

Document Preparation Profile (DPP)

1. IDENTIFICATION

Document Category	Safety Guide
Working ID:	DS397
Proposed Title:	Safety in the Utilization and Modification of Research Reactors
Proposed Action:	revision
Published Title/Date	Safety in the Utilization and Modification of Research Reactors/1994
Safety Series No.:	SS No. 35-G2
SS Committee(s):	NUSSC
Technical Officer(s):	T. Hargitai

2. OBJECTIVE

The objective of the present Safety Guide is to provide practical guidance on the safety related aspects of the utilization and modification of research reactors such that these projects can be implemented without undue risks to personnel, the general public, the environment or the reactor.

3. BACKGROUND

The proposed publication is a revision of the previous Safety Guide SS 35-G2 having the same subject. Besides updating the material of this safety standard, this publication is intended to harmonize with the new structure and categorization of the IAEA Safety Publications and with the rest of the publications being developed within the framework of the IAEA programme on research reactor safety. The document is elaborating the requirements contained in "Safety Requirements of Research Reactors" NS-R-4.

4. INTERFACES

This Safety Guide will have interfaces with the following:

- Legal and Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety, GS-R-1, 2000
- Safety Requirements for Research Reactors, NS-R-4
- Safety in the Utilization and Modification of Research Reactors, SS No. 35-G2
- Safety Assessment of Research Reactors and Preparation of the Safety Analysis Report, SS No. 35-G1
- Quality Assurance for Safety in NPPs and Other Nuclear Installations, SS No. 50-C/SG-Q, 2001 (DS338)

5. OVERVIEW

This Safety Guide provides guidance on the safety implications of research reactor utilization and modification. Research reactor modification is a deliberate change of or an addition to the existing reactor or experimental facilities. It may involve safety systems or safety related items or systems, procedures, documentation or operating conditions. Research reactor utilization means the use of the reactor or of an experiment or an experimental device during reactor operation.

Table of contents:

1. Introduction
 2. Organization and responsibilities (*Regulatory Body, Operating Organization, Reactor and Project Managers*)
 3. Safety assessment, categorization and approval routes
 - 3.1. Minor and not identified modifications
 4. General and specific safety requirements for design
 5. Pre-implementation phase of a utilization or modification project
 6. Implementation phase of a utilization or modification project
 7. Post-implementation phase of a utilization or modification project
 8. Operational safety requirements for experiments
 9. Safety considerations in the handling, dismantling, post-irradiation examination and disposal of experimental devices
 10. Safety aspects of out-of-reactor installations
 11. Management systems of experiments and modifications
- ANNEX I: Categorization criteria
ANNEX II: Justification of a project
ANNEX III: Safety of the experiments

6. PRODUCTION: Provisional schedule for preparation of the document, outlining expected dates for:

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Approval on draft by the Steering Committee: **by February 2006**

Approval by the Safety Standards Committees for submission to Member States for comments*: **May 2006**

Revision of draft by taking into account the Comments by the Member States *: **by August 2006**

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note: * is necessary only for the Safety Standards.