

# UPSAT 2008



**IAEA**  
International Atomic Energy Agency  
*Atoms for Peace*

**URANIUM PRODUCTION SITE  
APPRAISAL TEAM**



## INTRODUCTION

The IAEA Uranium Production Site Appraisal Team (UPSAT) programme is designed to assist Member States to improve the operational and safety performance of uranium production facilities through all phases of the uranium production cycle. This programme is expected to facilitate the exchange of knowledge and experience between team members and industry personnel. It is intended to enhance overall safety in uranium production in all countries where such activities take place or are planned to be developed.

An UPSAT review will be conducted only at the request of the relevant Member State. The IAEA undertakes the responsibility to convene an international panel of experts that will perform an independent peer review according to the terms of reference established by the requesting Member State. The procedures used for this purpose are: a review of source material, technical exchanges between international experts and the requesting Member State or organization, and preparation of a review report with findings, conclusions and recommendations. The review can be tailored to the specific needs of any relevant facility or operation. A full review may cover several operational areas, including exploration, resource development work, operational design and planning, support operations, quality assurance, general safety, radiation protection, training, engineering and processing, environmental impact and waste management, security, decommissioning plans, and communications.

An UPSAT mission is conducted outside any regulatory framework and is intended to supplement other facility and regulatory efforts which may have the same objective. The benefits of an UPSAT mission need not be limited to the subject facility. Other facilities of the same organization, in the same country or elsewhere, as well as the organizations which provided the review team experts, may also benefit.

The benefit of such a peer review for the requesting Member State or organization is to obtain independent,

international expert opinion and advice on: (a) proposed or ongoing resource development programmes and their implementation; (b) upgrading present and future safety programmes; and (c) regulatory matters. An UPSAT mission may also be useful in improving public acceptability.

The report of the UPSAT mission, presenting the conclusions of the review team, will be submitted for consideration by the requesting Member State and the management of the facility reviewed.

## OBJECTIVES

An UPSAT mission is a peer review of one or more phases of a uranium production operation by a team of selected international experts having direct experience in the technical areas specific to that operation. Judgements of the performance are made on the basis of the collective expertise of the review team. The review is a technical exchange of experience and work practices aimed at strengthening the programmes and procedures and their implementation at the subject facility. The principal objective of the UPSAT programme is the identification of areas that may require improvement and the formulation of recommendations for introduction of improved practices. The key objectives of a mission are to provide:

- The requesting Member State or organization with an objective assessment of the status of operational safety and practices at the facility, in the context of the IAEA Safety Standards and international standards of operation and good practices;
- Recommendations and suggestions for improvement in areas where performance falls short of generally accepted international good practice;
- Key staff of the facility with an opportunity to discuss their practices with experts who have experience with such practices at other locations.



## OPERATIONAL AREAS TO BE REVIEWED

The following list of topics, though not exhaustive, identifies the major areas to be considered in developing the programme for an UPSAT mission:

- Organization and management;
- General safety;
- Mining and processing engineering;
- Staff training;
- Waste management;
- Radiation protection;
- Monitoring systems;
- Environmental impact assessment;
- Security;
- Decommissioning/environmental remediation planning

Depending on the terms of reference for each UPSAT review, individual study areas may be emphasized or omitted. When a request for an UPSAT review is received by the IAEA, the UPSAT coordinator will discuss the areas that are to be addressed with the requesting Member State. Once the terms of reference for the mission have been finalized, the UPSAT team will be assembled accordingly.

## UPSAT REVIEW MECHANISM

The typical components and timing of an UPSAT review are presented in the table on page 4. As reviews may differ in time and scope, sufficient flexibility must be applied to the UPSAT service in order to accommodate the actual needs of an individual request. The methodology to be applied in the review work is described in the UPSAT Guidelines — IAEA-TECDOC-878 (published by the IAEA, 1996).

### Transmittal of request

The IAEA UPSAT service can only be initiated following a formal request from a Member State or an organization within the Member State. Such an organization requesting an UPSAT review should write to the IAEA clearly stating the terms of reference of the proposed review, the preferred timing and the person responsible for the review.

### Team composition/selection of experts

Each UPSAT team will be recruited by the IAEA and will comprise experts from countries other than the country in which the review is being performed. The team members will be selected on the basis of their expertise and special skills in the areas of the review. The final size and composition of the team will be determined by the IAEA during the evaluation of the project but will normally include between four and eight members. A team leader will be selected from the team members.

The IAEA coordinator will be responsible for the initial organization of the review and recruitment of the expert team. The coordinator will work with the team leader to facilitate interaction with the IAEA, as well as to help maintain consistency between all UPSAT reviews and update the review process and procedures as required.

The team leader will be responsible for the overall conduct of the review and preparation of the final technical report. All team members will be briefed prior to undertaking the review; specific background information regarding the operation or facility will be an essential part of the briefing. The experts will act on their own behalf and not reflect the opinion or the policy of their country or organization.

### Advance information/source material

To assist the UPSAT team in its familiarization with the facility, and to ensure the most effective use of their time while at the facility, it is necessary for all team members to be provided with relevant background material a few weeks prior to the review. This material should include comprehensive technical and administrative information on all aspects of the operations to be reviewed.



### Conduct of review

After the source material has been reviewed, the UPSAT team will meet with the experts of the organization of the requesting Member State. When the team arrives at the uranium production facility, they should already be familiar with the main features of the facility. At the start of the review mission, which may take from one to two weeks depending on the facility and type of activities to be reviewed, members of the team will be briefed and meet their counterparts among the staff of the facility. The team members will follow the predetermined methodology, i.e. UPSAT Guidelines, in recording the observations and conclusions from which the mission report will be drawn. During the visit to the Member State, the team will meet regularly for general consultations and discussions according to a preset timetable.

### Reporting

Initially, all experts will submit their findings to the team leader before the final departure of the team from the

facility. A summary of the review findings will be submitted to the facility management at the exit meeting. The team leader will then prepare a draft mission report according to the prescribed schedule. This draft will be reviewed by all members of the UPSAT team before the IAEA prepares and transmits the final report to the requesting Member State within six weeks of the end of the fieldwork. Such a report is the property of the requesting Member State and of the reviewed organization, and will be kept confidential by the IAEA and the UPSAT team. Publication of the report or part of the report must have the permission of the requesting Member State and organization.

**FUNDING**

The costs of an UPSAT mission would be shared by the IAEA, the Member State requesting the mission and the

Member States providing the experts.

If the mission is requested by a developing Member State, this cost may be financed through IAEA technical cooperation funds. This, however, should be properly formalized, approved and included in the technical cooperation biennial programme.

The Member State requesting an UPSAT mission shall bear locally incurred expenses, such as board and lodging; incidental expenses; local transportation; administrative services; and provision of meeting rooms and office space. The international travel costs for a mission to industrialized Member States should be borne by the requesting countries.

A review mission may require a preparatory meeting. The travel and local expenses of the IAEA staff member (coordinator) attending this meeting shall be borne by the IAEA.

**TABLE 1: PROJECTED SCHEDULE FOR UPSAT MISSIONS AND ASSOCIATED ACTIVITIES**

	Activity	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
1	Request received from Member State	█					
2	IAEA reviews and considers the request	█					
3	Additional information needs identified by IAEA and information supplied by Member State		█	█			
4	Expert selection and assembly of team			█	█		
5	Information sent to team members for assessment and mission preparation			█	█	█	
6	UPSAT field activity					█	
7	Preparation of final report by team						█
8	Processing of report by IAEA and dispatch to Member State						█



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