

October 25, 2002

MEMORANDUM TO: Chairman Merserve
Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
Commissioner Merrifield

FROM: William D. Travers */RA/*
Executive Director for Operations

SUBJECT: TRIP REPORT ON THE IAEA GENERAL CONFERENCE, SENIOR
REGULATORS' MEETING, SEPTEMBER 16-17, 2002

Attached, for your information, is a report of my travel to Vienna, Austria to participate in the IAEA's General Conference Senior Regulators' Meeting. The major topic of discussion at the meeting was IAEA Safety Standards. The discussion included various aspects of these standards including the vision for architecture, character, review cycle, and global acceptance of IAEA safety standards.

Other sessions of the Senior Regulators' Meeting addressed regulatory aspects of research reactors, and regulating sealed radioactive sources. The trip report provides a summary of the presentations, pertinent issues, and pending actions.

I will be attending the Commission on Safety Standards (CSS) meeting in November 2002 which will further discuss IAEA safety standards. IAEA is preparing a paper on this topic for the CSS' consideration based on discussions from the Senior Regulators' Meeting. I will keep the Commission informed of the outcome of that meeting and any policy issues that may arise from that meeting.

Attachment: As stated

cc: SECY
OCA
OGC
OPA
CFO

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FOREIGN TRIP REPORT

Subject: Senior Regulators' Meeting

Dates of Travel: September 14-19, 2002

Organization Visited: International Atomic Energy Agency (IAEA), Vienna, Austria

Author: Dr. William D. Travers

Background/Purpose

I participated in the Senior Regulators' Meeting which was held on September 16th and 17th during the IAEA's General Conference. (Chairman Meserve attended the initial part of the meeting.) A major topic of discussion was the IAEA's safety standards. The IAEA has the statutory authority "to establish or adopt..standards of safety for the protection of health and minimization of danger to life and property and "to provide for the application of these standards." The development of IAEA standards is supervised by the Commission on Safety Standards (CSS) and four specialized committees covering nuclear safety for installations (NUSSC), radiation safety (RASSC), waste safety (WASSC), and transportation safety (TRASSC). These groups have the primary role in the preparation and review of all documents in the Safety Standard Series, which is comprised of three categories: (1) Safety Fundamentals; (2) Safety Requirements; (3) Safety Guides. I currently serve as the U.S. representative on the CSS for a four-year term to end in 2003.

The IAEA safety standards form the basis for IAEA assistance and cooperation provided through peer review advisory missions (e.g., the Operational Safety Review Team missions [OSARTS], International Regulatory Review Team [IRRTS]), training, cooperative research, and assistance missions. While the safety standards are not legally binding on Member States, many have adopted portions of the standards for use in their national programs. However, Member States that receive IAEA technical cooperation and safety assistance must follow the relevant standards that cover those areas of assistance.

In late 2001, the Department of Nuclear Safety (DNS) set out a Medium-term Vision and Strategy whose objective is to improve global nuclear safety. The three goals of the Vision are to make the IAEA Safety Standards universally accepted, to integrate safety standards and their application systems, and to enhance the goal of networking of safety knowledge and experience toward sustainable national and international safety infrastructures in pursuit of the Vision's objective. The IAEA Director General instructed the Secretariat to prepare an "Action Plan" for the IAEA Safety Standards Program in November 2001 and requested that the CSS review it. The Secretariat prepared a paper which identified a number of key issues as a first step in developing the Action Plan. Subsequently, a revision of this paper was provided to the members of the CSS. (These two papers were provided to the Commissioners via Note to Commissioner's Assistants, dated August 28, 2002). A later revision (Attachment 1) was provided to the CSS Members as the version to be discussed at the Senior Regulators' Meeting.

Summary of Pertinent Points/Issues

The discussion of the IAEA Safety Standards at the Senior Regulators' Meeting was conducted in a larger forum than the CSS and will be discussed further at the CSS meeting in November 2002. The Senior Regulators' Meeting discussions resulted in several preliminary conclusions as follows:

- The architecture of the Safety Standards (i.e., Safety Fundamentals, Safety Requirements and Safety Guides) remains appropriate.
- The present Safety Standards Committees should be retained.

