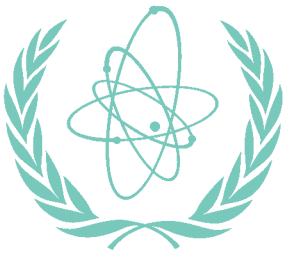
EPR-
RESEARCH
REACTOR/T
2011

TRAINING FOR
RADIATION EMERGENCY
PREPAREDNESS AND RESPONSE

EMERGENCY PREPAREDNESS
AND RESPONSE

Workshop Manual



IAEA
International Atomic Energy Agency

CONTENT

INFORMATION FOR THE COURSE

TITLE: IAEA Training Course on Research Reactor Emergency Response

HOST INSTITUTE: *[Provide host country/organization]*

DATE: *[Provide dates]*

ORGANIZERS: International Atomic Energy Agency in co-operation with the *[Host organization/Country]*

PARTICIPANTS: Determined by *[host or Invitation]*

LANGUAGE: English

OBJECTIVES OF THE WORKSHOP: By the end of the workshop, the participants will:

- ⇒ understand the risk of emergencies at research reactors and their potential consequences
- ⇒ understand the basic concepts of emergency preparedness and response, including objectives of emergency response and preparedness, emergency planning categories, planning areas and zones, planning levels and responsibilities, emergency classes, conditions and immediate actions, and integrated planning concepts
- ⇒ understand the step-by-step approach to developing and implementing emergency response plans
- ⇒ be able to identify critical tasks and recognize the need for their assignment
- ⇒ be able to describe a simple concept of operations for emergency preparedness for research reactors
- ⇒ know the infrastructure and functional elements of a response capability for emergency planning for research reactors
- ⇒ be able to:
  - ⇒ classify an emergency
  - ⇒ make appropriate off-site notifications
  - ⇒ take appropriate actions to protect on-site staff
  - ⇒ implement appropriate off-site protective actions
  - ⇒ treat injured and exposed personal
  - ⇒ provide timely and informative information to the public
  - ⇒ make appropriate international notifications and request assistance from IAEA
- ⇒ be familiar with IAEA publications that can be used in developing an emergency response capability to include:
  - ⇒ GS-R-2, Preparedness and Response for a Nuclear or Radiological Emergency
  - ⇒ EPR-RESEARCH REACTOR, Generic Procedures for Response to a Nuclear or Radiological Emergency at Research Reactors
  - ⇒ GSG-2, Criteria for Use in Preparedness and Response for a Nuclear or Radiological Emergency
  - ⇒ EPR-METHOD 2003, Method for Developing Arrangements for Response to a Nuclear or Radiological Emergency
  - ⇒ TECDOC-955, Generic assessment procedures for determining protective actions during a reactor accident

- ⇒ EPR-MEDICAL, Generic procedures for medical response during a nuclear or radiological emergency
- ⇒ EPR-FIRST RESPONDERS 2006, Manual for First Responders to a Radiological Emergency,
- ⇒ TECDOC 1162, Generic procedures for assessment and response during a radiological emergency
- ⇒ TECDOC-1092, Generic Procedures for monitoring in a nuclear or radiological emergency

⇒ develop any action plan for establishing an emergency response capability for research reactors consistent with IAEA guidance

⇒ know the means by which the IAEA can assist in development of national capabilities

PROJECT NO. *[provide code]*
PROJECT TITLE *[provide title]*

IAEA TECHNICAL OFFICER *[Name and organization]*

COURSE DIRECTOR: *[Name and organization serving as Course Director]*

WORKSHOP PLAN

The main aims of the workshop are to provide the participants with the knowledge and tools to be able:

- To develop and implement an action plan to establish the capability to respond to emergencies at their research reactors, and
- To develop plans and procedures to respond in case of emergencies at research reactors.

