A. Introduction

A management system is a set of interrelated or interacting elements that establishes policies and objectives, and which enables those objectives to be achieved in a safe, efficient and effective manner.

The Specific Safety Requirements publication *Safety of Research Reactors* (IAEA Safety Standards Series No. SSR-3) establishes the requirement: “The operating organization for a research reactor facility shall establish, implement, assess and continuously improve an integrated management system.” The Generic Safety Requirements publication *Leadership and Management for Safety* (IAEA Safety Standards Series No. GSR Part 2) requires that “The management system shall integrate its elements, including safety, health, environmental, security, quality, human-and-organizational-factor, societal and economic elements,
so that safety is not compromised.” and “The management system shall be developed and applied using a graded approach.”

IAEA Safety Standards Series No. SSR-3 also requires that the operating organization ensure, through the establishment and use of an integrated management system, that the research reactor is sited, designed, constructed, commissioned, operated, utilized, and decommissioned in a safe manner. The development and implementation of a management system is a basic requirement in order to assure, in particular:

- Safety of research reactors at all stages and for all activities during their lifetime in order to protect the public, the workers and the environment from undue radiation hazards;
- Compliance with regulatory requirements;
- Proper and safe modification, refurbishment and upgrading;
- Safe and effective utilization of the research reactor facilities, including quality control of products and services delivered; and
- Improved operational performances of the research reactors as well as of maintenance programmes and procedures.

The Safety Guide Application of the Management System for Facilities and Activities (IAEA Safety Standards Series No. GS-G-3.1) provides generic guidance to fulfil these requirements, and the Safety Guide The Management System for Nuclear Installations (IAEA Safety Standards Series No. GS-G-3.5) provides specific guidance for nuclear installation operating organizations. The above-mentioned safety requirements and safety guidance are also applicable to research reactors, but the application of the management system requirements should be graded to ensure that resources are deployed and appropriate controls are applied on the basis of the consideration of:

- The significance and complexity of each product, service, activity or control;
- The hazards and the magnitude of the potential impact (risks) associated with the safety, health, environment, security, quality, and economic aspects of each product, service, activity or control; and
- The possible consequences if a product fails or an activity is carried out incorrectly.

For research reactors with a lower power and a limited number of experimental facilities; there are significant differences concerning the controls that need to be performed and the extent of the associated documentation in comparison with those for high-power research reactors with a large number of experimental and radioisotope production facilities. Consequently, the scope, extent and details of the management system should be established and implemented by the operating organization using a graded approach.

The Training Workshop on the Implementation of a Management System for Research Reactor Operating Organizations, held in Vienna, Austria, from 24 to 28 November 2014, recommended that the International Atomic Energy Agency (IAEA) initiate programmes to assist Member States in establishing and implementing an integrated management system based on the IAEA safety standards, and also that it provide training on the benefits and needs of a management system.

Considering all the above elements, the IAEA is organizing this Training Workshop on Integrated Management Systems for Research Reactors from 14 to 18 November 2016 at its Headquarters in Vienna, Austria.
B. Objectives

The workshop is aimed at providing the participating Member States with practical information on the establishment, implementation and continuous development of management systems for research reactors on the basis of the IAEA safety standards. It will also serve as a forum for Member States to share and discuss experiences, challenges and lessons learned in relation to management systems for research reactors. The use of a graded approach in the application of the requirements for management systems will also be discussed on the basis of the Safety Report entitled *Implementation of a Management System for Operating Organizations of Research Reactors* (Safety Reports Series No. 75).

C. Target Audience

The workshop is intended for individuals from Member States with an operating research reactor facility or Member States that have initiated a new research reactor project. Participants should be individuals in charge of developing, implementing and improving management systems at their respective research reactor facilities. Specialists from regulatory bodies who are in charge of the review and assessment of management systems for research reactors can also participate.

D. Working Language

The working language of the workshop will be English.

E. Topics

The following topics will be addressed and discussed during the workshop:

- IAEA safety standards dealing with management systems for nuclear facilities and activities;
- Use of a graded approach in the application of management system requirements for research reactors;
- Implementation of management systems for research reactor operating organizations;
- Experience, including practical examples and lessons learned, of the participating Member States in relation to their management systems;
- Monitoring, assessment and continuous improvement of the management system; and
- Regulatory oversight of management systems for research reactor organizations.

The workshop will include working group sessions to discuss issues and challenges in implementing an integrated management system in the research reactor operating organizations and their regulatory aspects.
F. Visas

Designated participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria as soon as possible. Approximately four weeks before the workshop, the IAEA will send official invitation letters to designated participants which are intended to assist with visa arrangements.