- The emphasis on standards improvements should be on quality and consistency in level of detail across the standards.
- The safety standards consensus process supports a degree of global acceptance. However, it is up to each Member State to determine how best to use them given their legal and regulatory framework.
- Good practices should be at the Safety guides, safety reports, TECDOCS level which provide approaches, methodologies for consideration.
- A safety standards communications strategy should include a mechanism to solicit feedback on the usefulness of the standards and outreach activities.

No significant policy issues were raised in this forum, although potentially could be raised at the November CSS meeting. I will inform you of the results of the CSS meeting and of policy issues, if any, that need to be considered.

Discussion

The Senior Regulators' Meeting comprised three Sessions as follows, Session I: The IAEA's safety standards-universal standards for the 21st century; Session II: Regulatory aspects of research reactors; and Session III: Regulating sealed radioactive sources. Deputy Director General, Mr. T. Taniguchi gave opening remarks on the IAEA's overall vision and strategy for safety goals which are described above in the background section. Mr. Taniguchi focused on globalization of safety standards and application which he defined as "universalization and harmonization of safety approaches among governments and industry with a high expectation of transparency and accountability." He listed the following as characteristics of universally accepted global standards: best safety practices to attain highest common factor; promotion and outreach of safety standards worldwide; comprehensive coverage with no significant gaps and minimum overlap; focused, up-to-date, soundly based and authoritative; drafted and reviewed by leading experts from Member States; and improvement through feedback from applications.

Following is a summary of each of the Sessions.

Session 1: The IAEA's Safety Standards: Universal Standards for the 21st Century, Chairman, Mr. L. Williams, United Kingdom

Mr. Williams and Mr. Karbassioun, IAEA gave presentations on the: safety standards vision; architecture of the Standards; scope/structure of the standards; character (nature) of the standards; standards review cycle; global acceptance (including communications). The presentation highlights follow:

- Regarding "safety" and "security," the Board of Governor's applied security as one element of safety. However, this view of physical security was not necessarily linked to malevolence. It was suggested that the Secretariat would need to make the link on how best to incorporate these two areas.

Regarding physical security, there should be discussion on whether there is a need for standards, guides or TECDOCS.

- The architecture of the Safety Standard Series (Safety Fundamentals, Safety Requirements and Safety Guides) and safety related publications such as Safety Reports and TECDOCS. and their objectives were described. The presenter offered a proposal to integrate Safety Reports and TECDOCS formally into (or link them to) the

safety standards program. He stated that this would make it necessary to subject them to enhanced scrutiny by the safety standards committees and the CSS.

- The character (nature) of the standards has changed in that earlier standards were produced as basic requirements (sometimes considered as the “lowest common denominator” or “minimal acceptable level”). The current aim has been to represent current international good practice as a point of reference for the Member States.
- The standards development process has two main elements: the development of new standards and the periodic review of existing standards for continuous improvement. There is a need for better coordination within the Agency and the Committees and need for more involvement of the industry and operators in the development (primarily done by the members of the Committees and Commission who distribute the standards within their country). It was suggested that safety standards be reviewed by the relevant Committee five years after publication, with some flexibility. Typically a new document would take 7 years to publication.
- The IAEA Safety Services should establish a mechanism to get feedback on the use and usefulness of the standards, e.g., is the guidance sufficient and clear and reporting on good practices as input for the next revision.
- Regarding global acceptance and a communication strategy, the presenter stated that Member States’ involvement in the consensus process of IAEA safety standards signifies a degree of global acceptance. However, perceptions and applications vary significantly. Promulgation of IAEA Safety Standards does not automatically lead to their actual application. The presenter stated that the standards must be seen as a suitable basis for national rules and regulations and that this is not fully shared. He asked a number of questions including whether national regulatory bodies were the main hurdles in achieving global acceptance; what are the main impediments that prevent national regulators from applying IAEA Safety Standards; are the standards fulfilling the needs and expectations of the potential users in terms of quality, usefulness, timeliness, and user-friendliness?