The workshop is divided into blocks, which are further divided into modules. Module is a generic term to describe the training activity e.g. a seminar, work session, video presentation, briefing, exercise, drill, discussion or any combination of these activities. Each module is characterized in the following way:

Purpose:	goals of the module that lecturer/trainer has to meet
Objectives:	statements of what the participants are expected to know or be able to do upon completion of the block (broad statements) or module (detailed statements)
Content or tasks:	short list of subjects (for the seminar) or tasks (for the work session, drill or exercise) to be covered in the module
Activity:	the way or method in which module is presented or conducted
Duration:	presentation time or duration of the session
Training material:	material distributed beforehand or at the workshop itself to the participants (seminar notes, work session notes, exercise manuals, other supporting materials)
References:	additional written material (not distributed but displayed), which could help participants to get deeper insight into the subject of the module
Equipment needs:	rooms, equipment, working material needed to conduct the module
Prerequisites:	knowledge and experience required or modules needed to follow the specific module efficiently

Workshop structure

Block	Objectives
B1 Opening of the workshop	To register for the workshop To be comfortable with the workshop, its aims and arrangements
B2 Introduction to the workshop	To learn the role of the IAEA in assisting Member States To learn experiences in response to emergencies at research reactors, and lessons learned To understand the importance of emergency preparedness and response To have a common understanding of the objectives, concepts and basic principles of emergency response
B3 Emergency preparedness and response	To learn the infrastructure and functional elements of an emergency response capability for research reactors To be able to describe a concept of operations for emergency preparedness for research reactors
B4 Development of response capabilities	To be able to develop a specific action plan for establishing or upgrading emergency response capability based on identified country needs
B5 Tabletop exercise	To experience major aspects of emergency response to an accident at research reactor
B6 Evaluation of the workshop and closing	To be able to evaluate the benefits, limitations and effectiveness of the workshop To give suggestions for future improvements of the workshop
	SUM

SEMINAR PLAN

BLOCK 1 OPENING OF THE WORKSHOP

	Registration
Purpose	To register participants To distribute training and other workshop materials and identity badges
Duration [hrs]	1
Equipment needs	Appropriately prepared room, training and other workshop materials, identity badges
	Formal opening
Purpose	To welcome guests and participants To declare the workshop opened
Objectives	To feel welcomed by the IAEA and by the host country To be aware of Agency's expectations of the participants To feel inspired to learn, ask questions, and make contacts
Content	Welcome addresses General introduction to the workshop Agency's expectations of the participants
Activity	Presentation
Duration [hrs]	½
Training material	None
References	None
Equipment needs	Appropriately prepared and equipped lecture room for 30 participants and guests
	Workshop information ***Presentation***
Purpose	To present basic workshop information (workshop aims, workshop plan, workshop programme, training material, workshop administration and logistic arrangements) To check if all training material is available
Objectives	To know the workshop aims To be informed on the workshop plan To be familiar with the workshop administration and logistic arrangements To be informed on training material received To get to know other participants
Content	Aims of the workshop within the overall framework of emergency preparedness development Workshop plan and workshop programme Workshop administration and logistic arrangements (inc. food, travel, accommodation, payments, social events, etc.) Self introduction of the participants
Activity	Presentation, questions and discussion
Duration [hrs]	½
Training material	Workshop programme, list of participants, checklist for workshop administration and logistic arrangements
References	None
Equipment needs	Computer projector, overhead projector, screen, PC, MS PowerPoint

