be working through as the course progresses.
2. ***Physical Protection System Design Requirements***
This set of sessions will allow the participants to determine the environment in which the protection system will exist (facility operations and conditions), what the system must protect against (threat), and what the physical protection system must protect (targets).
3. ***Physical Protection Technologies and Systems***
This session will begin with an overview of physical protection systems, followed by sessions on specific systems and technologies; for example, intrusion sensors, entry control, and response communications. The results of field experience and laboratory evaluation will be presented in these sessions, with emphasis on the applicability of these technologies to the needs of various States.
4. ***International Standards, Guidelines and Recommendations***
Information will be provided regarding international standards and guidelines on physical protection with emphasis on INFCIRC/225/Rev.4; the objectives, functions and organizational characteristics of State systems in general, those of the United States and of other selected representative States.
5. ***Evaluation Techniques***
A brief summary of techniques for analyzing physical protection systems and evaluating their effectiveness will be presented. Two types of techniques will be emphasized. 1) overall physical protection system effectiveness evaluation; and, 2) single adversary path evaluation.
6. ***Application***
The functions of a physical protection system and the integration of these functions into an effective system will be reviewed. A hypothetical facility will be introduced to the participants as the basis for physical protection system upgrade and design exercises. These practical exercises will require the use of all the major concepts presented in the course, resulting in a reinforcement and review of the design and evaluation process.

**Application
Procedure:**

The course is open to government-sponsored participants. Nominations should be submitted in duplicate on the standard IAEA nomination form for training courses. **Nominations should include the name; birth date and place; nationality; education and experience; occupation and employer's address; applicant's passport number and expiration date. An additional US Personal Information Form (see Annex to Nomination Form) for visa purposes must also be completed for this course.** Completed forms should be endorsed by and returned through the appropriate official channels (the National Atomic Energy Authority, the Resident Representative of the United Nations Development Programme, or the Ministry of Foreign Affairs). They must be received by the International Atomic Energy Agency, P.O. Box 100, A-1400 Vienna, Austria, attention of the Office of Nuclear Security, Department of Nuclear Safety and Security (Fax No. +431 2600 29299), not later than **9 January 2006**. **Applications sent directly by individuals or by private institutions cannot be considered.**

**Language
Certificate:**

In the case of countries in which English is not an official or customary language, a separate certificate of the candidate's proficiency in English must accompany the nomination. A language school or cultural institution, or an embassy of a country in which the language of the course is spoken must issue this certificate.

**Administrative
and financial
arrangements:**

Nominating governments will be informed as soon as possible, after the closing date for applications, of the names of the selected candidates and will be given full details of administrative and financial matters.

Participants from countries eligible to receive technical assistance will be provided with a least cost round-trip air ticket by the most direct route to the course or, alternatively, a travel grant not exceeding 50% of the IAEA's full return economy fare from participants home to the course location. Accommodation during the course will be paid for, as well as most meals. Participants will also receive a fixed amount to cover the cost of meals not provided by the Government during the course, return transfers between home and airport and airport and course venue, airport taxes, visa costs and other incidentals.

No tuition fee will be charged.

It should be understood that the organizers of the course do not accept liability for the payment of any costs or compensation that may arise from the illness injury, disability, or death of any participant while traveling to and from or attending the course, and it is clearly understood that each Government, in nominating participants, undertakes responsibility for such coverage.

All participants should be medically examined and certified physically fit before leaving their home for this training course. Participants should also make their own arrangements for passports, visas, and vaccinations.