The presenter stated that the challenge was how to raise the profile of the IAEA Safety Standards for the various audiences including governments/politicians, regulators, users/licensees, public. He said that IAEA has to offer good quality standards that meet the expectations of the users, establish two way communication to solicit feedback on the usefulness of the standards, and conduct outreach activities.

- There was acknowledgment that this was the first time that the CSS work has been reported to the Senior Regulators’ in support of transparency and it should happen more often.

Mr. Lacoste, France, gave a presentation on France’s position regarding IAEA Safety Standards. Following is a summary of Mr. Lacoste’s presentation.

- Nuclear regulation development started before the IAEA safety standards and the IAEA first generation standards were seen as little use for mature nuclear safety programs. However, since 1996, there are changes in the Agency with higher involvement of the regulators in standard development. The quality of the standards has improved substantially.

- Expectations of IAEA safety standards is that they enhance global networking of safety knowledge and experience; be useful as reference documents for the review process of the Conventions; should reflect the best practices of the Member States; give a clear unambiguous vision of safety for the users and the public; and their overall structure should be prepared by the CSS to benefit from the actual needs of the Member States' regulators.
- Since 2000, nuclear safety regulators of the European Union countries with nuclear activities, have been working on harmonizing their approaches in safety regulation and supervision through the WENRA association. WENRA is defining a safety level within a five year timeframe. These safety levels derive their basis from the IAEA safety standards, which are the only internationally agreed upon standards, and with best practices within their Member States. Hence, it is very important that the full set of standards cover the full range of nuclear activities (e.g., non-reactor installations such as fuel cycle, isotope fabrication). Only IAEA standards should be internationally accepted standards for nuclear safety and that they become or remain of the highest quality.

Prior to the Senior Regulators' Meeting, the IAEA sent out a questionnaire titled "Evaluation of the IAEA Safety Standards." Mr. J. Versteeg, IAEA gave a presentation on preliminary results of the questionnaire. Another presentation was given by Mr. Lipar, IAEA on the OSART program.

A representative of the Nuclear Safety Commission (NSC), Japan read a statement on "NSC's Response to the Falsification Case of Self-Imposed Inspection Records of the Tokyo Electric Power Company (TEPCO)."

Session 2: Regulatory aspects of research reactors, Chairman, Mr. J. Loy, Australia

Mr. Loy gave two presentations during this session: "Licensing a new Research Reactor-What is International Best Practice," and "The Code of Conduct on Research Reactors-What Problems Can it Solve." In the first presentation, Mr. Loy walked through Australia's process for licensing a new research reactor from the proposal, construction application, peer review via IAEA, public forums, external advisory committees, regulatory staff assessment with assistance from Canada and Argentina, identifying the big issues, determining international best practices, construction license issued, and next steps. The second presentation addressed the history of IAEA research reactor (RR) activities including the endorsement of the development of an international RR safety enhancement plan by the IAEA Board of Governors and the General Conference; survey implementation; establishment of a working group to develop a Code of Conduct which convened in May 2002. The draft Code of Conduct includes the role of the State (legislative and regulatory framework, review of safety of existing RR's, discussions with experts), role of the Regulatory body and Operator (assessment and verification of safety, financial and human resources, reference to agency management, program for request for extended shutdown, decommissioning), and the role of IAEA (disseminate Code, monitor and assist States, discussion in triennial report to the Board of Governors).

Mr. J. Riesle, Chile, gave a presentation on the impact of Integrated Safety Assessment of Research Reactors (INSARR) Missions to the Chile Research Reactor RECH-1. He discussed the INSARR Missions, their findings, and their positive impacts on the operator and the regulatory body. These impacts included: helping the operator improve operational safety, providing an independent review of the reactors safety features, helping the operator obtain necessary funding for implementing safety related features, passing on experiences from other countries. They also helped the regulatory body by providing a solid backup to regulatory

activities, to obtain funding for acquiring safety related tools, by assisting in communicating safety concepts thus enhancing the safety culture.