BLOCK 2 INTRODUCTION TO THE WORKSHOP

Module 0	**The role of the IAEA** ***Presentation***
Purpose	To explain the role of the IAEA and to give an overview of publications currently of relevance for emergency preparedness
Objectives	To be aware of the main statutory and legal functions of the IAEA To know the status of conventions, standards, guides and technical publications with regard to their binding and non/binding nature, and the process by which they are developed To be able to list the IAEA publications currently of relevance for emergency preparedness To understand the role of the IAEA in implementing these publications through IAEA training programmes To be informed on past and future IAEA training activities (courses, workshops, exercises) To become aware of projects of the Technical Co-operation Programme relevant to emergency preparedness and the participants To be acquainted with the IAEA responsibilities in radiological emergencies: role of RANET
Content	Main statutory and legal functions of the IAEA, Basic Safety Standards - emergency planning requirements , Status of standards, guides and technical publications, The IAEA publications currently of relevance for emergency preparedness, Projects of the Technical Co-operation Programme of relevance to emergency preparedness, Standard courses/workshops offered, Emergency Preparedness Review missions, Role of RANET, How to request IAEA's assistance
Activity	Seminar, questions and discussion
Duration [hrs]	1
Training material	Seminar notes for Module 0
Reference	RANET Manual, , Statutes, Conventions
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 1	**Overview of emergencies at research reactors**
Purpose	To present and explain the types and hazards of emergencies at research reactors and their potential consequences
Objectives	To be able to list types of potential radiological emergencies at research reactors, and know examples of reactor and facility set-ups that can give rise to such accidents To learn experiences in response to emergencies at research reactors To be able to list main consequences of these emergencies To be able to list principle lessons learned
Content	Potential accidents, Consequences of radiological accidents, Accident history and statistics, Example of an actual accident at the research reactor, Lessons learned from response to emergencies
Activity	Seminar, questions and discussion
Duration [hrs]	1
Training material	Seminar notes for Module 1
References	Incident Reporting System for Research Reactors (IRSRR), SSR No. 53
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Modules 2 and 3	**Objectives, concepts and basic principles of emergency response**
Purpose	To summarize principles and concepts of emergency preparedness and response
Objectives	To understand the basic concepts of emergency preparedness and response, including objectives of emergency response and preparedness, emergency planning categories, planning areas and zones, planning levels and responsibilities, emergency classes, conditions and immediate actions, and integrated planning concepts
Content	Concepts and objectives of emergency response, Threat categories and emergency classes, Emergency planning zones, Principles of intervention, including intervention levels, Protective actions and operational intervention levels, Emergency worker

	guidance , Emergency response strategies, Generic response organization
Activity	Seminar, questions and discussion
Duration [hrs]	2 – 1; 3 - 1½
Training material	Seminar notes for Modules 2 and 3
References	EPR-METHOD, GS-G-2.1, Code of Conduct, EPR-Research Reactor
Equipment needs	Computer projector, screen, PC, MS PowerPoint

BLOCK 3 EMERGENCY PREPAREDNESS AND RESPONSE OVERVIEW

Module 5	**Accident management vs Emergency Management**
Purpose	To present and explain major aspects of accident management and mitigation in contrast to emergency management
Objectives	To know basic concept of accident management and why do we need that accident management To become aware of accident prevention and accident mitigation process To become aware of accident mitigation measure To understand the EOP development guides and procedure To understand how emergency management differs from accident management To understand the Facility Response Manager responsibilities To know the phases of emergency management
Content	Response initiation (identification, notification and activation), Identification of on-site hazards during an emergency, Concept of an emergency classification system, Actions taken upon declaration of emergency class, Emergency operating procedures, On-site response teams and off-site assistance, Requirements for emergency management, Emergency management role, Facility Response Manager's tasks, Emergency phase actions, Post-emergency phase actions
Activity	Seminar, questions and discussion
Duration [hrs]	1
Training material	Seminar notes for Module 5
References	EPR-METHOD, NS-R-4, NS-G-4.4, GS-R-2; EPR-RESEARCH REACTOR
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 6	**Emergency classification**
Purpose	To explain the emergency classification system in EPR-RESEARCH REACTOR To demonstrate the system of emergency classification on examples
Objectives	To know the emergency classification system To be able to use tools in EPR-RESEARCH REACTOR for emergency classification
Content and tasks	Tools needed to determine emergency class, Work session examples and problems, To solve problems using EPR-RESEARCH REACTOR
Activity	Seminar, work session, discussion
Duration [hrs]	1
Training material	Work session notes for Module 6
References	EPR-RESEARCH REACTOR, SSS No. GS-R-2
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 7	**Urgent protective actions**
Purpose	To present and explain the concept of urgent protective actions (on-site, off-site)
Objectives	To be aware of different exposure pathways in nuclear or radiological emergency To be able to list urgent protective actions (on-site, off-site) To know the characteristics (benefits, drawbacks) of specific protective actions To understand the role of intervention and operational intervention levels To know on-site actions including the care for facility visitors
Content	Exposure pathways, Protection strategy and basis for urgent protective actions, Protective actions: evacuation, sheltering, thyroid blocking, Intervention and operational intervention levels, On-site actions
Activity	Seminar, questions and discussion

