



2AEA-INFCIRC/572/Rev.1 15 October 1999

# International Atomic Energy Agency INFORMATION CIRCULAR

GENERAL Distr. Original: ENGLISH

# GUIDELINES REGARDING NATIONAL REPORTS UNDER THE CONVENTION ON NUCLEAR SAFETY

# I. Introduction

These guidelines, established by the Contracting Parties pursuant to Article 22 of the Convention, are intended to be read in conjunction with the text of the Convention. Their purpose is to provide guidance to the Contracting Parties regarding material which it may be useful to include in the National Reports required by Article 5 and thereby to facilitate the most efficient review of implementation by the Contracting Parties of their obligations under the Convention.

#### II. General

The basic concept of the Convention is the obligation of the Contracting Parties to apply widely recognized principles and tools for high-quality safety management and to submit the National Reports on the implementation of those principles and tools to peer reviews with international participation. In accordance with Article 1 of the Convention, the National Reports should illustrate how the objectives of the Convention, especially a high level of nuclear safety, have been achieved.

Taking into account that

- each Contracting Party has the right to submit a National Report with the form, length and structure it believes necessary to describe how it has implemented its obligations under the Convention,
- the need for effective and efficient review requires reports to be in as similar a format as possible, to aid comparison,
- a flexible approach can be adopted to the writing of reports, provided that each report strikes a balance between being sufficiently comprehensive to permit genuine evaluation of the extent of implementation of each obligation and being sufficiently concise to make both writing and reviewing the report practicable,

30 - 5099-03691

For reasons of economy, this document has been printed in a limited number. Delegates are kindly requested to bring their copies of documents to meetings.

- the first National Report of a Contracting Party may need to contain more comprehensive information on the Contracting Party's nuclear programme than subsequent reports, and some of the information in the first report may not need to be repeated but only updated or supplemented for subsequent review meetings,
  - the National Report of a Contracting Party at following meetings should contain updated information on matters covered in the first report, noting significant changes in national nuclear safety laws, regulations and practices. It should also address safety issues which have been identified in the country's previous report or which have arisen since the previous report. In particular, it should address progress in safety analysis and improvement programs at existing nuclear facilities. Finally, it should respond to any recommendations adopted at the plenary sessions of the previous Review Meeting of the Contracting Parties, and
- information on plans, methods, procedures etc. relating to nuclear installations can be provided in a generic manner; however, a significant nuclear safety issue encountered at a particular nuclear site can be described in a specific manner,

the report should:

- address all aspects of the obligations arising out of the Convention;
- combine an article-by-article approach, based on the thematic arrangement of the Convention, with due regard to the concept of "safety as a whole";
- clearly distinguish between requirements laid down in the national regulations (formal compliance) and the status of the implementation of these requirements (factual compliance);
- avoid duplication both within the report and between the report and reports prepared by the Contracting Party for previous review meetings;
- discuss the safety of nuclear installations (as defined in Article 2 of the Convention) through the presentation of aggregated data and generic analyses showing overall trends of safety significance and where appropriate illustrated by the specific discussion of particular safety-related issues encountered at individual facilities; and
- include, as appropriate, in the form of annexes, other official National Reports, and reports of national and international bodies which have carried out reviews at the request of the Contracting Party.

The report to be submitted by a Contracting Party without nuclear installations should follow the above format, addressing relevant articles of the Convention.

National Reports should focus on describing by which specific measures a state is implementing which specific article of the Convention; therefore, all information contained in National Reports should explicitly be connected to a specific Convention article.

Whereas the practice of supplementing National Reports with a number of annexed documents is encouraged, the main body of the National Report itself should nevertheless contain all key elements of information needed to assess in what way the State Party concerned is trying to attain Convention objectives.

The ratio between the length of a National Report and the amount of data/information supplied in annexes should not exceed a limit beyond which the transparency of the information provided could be seen to be put in question; a report/annexes ration of roughly 1/3 would seem recommendable in this respect.

In order to facilitate the physical handling of National Reports, it should be encouraged to submit them as one single bound document comprising the main report as well as all annexes.

Furthermore, it would also facilitate the physical handling of National Reports if all National Reports would be provided in one common, single format such as 297/210 mm which is already widely used.

The number of pages of a National Report should not exceed a reasonable amount.