G. Application Procedure

Designations should be submitted on the attached Participation Form (Form A). Completed forms should be endorsed by the competent national authority and returned through the established official channels. They must be received by the IAEA not later than 2 September 2016. Designations received after that date or applications sent directly by individuals or by private institutions cannot be considered. Designating Governments will be informed, in due course, of the names of the selected candidates and at that time full details will be given on the procedures to be followed with regard to administrative and financial matters.

H. Accommodation

It is the responsibility of the participants to arrange their own accommodation. A list of hotels for reference and detailed information on transport arrangements to/from Vienna and other organizational items will be sent to all designated participants approximately four weeks before the workshop.

I. Expenditures and Financial Support

The IAEA is generally not in a position to bear the travel and other costs of participants in the workshop. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Such assistance may be offered upon specific request to normally one participant per country provided that, in the IAEA’s view, the participant on whose behalf assistance is requested will make an important contribution to the workshop. The application for financial support should be made at the time of designating the participant (Form C). There is no registration fee for this workshop.

J. IAEA Secretariat / Organization

The IAEA Scientific Secretaries for the workshop are Mr Ram Charan Sharma of the Research Reactor Section, Division of Nuclear Fuel Cycle and Waste Technology, Department of Nuclear Energy, and Mr Deshraju H. Venkat Rao of the Research Reactor Safety Section, Division of Nuclear Installation Safety, Department of Nuclear Safety and Security.

All the correspondence related to this workshop should be addressed to the Administrative Secretary for the workshop, Ms Reena Thottakkara (Email: R.Thottakkara@iaea.org) with a copy to the Scientific
Secretaries, Mr Ram Charan Sharma (Email: Ram.Sharma@iaea.org), and Mr Deshraju Venkat H. Rao (Email: D.V.Rao@iaea.org).

**General address of the IAEA Secretariat:**
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Email: Official.Mail@iaea.org
Fax: +43 1 26007

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**Scientific Secretaries:**

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Fax: +43 1 26007
Email: D.V.Rao@iaea.org

Subsequent correspondence on scientific matters should be sent to the Scientific Secretaries and correspondence on other matters related to the workshop to the Administrative Secretary.
Participation Form

Training Workshop on Integrated Management Systems for Research Reactors

IAEA Headquarters, Vienna, Austria

14–18 November 2016

To be completed by the participant electronically if possible (i.e. not by hand) and then sent to the competent official authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA), Vienna International Centre, PO Box 100, 1400 Vienna, Austria, either electronically by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). (Kindly send also a copy per email to: Ram.Sharma@iaea.org, D.V.Rao@iaea.org, and R.Thottakkara@iaea.org.)

Deadline for receipt by IAEA through official channels: 2 September 2016

| The Government (designating authority) of |  |
| designates the person indicated below for the above-mentioned event. |  |
| □ Female □ Male | Date of birth: |
| Family name (as in passport): | Place of birth: |
| First name: | Nationality: |
| Complete mailing address (office): | Passport No.: |
| Institution name: | Date of issue: |
| Street: | Place of issue: |
| PO Box: | Valid until: |
| Town/City: | Telephone (office): |
| Region/District: | Telephone (home): |
| Country: | Fax: |
| Airport/town nearest to residence: | Email: |
| Language ability: (The designating authority confirms that the participant is proficient in the language in which the event is to be held.) |  |
| □ Yes | Main academic/technical qualification: |
| Presentation of a paper: |  |
| □ Yes □ No | □ Yes  |
| Title of the paper: |  | Yes |
| An abstract of the paper is attached: |  |
| □ Yes □ No | Radiation surveillance |
| Is the participant covered under a radiation surveillance programme? |  |
| □ Yes □ No | Financial support |
| Please indicate if you are requesting financial support from the IAEA? |  |
| □ Yes □ No |  |

Date  Name and title (printed) and signature of designating authority official

Form A  
T3-TR-52539
Grant Application Form

Training Workshop on Integrated Management Systems for Research Reactors

IAEA Headquarters, Vienna, Austria

14–18 November 2016

To be completed by the applicant and sent to the competent official authority (Ministry of Foreign Affairs or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency, Vienna International Centre, PO Box 100, 1400 Vienna, Austria (Fax: +43 1 26007).

To be completed only by participants from developing countries on whose behalf a grant is requested

Deadline for receipt by IAEA through official channels: 2 September 2016

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2. RECENT EMPLOYMENT RECORD (starting with your present post)

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3. DESCRIPTION OF WORK PERFORMED OVER THE LAST THREE YEARS:

4. INSTITUTE’S/MEMBER STATE’S PROGRAMME IN FIELD OF WORKSHOP:

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Date Signature of applicant

.................................................................................................................................

Date Name and title (printed) and signature of responsible Government official