Duration [hrs]	1½
Training material	Seminar notes for Module 7
References	EPR-METHOD, EPR-RESEARCH REACTOR, GSG-2
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 8	**Instructing, warning and informing the public**
Purpose	To present, explain and discuss issues of instructing, warning and informing the public in an emergency
Objectives	To learn the ways of communications with the public and the media To become aware of basic principles of communication To learn on practical examples
Content	Why, when and in what form to communicate with the public, Working with the media, Basic communication principles, Providing information to the public routinely, Warning of the public of an emergency, Keeping the public informed during and following an emergency, Examples of the impact of an adequate public communications
Activity	Seminar, questions and discussion
Duration [hrs]	1
Training material	Seminar notes for Module 8
References	EPR-METHOD, TECDOC-1076, EPR-FIRST RESPONDERS
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 9	**Action Guides and Response Priorities**
Purpose	To present the suggested facility response organization and the responsibilities of the positions in the organization
Objectives	To understand the Emergency Response Team organization in EPR-RESEARCH REACTOR To be able to list the responsibilities of each Team member To be able to list the priority actions and expected timing To understand how and when the organization may be modified
Content	Emergency Response Team Organization, Responsibilities of Team members, Additional Team members, Priority of response actions, Suggested timing of response actions
Activity	Seminar, questions and discussion
Duration [hrs]	1.5
Training material	Seminar notes for Module 9
References	EPR-METHOD; GS-R-2; EPR-RESEARCH REACTOR
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 10	**Medical management overview**
Purpose	To give an overview of medical management in case of radiation emergency
Objectives	To be able to characterize the most frequent medical consequences of the radiation accident To understand the role and place of medical preparedness and response in the overall organisational emergency response structure To know infrastructure and functional requirements for medical response preparedness To be aware of the psychological effects of radiation emergenciesTo be able to list medical categories of affected persons involved in radiation accidents using simple classification
Content	Health effects of ionising radiation – descriptions and examples, Medical consideration of radiation emergencies, The psychological aspects for radiation emergencies, Mitigation of the health and psychological effects of radiation emergencies, Infrastructure and functional requirements for medical preparedness, Importance of obtained international expertise
Activity	Seminar, questions and discussion
Duration [hrs]	1
Training material	Seminar notes for Module 10

References	Ricks, R.C., Prehospital Management of Radiation Accidents, ORAU 223, Oak Ridge Associated Universities, Oak Ridge, TN (1984) Medical management of radiological casualties. Handbook. Ed. D. Jarrett, AFRRI, Bethesda, MD (1999), EPR-MEDICAL
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 11	**On scene emergency medical response**
Purpose	To explain the tasks of Emergency Medical Responders, introduce basic steps in contaminated casualty handling and to give an overview of decontamination procedures
Objectives	To understand the role and tasks of Emergency Medical Responders on the scene of an accident, To know the basic steps in contaminated casualty handling To be aware of interactions and needed coordination between different response groups on-scene To be acquainted with basic decontamination procedure
Content	Immediate actions to be taken, Handing and preparation of a contaminated victim
Activity	Seminar, questions and discussion
Duration [hrs]	1
Training material	Seminar notes for Module 11
References	Ricks, R.C., Prehospital Management of Radiation Accidents, ORAU 223, Oak Ridge Associated Universities, Oak Ridge, TN (1984) Medical management of radiological casualties. Handbook. Ed. D. Jarrett, AFRRI, Bethesda, MD (1999), TECDOC-1162, TECDOC-1092, EPR-METHOD, EPR-FIRST RESPONDERS
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 13	**Emergency Monitoring and Assessment**
Purpose	To present emergency monitoring objectives and strategies
Objectives	To list the objectives of emergency monitoring To discuss resources and capabilities (teams, instruments) needed To understand generic emergency monitoring organisation To be able to describe emergency monitoring and sampling strategy in small and large scale accidents To determine staff qualification requirements To be aware of basic survey methods To comprehend the QA and QC systems in emergency monitoring and sampling
Content	Objectives of emergency monitoring, Generic monitoring organization, Emergency monitoring strategy, Emergency staff, Instrumentation, Basic survey methods, Quality assurance system
Activity	Seminar, questions and discussion
Duration [hrs]	1
Training material	Seminar notes for Module 13
References	TECDOC-1092; EPR-METHOD; EPR-RESEARCH REACTOR
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 14	**Non-radiological Safety at Research Reactors**
Purpose	Explore the various safety hazards other than radiation
Objectives	To be aware of non-radiological safety issues at research reactors
Content	Physical protection systems (PPS), Fire protection systems (FPS), Electric power supply systems (EPSS), Water flow safety systems, Civil engineering issues, Hazardous materials
Activity	Seminar, questions and discussion
Duration [hrs]	1
Training material	Seminar notes for Module 14
References	Safety Series No. 115
Equipment needs	Computer projector, screen, PC, MS PowerPoint

