

IAEA SAFETY STANDARDS SERIES

Organization and Staffing of the Regulatory Body for Nuclear Facilities

SAFETY GUIDE

No. GS-G-1.1



INTERNATIONAL
ATOMIC ENERGY AGENCY
VIENNA

IAEA SAFETY RELATED PUBLICATIONS

IAEA SAFETY STANDARDS

Under the terms of Article III of its Statute, the IAEA is authorized to establish standards of safety for protection against ionizing radiation and to provide for the application of these standards to peaceful nuclear activities.

The regulatory related publications by means of which the IAEA establishes safety standards and measures are issued in the **IAEA Safety Standards Series**. This series covers nuclear safety, radiation safety, transport safety and waste safety, and also general safety (that is, of relevance in two or more of the four areas), and the categories within it are **Safety Fundamentals**, **Safety Requirements** and **Safety Guides**.

Safety Fundamentals (blue lettering) present basic objectives, concepts and principles of safety and protection in the development and application of nuclear energy for peaceful purposes.

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www.iaea.org/ns/coordinet

or on request to the Safety Co-ordination Section, IAEA, P.O. Box 100, A-1400 Vienna, Austria.

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ORGANIZATION AND STAFFING OF THE REGULATORY BODY FOR NUCLEAR FACILITIES

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The Agency's Statute was approved on 23 October 1956 by the Conference on the Statute of the IAEA held at United Nations Headquarters, New York; it entered into force on 29 July 1957. The Headquarters of the Agency are situated in Vienna. Its principal objective is "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world".

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FOREWORD

by Mohamed ElBaradei
Director General

One of the statutory functions of the IAEA is to establish or adopt standards of safety for the protection of health, life and property in the development and application of nuclear energy for peaceful purposes, and to provide for the application of these standards to its own operations as well as to assisted operations and, at the request of the parties, to operations under any bilateral or multilateral arrangement, or, at the request of a State, to any of that State's activities in the field of nuclear energy.

The following bodies oversee the development of safety standards: the Commission on Safety Standards (CSS); the Nuclear Safety Standards Committee (NUSSC); the Radiation Safety Standards Committee (RASSC); the Transport Safety Standards Committee (TRANSSC); and the Waste Safety Standards Committee (WASSC). Member States are widely represented on these committees.

In order to ensure the broadest international consensus, safety standards are also submitted to all Member States for comment before approval by the IAEA Board of Governors (for Safety Fundamentals and Safety Requirements) or, on behalf of the Director General, by the Publications Committee (for Safety Guides).

The IAEA's safety standards are not legally binding on Member States but may be adopted by them, at their own discretion, for use in national regulations in respect of their own activities. The standards are binding on the IAEA in relation to its own operations and on States in relation to operations assisted by the IAEA. Any State wishing to enter into an agreement with the IAEA for its assistance in connection with the siting, design, construction, commissioning, operation or decommissioning of a nuclear facility or any other activities will be required to follow those parts of the safety standards that pertain to the activities to be covered by the agreement. However, it should be recalled that the final decisions and legal responsibilities in any licensing procedures rest with the States.

Although the safety standards establish an essential basis for safety, the incorporation of more detailed requirements, in accordance with national practice, may also be necessary. Moreover, there will generally be special aspects that need to be assessed on a case by case basis.

The physical protection of fissile and radioactive materials and of nuclear power plants as a whole is mentioned where appropriate but is not treated in detail; obligations of States in this respect should be addressed on the basis of the relevant instruments and publications developed under the auspices of the IAEA. Non-radiological aspects of industrial safety and environmental protection are also not explicitly considered; it is recognized that States should fulfil their international undertakings and obligations in relation to these.

The requirements and recommendations set forth in the IAEA safety standards might not be fully satisfied by some facilities built to earlier standards. Decisions on the way in which the safety standards are applied to such facilities will be taken by individual States.

The attention of States is drawn to the fact that the safety standards of the IAEA, while not legally binding, are developed with the aim of ensuring that the peaceful uses of nuclear energy and of radioactive materials are undertaken in a manner that enables States to meet their obligations under generally accepted principles of international law and rules such as those relating to environmental protection. According to one such general principle, the territory of a State must not be used in such a way as to cause damage in another State. States thus have an obligation of diligence and standard of care.

Civil nuclear activities conducted within the jurisdiction of States are, as any other activities, subject to obligations to which States may subscribe under international conventions, in addition to generally accepted principles of international law. States are expected to adopt within their national legal systems such legislation (including regulations) and other standards and measures as may be necessary to fulfil all of their international obligations effectively.

EDITORIAL NOTE

An appendix, when included, is considered to form an integral part of the standard and to have the same status as the main text. Annexes, footnotes and bibliographies, if included, are used to provide additional information or practical examples that might be helpful to the user.

The safety standards use the form 'shall' in making statements about requirements, responsibilities and obligations. Use of the form 'should' denotes recommendations of a desired option.