Each National Report should contain a chapter in which the country concerned presents its conclusions from the discussion of its previous National Report at the last Review Meeting. In this chapter, it should be elaborated to what extent these discussions and comparisons with the practices of other States Parties have made evident:

- a) strong features in its current practices; and, vice versa
- b) areas for improvements and major challenges for the future.

## III. Form and structure of the National Report

#### **Introduction to the National Report**

This section of the National Report should include: general introductory remarks outlining the national policy towards nuclear activities; a description of national nuclear programmes pertaining to nuclear installations; a survey of the main safety issues addressed in the report; a list of nuclear installations operating, closed and planned (to be provided in an annex); material updating previous reports (if appropriate); references to further annexes, as deemed necessary. INFCIRC/572/Rev.1 page 4

# Article-by-article review

For each article, suggestions are made below regarding some of the issues which might be addressed. Contracting Parties should provide, as appropriate, the following:

- (a) a description of the situation addressed in the article and the results achieved (for each type or generation of nuclear installation and, if necessary and relevant for the article in question, for specific installations);
- (b) a statement regarding implementation of the obligation(s) arising out of that article;
- (c) a description of plans drawn up and measures needed for corrective action at the national level and indicating any necessary international co-operation;
- (d) a description of plans and measures relating to planned nuclear installations; and
- (e) references to other material or annexes, as appropriate.

# A. Chapter 2 (a) of the Convention - General Provisions

In the section of the National Report relating to this chapter of the Convention, the status of existing nuclear installations should be summarized. Where necessary, a description should be included of upgrading measures to achieve a high level of nuclear safety or, if such upgrading cannot be achieved, of plans to shut down the nuclear installations in question as soon as practically possible as provided for in Article 6 of the Convention.

## Article 4. Implementing measures

The report on other Chapter 2 obligations should incorporate any necessary references to national laws and legislative, regulatory and administrative measures. No separate report under this article is required.

# Article 5. Reporting

Filing of the National Report fulfils this obligation, and no separate report under this article is required.

## Article 6. Existing nuclear installations

- list of existing nuclear installations as defined in Article 2 of the Convention (to be provided in an annex);
- list of existing nuclear installations where significant corrective actions have been found to be necessary by assessments, as relevant, under Articles 10-19;

- overview of safety assessments performed, and the major results of those assessments for existing nuclear installations;
- overview of programmes and measures for the safety upgrading, where necessary, of each type or generation of nuclear installation and/or timing of their shut-down; and
- position of the Contracting Party as to the further operation of each nuclear installation, explaining how safety and other aspects were taken into account in reaching this position in accordance with the provisions in Article 6 of the Convention.

# B. Chapter 2 (b) of the Convention - Legislation and Regulation

The section of the National Report relating to this chapter of the Convention should summarize the legislative and regulatory system governing the safety of nuclear installations and include statements with regard to the adequacy and effectiveness of that system.

## Article 7. Legislative and regulatory framework

- description of the national legislative and regulatory framework (for the first report, it should be as comprehensive as possible to be amended in subsequent reports as necessary); and
- summary of laws, regulations and requirements, the licensing system and the inspection, assessment and enforcement process governing the safety of nuclear installations.

## Article 8. Regulatory body

- description of the mandate and duties of the regulatory body;
- basic document describing the authority and responsibilities of the regulatory body;
- structure of the regulatory body, its technical and support experts and organizations, if appropriate, and its human and financial resources;
- position of the regulatory body in the governmental structure (including its reporting obligations); and
- relationship of the regulatory body to bodies responsible for the promotion and utilization of nuclear energy.

INFCIRC/572/Rev.1 page 6

# Article 9. Responsibility of the licence holder

- description of the main responsibilities of the licence holder; and
- description of the mechanism by which the regulatory body will ensure that the licence holder meets its primary responsibility for safety.

# C. Chapter 2 (c) of the Convention - General Safety Considerations

The section of the National Report relating to this chapter of the Convention should summarize major safety-related features, taking into account safety as a whole and, where appropriate, cross-referencing to related items in other articles.

## Article 10. Priority to safety

- principles emphasizing the overriding priority of safety and the implementation of those principles, including safety priority principles relating to the regulatory body, designers, constructors, operators and the licence holder and any other principles directly relating to safety, such as principles relating to
  - safety policies,
  - safety culture and its development,
  - safety commitments,
  - regulatory control and
  - voluntary activities and good practices.

