

Document Preparation Profile (DPP)

1. IDENTIFICATION

Document Category:	Safety Guide
Working ID:	DS 429
Proposed Title:	External expert support on safety issues
Proposed Action:	New document
Published Title/Date:	
Safety Series Number:	N/A
SS Committee(s):	NUSSC (lead), RASSC, TRANSSC, WASSC
Technical Officer(s):	George Philip (NS)

2. BACKGROUND

This new safety guide will provide guidance on external expert support on safety and security issues in the context of the regulatory system, which is not dealt with in detail in any current Safety Guide.

The IAEA sponsored the “International Conference on the Challenges faced by Technical and Scientific Support Organizations in Enhancing Nuclear Safety”, from 23-27 April 2007 in Aix-en-Provence, France. This was the first international conference specifically addressing the role such Technical Support Organizations (TSO) can play and the challenges they face in enhancing nuclear and radiation safety.

A major recommendation of the conference was that the IAEA should take the initiative to address Member States concerns with respect to the roles and activities of TSOs in enhancing nuclear and radiation safety, and for giving consideration to reflecting basic concepts and principles in appropriate IAEA guidance documents. In this context, the conference also recommended that the IAEA proceed in a cautious, step by step and deliberate manner to consider relevant issues and approaches, without jeopardizing existing arrangements between regulators and TSOs. As a result, the development of a new safety guide was proposed to cover TSOs and their activities.

Regulatory Bodies have a range of functions that they must fulfil (see GS-R-1) but may not have sufficient resources within its own organisation, in terms of number of staff, range of expertise to do this to the extent necessary. In these cases the Regulatory Body should have a process and procedures to obtain suitable external expert support so that it can make its regulatory decisions. However, external expert support may be sought from a wide range of bodies: dedicated support organisations (including TSOs), advisory committees, research organisations, academic bodies, specific experts etc. Following discussions in the Safety Standards Committees and Secretariat, it was decided that the safety guide should address all potential areas of expert support.

Whatever the method used to obtain such external expert support there are several factors in common and the purpose of the Safety Guide is to define the characteristics expected of such support. A fundamental aspect is that a Regulatory Body should be the sole arbiter of regulatory decisions and the external expert support should not try to influence that decision making process. It is essential, therefore, that the Regulatory Body must have, within its own organisation, sufficient

knowledge and expertise to be able to frame issues when seeking external support, to determine suitable sources of such support and be able to evaluate the results obtained and integrate them properly and knowingly into regulatory decision making.

3. OBJECTIVE AND JUSTIFICATION

The Draft Requirements document, DS 415, Governmental and Regulatory Framework for Safety requires that a Regulatory Body “shall obtain technical or other expert professional advice or services, as necessary, to support its regulatory function” (R23). The basic aspects of using external expert support are set out in GS-G-1.1, paragraphs 3.28, 3.29 and 4.3. The purpose of this Safety Guide is to provide more detail on these paragraphs. The detailed explanation of the requirement on external services will be developed as an independent document, but it may be possible when the new structure is fully in place to incorporate it within a document(s) in that structure.

This guide applies to all countries where regulatory infrastructures may need development or enhancement with regard to the safety of facilities and activities that give rise to radiation risks. This guide may be of particular interest to countries seeking to embark on nuclear power or seeking to expand their existing programmes.

The guidance can be equally applicable to industrial and medical organizations seeking to develop external support for their activities.

This Safety Guide will not discuss the organisational arrangements or abilities of external expert support, though some of these may be inferred from the expectations that a Regulatory Body should consider when choosing its source of support. In particular, the Regulatory Body should ensure that there are adequate arrangements to avoid potential conflicts of interest if the source of the external expert support is also providing support on similar issues to licensees, potential licensees, designers or vendors. A similar approach should be adopted by licensees, potential licensees, designers or vendors when dealing with relevant safety matters.

4. POSITION IN THE OVERALL STRUCTURE OF THE RELEVANT SERIES AND INTERFACES WITH EXISTING AND/OR PLANNED PUBLICATIONS

The main interfaces of this Safety Guide will be as supporting guidance to GS-R-1, and, in particular, GS-G-1.1. Other interfaces are as below.

Conventions

- Convention on Nuclear Safety (CNS)
- Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention)
- Convention on Early Notification of a Nuclear Accident
- onvention on Early Notification of a Nuclear Accident
- nvention on Early Notification of a Nuclear Accident
- vention on Early Notification of a Nuclear Accident
- ention on Early Notification of a Nuclear Accident
- ntion on Early Notification of a Nuclear Accident
- tion on Early Notification of a Nuclear Accident
- ion on Early Notification of a Nuclear Accident
- on on Early Notification of a Nuclear Accident
- n on Early Notification of a Nuclear Accident
- on Early Notification of a Nuclear Accident

- on Early Notification of a Nuclear Accident
- n Early Notification of a Nuclear Accident
- Early Notification of a Nuclear Accident
- Early Notification of a Nuclear Accident
- arly Notification of a Nuclear Accident
- rly Notification of a Nuclear Accident
- ly Notification of a Nuclear Accident
- y Notification of a Nuclear Accident
- Notification of a Nuclear Accident
- Notification of a Nuclear Accident
- otification of a Nuclear Accident
- tification of a Nuclear Accident
- ification of a Nuclear Accident
- fication of a Nuclear Accident
- ication of a Nuclear Accident
- cation of a Nuclear Accident
- ation of a Nuclear Accident
- tion of a Nuclear Accident
- ion of a Nuclear Accident
- on of a Nuclear Accident
- n of a Nuclear Accident
- of a Nuclear Accident
- of a Nuclear Accident
- f a Nuclear Accident
- a Nuclear Accident
- a Nuclear Accident
- Nuclear Accident
- Nuclear Accident
- uclear Accident
- clear Accident
- lear Accident
- ear Accident
- ar Accident
- r Accident
- Accident
- Accident
- ccident
- cident
- ident
- dent
- ent
- nt
- t
-
- Convention on Assistance in the Case of Nuclear Accident or Radiological Emergency
- Convention of Physical Protection of Nuclear Material (CPPNM) and its Amendment
- Vienna Convention on Civil Liability for Nuclear Damage