Session 3: Regulating sealed radioactive sources, Chairman, Mr. J. Loy, Australia

Mr. V. Friedrich, Hungary gave a presentation on “Regulating Sealed Radioactive Sources.” He discussed the source life cycle including manufacture, distribution, use, and disuse and identified the weak points in the cycle as sources in transition, disused/spent sources and orphan sources. In addition, he addressed the back end of the life cycle (at the user, at the waste management organization, disposal, the return option), the economic aspects and the national and international regulatory situation. He raised a number of issues including: how can continuity of control be ensured throughout the life cycle, should (could) regulators promote/facilitate the take back option and the establishment of adequate disposal options. On the international level questions included: should the exporting States promote the take back option; could the Code of Conduct be enhanced to include statements on the national legal framework, responsibilities of States for exporting, importing, or both, common border control procedures, liability issues for transboundary shipments, and bi, multi-level agreements.

Pending Actions/Planned Next Steps

A revised draft discussion paper on the IAEA Safety Standards will be prepared based on the discussions at the Senior Regulators’ meeting. This paper will be discussed at the CSS Meeting in November 2002, which I will be attending. The final draft of the paper will be presented to the Board of Governors for endorsement in March 2003.

DISCUSSION PAPER ON
“THE IAEA’S SAFETY STANDARDS:
Universal Standards FOR THE 21ST century”¹

INTRODUCTION

1. Since the beginning of the twentieth century research and development into the peaceful uses of nuclear science and technology has led to many and diverse applications of nuclear energy in agriculture, health and industry. Such nuclear and radiation related technologies are now very widely employed but, like many other technologies, as well as yielding benefits, they also incur some risks. Societies throughout the world are concerned about the hazards associated with exposure to ionizing radiation and the potential harm to the environment both now and for the future. There is therefore a need to ensure universally that consistently high levels of protection are being applied for both the people and the environment.

2. Many of the risks associated with nuclear fuel cycle activities and other uses of radiation sources and radioactive material have the propensity to manifest themselves beyond national borders and far into the future. The Chernobyl accident clearly demonstrated the global dimension of the safety of nuclear installations. The increasing globalization of business, technology and information underlines the need for international safety standards to adequately ensure the protection of people and the environment. For over seventy years the wide recognition of the work of the International Commission on Radiological Protection (ICRP) illustrates that, from the very outset of the uses of nuclear technologies, radiation protection has been addressed at the international level. For obvious reasons, the safety of transport of radioactive material has always been regarded as requiring international consideration.

3. Stemming from its original mandate to promote the safe and peaceful application of nuclear energy (Article III of the IAEA Statute), part of the IAEA’s mission is to establish and maintain safety standards in the fields of nuclear safety, radiation protection, radioactive waste management and the transport of radioactive material. Standards in all of these areas have been developed and continually improved in line with experience and advances in knowledge. Over the years a comprehensive architecture for the IAEA’s safety standards programme has evolved.

Attachment 1

¹This discussion paper has been prepared by a special working group of the Commission on Safety Standards (CSS) in consultation with the IAEA Secretariat. It has been produced for discussion at the Meeting of Senior Regulators during the IAEA General Conference in September 2002. The views of the Senior Regulators will be used to further develop this paper and a revised document will be discussed by the CSS at its November 2002 meeting.

4. Although the standards for nuclear power plants and the Transport Regulations are comprehensive, there are a few significant gaps in other parts of the programme, notably in the areas of nuclear fuel cycle facilities (other than reactors), research reactors and some aspects of radioactive waste management. The need to close these gaps, together with the need to continually check the quality of these products and improve them when necessary, has led the IAEA to review its safety standards to make sure they remain comprehensive, up-to-date and fit for purpose as the application of nuclear and radiation technologies progress and public's expectations for high levels of safety increase.