BLOCK 4 DEVELOPMENT OF A RESPONSE CAPABILITY

Module 4	**Concepts of Operations and Responsibilities**
Purpose	Present the concept of operations and show how assignment of responsibilities is determined
Objectives	Understand the importance of assigning responsibilities Be able to use the worksheet provided to identify and resolve gaps and conflicts in responsibility Understand the role and importance of the Concept of Operations in coordinating the planning Be able to develop a basic Con-ops for events possible at research reactors Know how to ensure panning for a research reactors is integrated with national planning
Content	Concepts of operations, Critical tasks and responsibilities
Activity	Seminar, questions and discussion
Duration [hrs]	1
Training material	Seminar notes for Module 4; Worksheets for “Identification and Assignment of Critical Tasks”
References	EPR-METHOD
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 12	**Infrastructure and Functional Requirements**
Purpose	To give an overview of infrastructure elements needed to ensure that the functional elements of a response can be performed when needed
Objectives	To be aware of importance of infrastructure elements To know basic infrastructure requirements
Content	Infrastructure elements: authority, organisation, co-ordination, plans and procedures, logistical support and facilities, training, drills and exercises, quality assurance and programme maintenance
Activity	Seminar, questions and discussion
Duration [hrs]	1
Training material	Seminar notes for Module 12
References	IAEA-EPR-METHOD, SSS No. GS-R-2
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 15	**Developing emergency response capability – step-by-step process**
Purpose	To explain 10 steps in developing sound emergency response capability
Objectives	To know that developing a national capability requires a systematic approach To become aware that EPR-METHOD recommends a ten-step process To know that this process is modular, requires extensive consultation with all relevant organizations and that it is iterative To understand the main elements of the ten-step process and considerations in their implementation To know the objective of writing a plan To know the importance of structuring the plan for future revisions To know the principal components of a national plan
Content	Challenges in planning, Process for developing a plan, Integrated planning concept, Concept of operation
Activity	Seminar, questions and discussion
Duration [hrs]	1
Training material	Seminar notes for Module 15
References	IAEA-EPR-METHOD
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 16	**Outlines of emergency plan and procedures**
Purpose	To present generic outlines of emergency plan and procedures
Objectives	To be acquainted with the off-site an on-site emergency plan’s outline