The English version of the text is the authoritative version.

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1. INTRODUCTION

BACKGROUND

1.1. The achievement and maintenance of a high level of safety in the siting, design, construction, commissioning, operation and decommissioning of nuclear facilities, and in the closure of waste disposal facilities, requires a sound legal and governmental infrastructure. An appropriately organized and staffed independent regulatory body with well defined responsibilities and functions and access to adequate resources is a key element of such an infrastructure.

1.2. The IAEA Safety Requirements publication on Legal and Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety [1] sets out the requirements for such an infrastructure. These include requirements in respect of the establishment of an independent regulatory body for nuclear facilities and the responsibilities and functions to be assigned to it.

1.3. Four interrelated IAEA Safety Guides provide recommendations on satisfying the requirements concerning particular responsibilities and functions of the regulatory body in the regulation of nuclear facilities. The present Safety Guide addresses the organization and staffing of the regulatory body; three related Safety Guides cover, respectively, regulatory review and assessment [2], regulatory inspection and enforcement [3] and documentation relating to the regulatory process [4].

OBJECTIVE

1.4. The purpose of this Safety Guide is to provide recommendations for national authorities on the appropriate management system, organization and staffing for the regulatory body responsible for the regulation of nuclear facilities in order to achieve compliance with the applicable safety requirements.

SCOPE

1.5. This Safety Guide provides recommendations on the organization and staffing of a regulatory body for nuclear facilities: its structure and organization; its interaction with other organizations; the appropriate qualifications required of the staff of the regulatory body; and the training to be provided for those staff.

1.6. The present Safety Guide covers the organization and staffing in relation to nuclear facilities such as: enrichment and fuel manufacturing plants; nuclear power plants; other reactors such as research reactors and critical assemblies; spent fuel reprocessing plants; and radioactive waste management facilities such as treatment, storage and disposal facilities. This Safety Guide also covers issues relating to the decommissioning of nuclear facilities, the closure of waste disposal facilities and site rehabilitation.

STRUCTURE

1.7. Section 2 of this Safety Guide provides recommendations on regulatory independence and funding of the regulatory body. Section 3 presents recommendations on an organizational framework for the regulatory body carrying out its statutory functions. Recommendations on staffing of the regulatory body are given in Section 4. Section 5 addresses the initial and continuing training needs. The Appendix gives the basic elements of a regulatory training programme.

2. REGULATORY INDEPENDENCE AND FUNDING OF THE REGULATORY BODY

GENERAL

2.1. Legislative and governmental responsibilities and a number of prerequisites for the safety of nuclear facilities and activities are addressed in Section 2 of the Safety Requirements publication on Legal and Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety [1]. Some of the prerequisites, such as the legislative and statutory framework, infrastructure, responsibilities and authorities, are covered in Ref. [1]. Other prerequisites concerned with the main functions of the regulatory body are covered in Refs [2–4]. This section provides recommendations on two of these prerequisites, namely regulatory independence and the funding of the regulatory body.

REGULATORY INDEPENDENCE

2.2. The importance of regulatory independence is affirmed in the Convention on Nuclear Safety¹ [5] and in the IAEA Safety Requirements [1]. Both deal with the establishment of a regulatory body and the need for its separation or independence from promoters of nuclear technologies. The primary reason for this independence is to ensure that regulatory judgements can be made and regulatory enforcement actions taken without pressure from interests that may conflict with safety. Furthermore, the credibility of the regulatory body to the general public depends in large part upon whether the regulatory body is considered to be independent of the organizations that it regulates as well as independent of governmental organizations and industry groups that promote nuclear technologies.

2.3. It is recognized that a regulatory body cannot be absolutely independent in all respects of other parts of government: it must function within a national system of laws and budgets, just as other governmental bodies and private organizations must do. Nevertheless, for the regulatory body to have credibility and effectiveness, it should have effective independence in order to be able to make the necessary decisions in respect of the radiological protection of workers, the public and the environment.

2.4. The need for independence of the regulatory body does not imply that it ought to have an adversarial relationship with operators or with any other party.

2.5. The following paragraphs provide a more detailed discussion of a number of aspects of regulatory independence.

Aspects of regulatory independence

2.6. *Political aspects.* The political system shall ensure clear and effective separation of responsibilities and duties between the regulatory body and organizations promoting or furthering the development of nuclear technologies. In this regard, a distinction should be made between independence and accountability. The regulatory

¹ Article 8.2 of the Convention on Nuclear Safety requires: "...an effective separation between the functions of the regulatory body and those of any other body or organization concerned with the promotion or utilization of nuclear energy." The IAEA's Safety Requirements publication on Legal and Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety stipulates that "[a] regulatory body... shall be effectively independent of organizations or bodies charged with the promotion of nuclear technologies or responsible for facilities or activities." (Ref. [1], para. 2.2 (2).)