5. This paper aims at setting out a vision, and a strategy for meeting it by ensuring that the IAEA's safety standards continue to provide internationally recognized and applied standards for protection and safety in a changing world.

VISION

6. The vision is simple: to provide the global community with a complete and practical suite of comprehensive and fit-for-purpose safety standards which, when applied universally, will provide consistent standards of protection and safety for people and the environment worldwide.

7. While striving for the continuing improvement of the current standards, a number of important issues need to be addressed. These are:

- the architecture of the standards;
- the scope of the standards;
- the character (nature) of the standards;
- the standards review cycle;
- the application of the standards;
- the global acceptance of the standards; and
- the communication strategy.

These issues are discussed in more detail in the remainder of this paper.

8. If the vision is fulfilled, the international community will continue to be provided with the safety standards it needs. However, it is not sufficient just to deliver the required standards of protection and safety. The standards need to be supported by national infrastructure, legislation, regulations and industry standards. The industry standards will define and deliver the detailed facility and process specifications. Thus the IAEA standards set the comprehensive framework for complementary national infrastructure, legislation, regulation and industry standards.

ARCHITECTURE OF THE STANDARDS

9. The current architecture of the safety standards has been developed over the years. There is considerable benefit in retaining the existing architecture, which has three main categories:

- Safety Fundamentals;
- Safety Requirements; and
- Safety Guides.

The IAEA also develops other safety related publications, notably Safety Reports and TECDOCs. However, the role of these publications and their relationship to the safety standards is often not well understood. Therefore, a discussion of Safety Reports and TECDOCs is also included in this section.

Safety Fundamentals

10. The Safety Fundamentals are at the top of the safety standards pyramid and present the basic objectives, concepts and principles of safety and protection for the development and application of radiation related technologies, the use of nuclear energy for peaceful purposes and radioactive waste management. It is intended to replace the three current Fundamentals documents — covering the safety of nuclear installations, radiation protection and the safety of radiation sources, and radioactive waste management — with a single document, as suggested at the March 1995 session of the Board of Governors. The unified Safety Fundamentals will aim both to harmonize the principles from the existing documents and to cover other relevant areas, such as safety infrastructure, emergency preparedness and the safe transport of radioactive material.

Safety Requirements

11. The Safety Requirements establish the key requirements that must be met to ensure the safety and protection of people and the environment, both now and in the future. The Requirements therefore use 'shall' statements to make it absolutely clear what is expected. It is proposed to extend the range of the Requirements documents in both thematic and facility specific standards. This will allow for a better harmonization among the standards: for example thematic Requirements for decommissioning will be established in one document, which can be referred to or incorporated into the relevant sections of the various facility specific standards as appropriate. This will help to ensure consistency between different types of facility in the approach to safety in decommissioning and avoid the need for developing separate Requirements document for decommissioning of each type of facility.

Safety Guides

12. The Safety Guides provide guidance on how to comply with the Requirements in terms of more detailed actions, conditions or processes. As guidance the recommended course of action is advisory and hence expressed in the form of 'should' statements. The implication is that it is necessary to take the measures recommended or equivalent alternative measures in order to comply with the Requirements. The intention is to supplement the Requirements and produce additional Safety Guides as necessary on both facility based and thematic issues.

Safety Reports and TECDOCs

13. Safety Reports and TECDOCs are produced as a means of disseminating information. These documents are not safety standards of the Agency and are not produced with the same level of consultation and peer review as the Fundamentals, Requirements and Guides. However, they are regarded as making a valuable contribution to the enhancement of international knowledge by providing, for example, more detailed descriptions of particular approaches or methodologies, or additional background information on a topic, or by describing topics that are not considered mature enough for safety standards to be developed. Their exact role and nature therefore varies, and does need further consideration. One proposal is to integrate such documents more formally into the safety standards programme, which would make it necessary to subject them to enhanced scrutiny of the type provided by the Safety Standards Committees and Commission on Safety Standards.