	To be acquainted with implementing procedure's generic outline To be aware of QA elements for emergency plan and procedures
Content	Local government and participating organizations emergency plans outline, Facility's (on-site) emergency plan outline, Operator's contingency plan outline, Implementing procedures outline
Activity	Seminar, questions and discussion
Duration [hrs]	1
Training material	Seminar notes for Module 16
References	IAEA- EPR-METHOD
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 17	**Discussion Problems**
Purpose	
Objectives	To demonstrate level of understanding of the material presented in the training course.
Content	Questions related to the material presented in the course
Activity	Work session
Duration [hrs]	1
Training material	Seminar notes for Module 17
References	EPR-RESEARCH REACTOR
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 18	**Development and implementation of an action plan**
Purpose	To explain how to develop a project management framework
Objectives	To understand the need to develop an action plan as a follow up to this workshop To understand basic project management principles To know what a project management plan should contain To be familiar with the project management process
Content	What is an action plan, Project management fundamentals, What is project management, Project management contents and process, Generic action plan
Activity	Seminar, questions and discussion
Duration [hrs]	1
Training material	Seminar notes for Module 18
References	None
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 19	**Preparation of a specific action plan**
Purpose	To guide the participants in preparing a specific action plan
Objectives	To be able to identify specific needs To be able to develop an appropriate action plan within an appropriate project management structure
Tasks	To prepare draft action plan for development or upgrading emergency response capability for a specific research reactor
Activity	Work session, presentation by one participant, discussion
Duration [hrs]	1
Training material	Work session notes for Module 19
References	None
Equipment needs	None

BLOCK 5 TABLETOP EXERCISE

Module 20	**Tabletop Exercise Preparations**
Purpose	Make preparations for a tabletop exercise
Objectives	Understand the tabletop exercise scenario and information format
Content	Establish the three groups, facility operators and radiation specialists, Emergency Response Team, off-site officials, Explain the exercise scenario and rules of conduct, Discuss the exercise after it concludes (following day)
Activity	Presentation

Duration [hrs]	Preparations – 1; Critique - 1½
Training material	Notes for Module 20
References	Tabletop Exercise Manual, Section 1
Equipment needs	Computer projector, screen, PC, MS PowerPoint
Module 21	**TTX Controller Training**
Purpose	Brief TTX controllers and evaluators
Objectives	Understand the scenario of the TTX
Content	Review the TTX scenario, Assign controllers and evaluators to positions, Review timing and content of all Injects
Activity	Presentation and work session
Duration [hrs]	1
Training material	Notes for Module 21; injects from TTX Manual, section 3
References	Tabletop Exercise Manual, Sections 2 and 3
Equipment needs	Computer projector, screen, PC, MS PowerPoint

	Review Test Questions
Purpose	Review and discuss responses to test questions
Objectives	Ensure understanding of the course material
Content	Review each question with course participants
Activity	Work session
Duration [hrs]	2
Training material	Test questions
References	All course material
Equipment needs	Computer projector, screen, PC, MS PowerPoint

BLOCK 6 EVALUATION OF THE WORKSHOP AND CLOSING

	Evaluation of the workshop ***Work session***
Purpose	To evaluate the effectiveness of the workshop based on participants feedback
Objectives	To become familiar with the Evaluation Questionnaire
Tasks	To evaluate and discuss the effectiveness of the workshop To give suggestions for future workshop improvements
Activity	Work session, discussion
Duration [hrs]	0.5
Training material	Evaluation Questionnaire *Comment:* specific Evaluation Questionnaire is prepared
References	None
Equipment needs	Evaluation Questionnaires from Workshop Manual
	Closing
Purpose	To deliver closing addresses To close the workshop
Objectives	To be encouraged to continue activities started at the workshop
Content	Closing addresses by host country and IAEA representatives
Activity	Presentation
Duration [hrs]	0.5
Training material	None
References	None
Equipment needs	None

WORKSHOP PROGRAMME

The course/workshop schedule goes on this page

RESPONSIBILITIES

Responsibility of the Course Director

Beside general responsibilities of the Workshop Director (WD) outlined in IAEA guidelines for organization of training courses the WD is also responsible:

1) To make all arrangements to ease the customs formalities for the IAEA workshop equipment (if any);
2) To ensure that all needed equipment will be available and ready for use at the beginning of the workshop;
3) To organize pick-up at the airport and transportation for all participants and lecturers or to prepare clear information about transport arrangements;
4) To maintain administrative office throughout the workshops to be responsible for providing local support, make arrangements, solve problems, as required;
5) To ensure that computer projector, overhead projector, slide projector, video and flipcharts will be available throughout the workshops;
6) To ensure photocopier will be available for unlimited use (within reason);
7) To prepare general information about workshop venue;

Responsibility of the IAEA Technical Officer

Besides general responsibilities outlined in IAEA guidelines for organization of training courses the Technical Officer (TO) has also the following responsibilities:

1) To ensure that equipment which needs to be purchased for the workshops (if any) is ordered in time;
2) To take all in-house administrative steps required to send IAEA owned equipment, needed for the workshops, to *[host organization]* in time;
3) To ensure that workshops' Evaluation Forms are prepared and send to *[host organization]*;
4) To ensure that IAEA radiation protection surveillance is implemented;
5) To ensure that workshop materials are prepared;
6) To check all arrangements for the workshops before beginning of the workshop;
7) To act as an IAEA representative.