## Article 11. Financial and human resources

- financial and human resources of the licence holder/applicant available to support the nuclear installation throughout its life;
- financing of safety improvements made to the nuclear installation during its operation;
- financial and human provisions for decommissioning and radioactive waste management at nuclear installations; and
- rules, regulations and resource arrangements concerning the qualification, training and retraining of personnel, including simulator training for all safety-related activities in or for each nuclear installation.

# Article 12. Human factors

- methods to prevent, detect and correct human errors, including the analysis of human errors, the man-machine interface, operational aspects and experience feedback;
- managerial and organizational issues; and
- role of the regulatory body and the operator regarding human performance issues.

# Article 13. Quality assurance

- quality assurance (QA) policies;
- QA programmes relating to all aspects of safety throughout the life of the nuclear installation;
- methods used in implementing and assessing QA programmes; and
- regulatory control activities.

# Article 14. Assessment and verification of safety

- the licensing process and safety analysis reports for different stages of nuclear installation projects (e.g. siting, design, construction, operation);
- summary of essential generic results of continued monitoring and periodic safety assessments of nuclear installations using deterministic and probabilistic analysis methods, as appropriate;
- verification programmes (preventive maintenance, in-service inspection of main components, evaluation of ageing processes, etc.); and
- regulatory control activities.

## Article 15. Radiation protection

- summary of laws, regulations and requirements dealing with radiation protection as applied to nuclear installations;
- implementation of national laws, regulations and requirements relating to radiation protection, including
  - dose limits,
  - fulfilment of conditions for the release of radioactive materials,

- steps taken to ensure that radiation exposures are kept as low as reasonably achievable and
- environmental radiological surveillance;
- regulatory control activities.

# Article 16. Emergency preparedness

- general description of laws, regulations and requirements for on-site and off-site emergency preparedness;
- implementation of emergency preparedness measures, including the role of the regulatory body and other entities:
  - classification of emergency situations,
  - overall national emergency preparedness scheme,
  - on-site and off-site emergency plans of nuclear installations, including supporting agencies and systems, and
  - measures for informing the public about emergency preparedness in the vicinity of the nuclear installation;
- training and exercises; and
- international arrangements, including those with neighbouring countries, as necessary.

# D. Chapter 2 (d) of the Convention - Safety of Installations

The section of the National Report relating to this chapter of the Convention should describe major safety-related features, including implementation of the "defense in depth" concept as a whole, and the provisions against events such as fire, internal flooding and earthquakes; and accident management measures; due account being taken of the probability of events.

## Article 17. Siting

- description of licensing process, including summary of national laws, regulations and requirements relating to the siting of nuclear installations:
  - criteria for evaluating all site-related factors affecting safety and

- criteria for evaluating the nuclear safety impact of the nuclear installation on the surrounding environment and population;
- implementing provisions for fulfilment of the above-mentioned criteria;
- activities relating to maintenance of the continued safety acceptability of the nuclear installation, taking account of site-related factors; and
- international arrangements, including those with neighbouring countries, as necessary.

# Article 18. Design and construction

- description of the licensing process, including a summary of the national laws, regulations and requirements relating to the design and construction of nuclear installations;
- implementation of the "defense in depth" concept in accordance with the principle of multiple safety levels, including the integrity of barriers, taking into account internal and external events;
- prevention of accidents and their mitigation;
- measures for ensuring the application of technologies proven by experience or qualified by testing or analysis; and
- requirements regarding reliable, stable and easily manageable operation, with specific consideration of human factors and the man-machine interface.

## Article 19. Operation

- description of the licensing process, including a summary of national laws, regulations and requirements relating to the operation of nuclear installations; and
- description of the steps which the Contracting Party has taken in implementing obligations arising out of Article 19 of the Convention.

## Planned activities to improve safety

Summary of safety issues of concern identified earlier and planned future activities for addressing those issues, including, where appropriate, measures of international co-operation.

. •

INFCIRC/572/Rev.1 page 10

# Annexes

- List of nuclear installations
- Data on nuclear installations (reference could be made to the IAEA's Power Reactor Information System (PRIS) database)

. •

.

**,** '

Contracting Parties may include, as appropriate, the following as annexes to the National Reports submitted by them pursuant to Article 5 of the Convention:

- references to national laws, regulations, requirements, guides etc.;
- references to official national and international reports relating to safety; and
- references to reports on international review missions performed at the request of a Contracting Party.