THE SCOPE OF THE STANDARDS

14. The current safety standards include a mixture of facility specific and thematic standards. The general structure seems to be appropriate but certain facilities and activities are not addressed in detail. It is intended that all areas should be addressed, resulting in a comprehensive range of Requirements documents covering:

Thematic Safety Requirements

- Legal and Governmental Infrastructure;
- Quality Management Systems (including quality assurance and safety culture);
- Radiation Protection (occupational exposure, medical exposure, public exposure);
- Technical and Engineering Requirements (including defence in-depth, human factors, safety assessment and accident management);
- Emergency Preparedness
- Site Characterization and Evaluation for Nuclear Facilities;
- Transport of Radioactive Material;

- Management of Radioactive Waste (including classification, processing, discharges, clearance, storage and rehabilitation of contaminated areas);
- Environmental Protection;
- Decommissioning.

Facility Specific Design and Operational Requirements

- Nuclear Power Plants;
- Nuclear Fuel Cycle Facilities;
- Research Reactors and Radioisotope Production Facilities;
- Radioactive Waste Treatment and Storage Facilities;
- Radioactive Waste Disposal Facilities;
- Specific facilities and activities using radiation sources (e.g. Medical Uses of Radiation Sources, Industrial Radiography).

Where necessary, Requirements of both types would be supported by Safety Guides.

Character (nature) of the Standards

15. The first safety standards were produced in the 1960s and 1970s as basic requirements to be met by all Member States, and as such were sometimes considered as representing the 'lowest common denominator'. In developing the current standards the aim has been to represent current international best practice as a point of reference for the Member States. The intention in the future is to ensure that in developing new standards to fill gaps and in revising and updating existing standards, the resulting standards will continue to reflect international best practice to be universally applied.

16. The Safety Requirements present the level of safety which, if not met, may result in consideration of actions including stoppage of activities or closure of facility by national authorities. The Safety Guides recommend actions, conditions or procedures, developed on the basis of international best practices, for meeting the Safety Requirements, and thus represent a level of safety to be aimed for.

STANDARDS REVIEW CYCLE

17. The standards development and maintenance process has two main elements: the development of new standards and the periodic review of existing standards for continuous improvement.

Development of New Standards

18. The IAEA safety standards programme is characterized by a robust production process, which ensures international peer review, consensus building and quality. The current Safety Standards Series publications have been produced using a rigorous process. Following identification of the need for a standard, a detailed proposal is produced and submitted to the appropriate Safety Standards Committee(s) (NUSSC, RASSC, WASSC or TRANSSC) and the Commission on Safety Standards (CSS) for approval. Once the relevant Committee(s) and CSS approve the proposal, the IAEA Secretariat, making use of external consultants, drafts the required standard. Drafts of the document are then successively reviewed by the appropriate Committee(s), which are comprised of eminent experts in the relevant area of safety from IAEA Member States. When the Committees consider the draft document is suitable for external review, it is sent to all Member States for comment. Only when IAEA Member States' comments have been considered and the appropriate Committees have endorsed the text is the standard submitted to the CSS, comprising senior regulators from IAEA Member States, for endorsement. The CSS has the final say on Safety Guides. However, in the case of the Safety Fundamentals and Requirements, the approval of the IAEA's Board of Governors is also needed.

19. It is the intention to continue to involve specialist committees on nuclear, radiation, transport and waste safety. However, with the need to fill gaps in the standards for fuel cycle and radioactive waste facilities there is a need to ensure that the full range of competences is available within the Committees. Also, if there is to be greater use of cross-cutting thematic safety standards, the co-ordination between the Committees will need to be improved further. Regulators are certainly the best qualified to review and approve the standards. However, in the development of Requirements and Guides that are aimed at describing not only regulatory best practice but also industry best practice, it is necessary to involve the industry, operators and users in the process. In general, the further the standards delve into detailed issues of how to achieve safety, the greater one would expect the involvement of operators/users in addition to the regulators.