TECHNICAL ASPECTS

Faculty

List of presenters and their organizations

Equipment and supplies

Most of the needed equipment and supplies will be provided by the *[host organization]*

Exposure control

No radiation exposure is planned.

WORKSHOP EVALUATION QUESTIONNAIRE

Title of the workshop: National Training Course (or Workshop) on Research Reactor Emergency Response
Date: *[provide dates]*
Place: *[provide course location]*

Your Name: _____
(Optional)

This questionnaire has two goals: to identify the strengths of the workshop, and to point out areas where changes and improvements need to be made. Your role as a workshop participant is to be thoughtful and honest in your comments. Our role as workshop planners is to use the ideas and suggestions you make, to maintain and improve the workshop.

PART I: GENERAL QUESTIONS ABOUT THE WORKSHOP

1. We want our workshops to be very well organized. That is, we want the activities to run smoothly, on time, and efficiently. We want the information and tools you need to be available when you need them. We want you to have a clear picture of how activities fit into the workshop as a whole, and of where the workshop is going. Circle the answer that comes closest to your own view on organization of the workshop.

The workshop was always very well organized	Most of the time things were very well organized	Basically organized, but some need for improved organization	Workshop planners should work on making the workshop more organized	The workshop was very disorganized
1	**2**	**3**	**4**	**5**

Please comment:

2. We want our teachers to be very effective. That is, we want the teachers to be experts who are well prepared, and who explain their subject clearly. We want them to excite and involve you in learning practical skills and facts; and to answer your individual questions. How well do we live up to our goal that our teachers be very effective?

Almost all the teachers were very effective	Most of the teachers were very effective	Basically effective teachers, but some need for improvement	Workshop planners should work on making teachers more effective	Workshop teachers were not very effective
1	**2**	**3**	**4**	**5**

Please comment:

PART II: SPECIFIC QUESTIONS TO HELP US IMPROVE THIS WORKSHOP

1. Please list below the three topics which were most useful to you.

   a.
   b.
   c.

2. Now list the three topics which were least useful to you.

   a.
   b.
   c.

3. What was the workshops best learning activity? Please name a specific module.

4. What made it the best learning activity?

5. For each of the ideas listed here, circle whether you agree or disagree.

The workshop should be shorter	Agree	Disagree
The workshop should be longer	Agree	Disagree
There should be more work sessions (table top exercises, laboratory work, etc.)	Agree	Disagree
There should be less material covered	Agree	Disagree
There should be more material covered	Agree	Disagree
There should be more time for study periods	Agree	Disagree

6. What did you learn in this workshop, that you can most directly apply when you return home?

7. Indicate the usefulness of each module to your work and to improving your professional background by putting an **X** in the appropriate blank.
   If you think a session should be shortened, expanded or the content should be improved, put an **X** in the appropriate blank. Please explain your choices. Modify this list based on specific modules being presented.

MODULE	Useful	Not useful	Shorten	Expand	Improve content	Explain
Role of IEC						
Module 1						
Module 2						
Module 3						
Module 4						
Module 5						
Module 6						
Module 7						
Module 8						
Module 9						
Module 10						
Module 11						
Module 12						
Module 13						
Module 14						
Module 15						
Module 16						
Module 17						
Module 18						
Module 19						
Module 20						
Module 21						
TTX Training						
TTX						
TTX Critique						
Test Questions						

8. Any other comment, please add pages, if necessary:

ATTACHMENT 1
LIST OF PARTICIPANTS

	COUNTRY	PARTICIPANTS
1.		
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