- Convention on Supplementary Compensation for Nuclear Damage

Safety Fundamentals

- Fundamental Safety Principles (SF-1)

Codes of Conduct

- Code of Conduct on the Safety and Security of Radioactive Sources
- Code of Conduct on the Safety of Research Reactors
- Guidance on the Import and Export of Radioactive Sources

IAEA Safety Standards

- Legal and Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety, Requirements (GS-R-1)
- Draft Safety Requirements DS 415 Governmental and Regulatory Framework for Safety (revision of GS-R-1)
- International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources (SS115)
- Preparedness and Response for a Nuclear or Radiological Emergency Safety Requirements (GS-R-2)
- Management Systems Requirements for Facilities and Activities (GS-R-3)
- All safety requirements of the series NS-R-xx, WS-R-xx, TS-R-xx
- Safety guides GS-G-1.1 to 1.5, RS-G-1.9 and RS-G-1.10
- Draft safety guide “Establishing a National Nuclear Installation Safety Infrastructure” (DS 424)

Legal Series

- Handbook on Nuclear Law

INSAG Publications

- Nuclear Safety Infrastructure for a National Nuclear Power Programme Supported by the IAEA Fundamental Safety Principles (INSAG Series No. 22)
- Independence in Regulatory Decision Making (*INSAG Series No. 17*)

IAEA NE Publications

- Considerations to Launch a Nuclear Power Programme (GOV/INF/2007/2)
- Milestones in the Development of a National Infrastructure for Nuclear Power (NG-G-3.1)

5. OVERVIEW

This safety guide will provide guidance on external expert support in the context of the regulatory system. The emphasis of the Safety Guide is to define the characteristics expected of such support.

This safety guide will be organized in five chapters.

Chapter 1 will be an introduction, which will present the background, objective, scope and structure of the document.

Chapter 2 will provide definitions and concepts relating to external expert support in terms of the need for such support and the types and sources that may be used.

Chapter 3 will describe both the fundamental and specific task-related characteristics expected of such external expert support.

Chapter 4 will outline the need for processes and procedures to be in place when determining the need, source and use of external expert support. Recognising that, in practice, this may vary from country to country this section will describe the fundamental aspects of such processes and procedures.

Chapter 5 will describe the interactions of external expert support with stakeholders such as regulatory bodies, industry and the public. It will also address issues related to transparency, openness and communications.

DRAFT

OUTLINE OF THE PROPOSED TABLE OF CONTENTS

1. INTRODUCTION

Background
Objective
Scope (types of support)
Structure
Terminology

2. CONCEPT OF EXTERNAL EXPERT SUPPORT

- Every Member State with or seeking to have facilities and activities giving rise to radiation risks should have a strong, independent regulatory body (Safety Fundamentals, Principle 2)
- The regulatory body should have sufficient skills to make informed decision on all matters affecting safety and security (“new” GS-R-1, requirement 22)
- However, informed decision making in safety is extensively knowledge based. This knowledge may be needed from an external source to augment and complement in-house skills and expertise (“new” GS-R-1, Requirement 23).
- Therefore, the regulatory body may choose to seek external expert support to provide specialized expertise in support of their regulatory decisions (“new” GS-R-1, Requirement 23)
 - Areas covered by external expert support may include scientific or engineering analysis, legal advice, testing and analysis services, or administrative support;
 - The attributes and source of the external expert support will be dictated by the area covered, ranging from large, multifaceted organizations, through narrowly focused consulting or testing services companies, to individual consultants.
- Definition of external expert support
 - Types (measurements, safety assessments, etc.)
 - Sources (Private individuals to organizations)
 - International networking (“new” GS-R-1, Requirements 16,17)
- This guidance also applies to external expert support sought by operators, licensees and other users (SF-1, Principle 1).

3. CHARACTERISTICS OF EXTERNAL SUPPORT

3.1. Fundamental characteristics

- Objectivity – functional independence;
- Technical competency – demonstrated skills and knowledge (ISO certifications, R&D, etc.);
- Adequate Management System ;

- Safety culture;
- Experience – having done similar, appropriate work before.

3.2. Task-related characteristics

- Confidentiality.

4. PROCESS TO SELECT AND USE EXTERNAL EXPERT SUPPORT

(see GS-G-1.1, 3.28, 3.29 and 4.3) (should be generic and in the form of a list of issues to be considered)

5. INTERACTIONS OF EXTERNAL EXPERT SUPPORT WITH STAKEHOLDERS

- Functional independence (Interaction with Licensees)
- Transparency, openness, communications,
 - Interaction with others, including: Industry, Public, Media, Academic Societies,

6. PRODUCTION

Provisional schedule for the preparation of the document

Approval of DPP by the Steering Committee	01/2009
Approval of DPP by the Safety Standards Committees	IIQ/2009
Endorsement of DPP by the CSS	10/2009
Development of the draft Safety Guide	
First draft to be reviewed by the Steering Committee	02/2010
Approval by the Safety Standards Committees for submission to Member States for comments	IIQ/2010
Receipt of comments from Member States	12/2010
Revision of draft taking into account the Comments by the MS and Steering Committee Approval	02/2011
Approval by the Safety Standards Committees for submission to the CSS	IIQ/2011
Endorsement by the CSS	10/2011
Submission to Publications Committee for approval	10/2011
Target publication date	12/2011