Review and Continuous Improvement

20. The completeness of the safety standards is always a concern. The Committees are best qualified to identify gaps and overlaps within their specialist area, but the Commission is in a better position to address the more demanding question of identifying gaps and overlaps between or beyond the four areas. It is essential to keep the standards up-to-date with scientific and technological developments and the experience gained from their use. However, it is also important to balance this need with the needs of the users for stability in the standards. While there are specific reasons for the proposed two-year review cycle in the transport area (the Chairman of TRANSSC and the Secretariat have been requested by the CSS to investigate the practicalities of this two-year review cycle), this is certainly too short for the other areas of safety. For other areas it is generally agreed that each standard should be reviewed around five years after its publication, and if sufficient reason is found, then the process of revision may commence. Taking into account that the revision process would take at least two years, this means that a revision cannot appear earlier than seven years after the original publication. If on the basis of review after five years it is decided that the standard is still appropriate it should be reviewed after a further five years.

21. While there are advantages to a uniform revision cycle for all safety standards, there needs to be flexibility to allow for prompt revision of particular standards if the need arises. This should be at the discretion of the IAEA on the advice of its policy-making organs and/or the CSS.

APPLICATION OF THE STANDARDS

22. To deliver the goal of globally applied and universally consistent standards that will provide public and political confidence, it is essential for the IAEA's safety standards to be widely used. There is limited information available, but it would appear that currently the use of the standards is variable. The challenge is how to achieve better involvement and ownership by users. A first, important step will be to ensure the IAEA standards are used by the IAEA's own safety services and assistance to the Member States. It is intended that in future all IAEA safety related services and assistance should systematically use the standards as the basis of evaluating compliance/performance and that all training activities in nuclear, radiation, waste and transport safety be based on the standards. This will not only raise the profile of the standards but also provide valuable feedback on their quality and usefulness.

23. The Contracting Parties to the safety related conventions — notably the Convention on Nuclear Safety and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management — should be encouraged to use the IAEA's safety standards as a basis for assessing their compliance with their Convention obligations when preparing their National Reports. Again this would result in a more widespread use of the standards and, through the National Reports, would give an indication of the extent to which the goal of universal compliance is being achieved.

24. For the Standards to be extensively used they must meet the needs of the users. Different users may find different formats of safety standard useful: for example, more thematic standards in nuclear safety (e.g. on defence in depth, or safety assessments) and more facility based standards in other areas (e.g. a standard bringing together the various requirements and guidance relevant to a hospital). This might entail some repetition, but would provide benefits in 'user-friendliness'. The intention is that future development will be focussed on making the standards of value to the end users and on assisting them in identifying the standards as being of relevance to their activities. The feedback of experience from the users in the Member States would provide valuable input to the future revision of the safety standards.

GLOBAL ACCEPTANCE

25. The IAEA safety standards, by virtue of the process established for their development, do have a degree of international acceptance. However, as noted above, the international perceptions of these standards and their application vary significantly. The challenge is to broaden the recognition by all governments, regulatory bodies, operators and users, as well as the public, that the application of the IAEA safety standards ensures a globally consistent and high level of protection for people and the environment. The standards must be seen as suitable bases for national rules and regulations. Hence, the safety standards must meet the needs and expectations of the intended users, particularly in terms of quality, usefulness,

timeliness and user-friendliness. It is hoped that the proposed new architecture of the safety standards will provide users with the confidence that their needs and expectations can be met through their application.

COMMUNICATION STRATEGY

26. It is clear that, while the IAEA standards are known to those who have participated in their development, they are less well recognized in the wider world as essential and valuable contributions to the achievement of universal safety goals. A new communication strategy is therefore required to raise the profile of the standards in the eyes of the politicians, the public and the intended users. This is likely to be a major challenge and is unlikely to be achieved very quickly. Improving the standards themselves in the ways described above should help, as would interaction with the safety convention processes. However, there is an urgent need to develop a communication strategy with the intension of making full use of Internet and the production of a simple guide to the standards for distribution to all those with an interest, explaining the need for, the scope and the use of the IAEA safety standards.