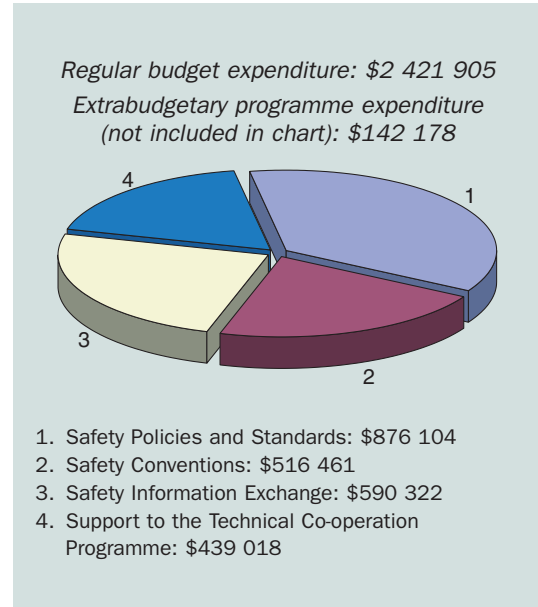


CO-ORDINATION OF SAFETY ACTIVITIES

PROGRAMME OBJECTIVE

To ensure technical consistency in the Agency's safety related functions (revision and development of safety standards, servicing safety conventions, safety information exchange and support to safety activities in the technical co-operation programme), as well as coherence with corresponding safety activities carried out by Member States and other international organizations.



KEY ISSUES AND HIGHLIGHTS

- Five safety standards were published, with 16 others approved and in the process of being published.
- Through the technical co-operation programme, the Agency implemented numerous projects in the areas of nuclear, radiation and waste safety.
- Assistance was provided in the form of training courses, workshops, fellowships and scientific visits and training for safety professionals in Member States.
- A long term strategy was developed for the Agency's education and training programmes aimed at promoting self-sustaining training capabilities in Member States.

SAFETY POLICIES AND STANDARDS

To facilitate use of the Agency's safety standards in Member States, the full texts of recently published standards were posted on the Agency's web site for the first time in 2001 (located at <http://www.iaea.org/ns/CoordiNet/safetypubs/inclSStandardsPublished.htm>). Five revised or new Safety Guides were published (see Box 1), and 16 other Safety Guides have been approved and are in the process of being published. The Safety Requirements publication *Preparedness and Response for a Nuclear or Radiological Emergency* (co-sponsored by FAO, ILO, OECD/NEA, UN OCHA, PAHO and WHO) was endorsed by the Commission on Safety Standards (CSS) and submitted to the Board of Governors for approval. A summary of the current status of all the safety standards is available at the web site <http://www.iaea.org/ns/committees/css/STATUS.PDF>. Detailed information on the activities of the various Safety Standards Committees and the CSS is also available at this site.

The Agency's current safety standards on quality assurance for nuclear installations (a Code and 14 Safety Guides) were issued together on CD-ROM. The electronic version enables the user to search for and access any topic directly through the contents list and by keyword searches.

For several years the Agency has organized Peer Discussions on Regulatory Practices, a forum in which senior regulators can exchange information and experiences on current issues. The topic for the 2001 round of discussions was 'Quality Management of the Nuclear Regulatory Body'. The Agency published a report by the regulators, summarizing the discussions and giving 21 examples of good practices.

The Agency provides the Secretariat for the International Nuclear Safety Advisory Group (INSAG), which advises the Director General on nuclear, radiation and radioactive waste safety from a global perspective. In 2001, INSAG approved a *Note on Maintaining Knowledge, Training and Infrastructure for Research and Development in Nuclear Safety*, which was distributed in interim form at the Agency's General Conference in September, and a report on *Key Practical Issues in Strengthening Safety Culture*. Both documents will be published by the Agency in 2002.

SAFETY CONVENTIONS

The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management entered into force on 18 June 2001. A preparatory meeting was held in December 2001 at which the Contracting Parties adopted the rules of procedure and

BOX 1. SAFETY STANDARDS PUBLISHED IN 2001

Safety Guides	Safety Standards Series No.
● Building competence in radiation protection and the safe use of radiation sources (co-sponsored by ILO, PAHO and WHO)	RS-G-1.4
● Decommissioning of nuclear fuel cycle facilities	WS-G-2.4
● Modifications to nuclear power plants	NS-G-2.3
● Safety assessment and verification for nuclear power plants	NS-G-1.2
● The operating organization for nuclear power plants	NS-G-2.4

financial rules, as well as guidelines regarding the review process and the form and structure of national reports.

An organizational meeting was held in September for the second Review Meeting of Contracting Parties to the Convention on Nuclear Safety, which will take place in April 2002. The meeting decided on the composition of the six country groups in which national reports will be discussed during the Review Meeting, and selected the officers for the meeting and the country groups.

SAFETY INFORMATION EXCHANGE

The International Nuclear Event Scale (INES) is used by 60 countries to facilitate rapid communication to the media and the public on the safety significance of events at all nuclear installations associated with the civil nuclear industry, including events involving the use of radiation sources and the transport of radioactive material (Fig. 1). In 2001, a new edition of the *INES User's Manual* was published incorporating experience gained from applying the 1992

BOX 2. SAFETY STANDARDS APPROVED AND IN THE PROCESS OF BEING PUBLISHED

Safety Guides	Safety Standards Series No.
● Advisory material for the Regulations for the Safe Transport of Radioactive Material	TS-G-1.1
● Core management and fuel handling in nuclear power plants	NS-G-2.5
● Dispersion of radioactive material in air and water and consideration of the population distribution in site evaluation for nuclear power plants	NS-G-3.2
● Documentation for use in regulating nuclear facilities	GS-G-1.4
● External human induced events in site evaluation for nuclear power plants	NS-G-3.1
● Instrumentation and control systems important to safety in nuclear power plants	NS-G-1.3
● Maintenance, surveillance and in-service inspection in nuclear power plants	NS-G-2.6
● Management of radioactive waste from the mining and milling of ores	WS-G-1.2
● Organization and staffing of the regulatory body for nuclear facilities	GS-G-1.1
● Planning and preparing for emergency response to transport accidents involving radioactive material	TS-G-1.2
● Predisposal management of high level radioactive waste	WS-G-2.6
● Predisposal management of low and intermediate level radioactive waste	WS-G-2.5
● Radiation protection and radioactive waste management in the operation of nuclear power plants	NS-G-2.7
● Radiological protection for medical exposure to ionizing radiation (co-sponsored by PAHO and WHO)	RS-G-1.5
● Regulatory inspection of nuclear facilities and enforcement by the regulatory body	GS-G-1.3
● Review and assessment of nuclear facilities by the regulatory body	GS-G-1.2

CO-ORDINATION OF SAFETY ACTIVITIES

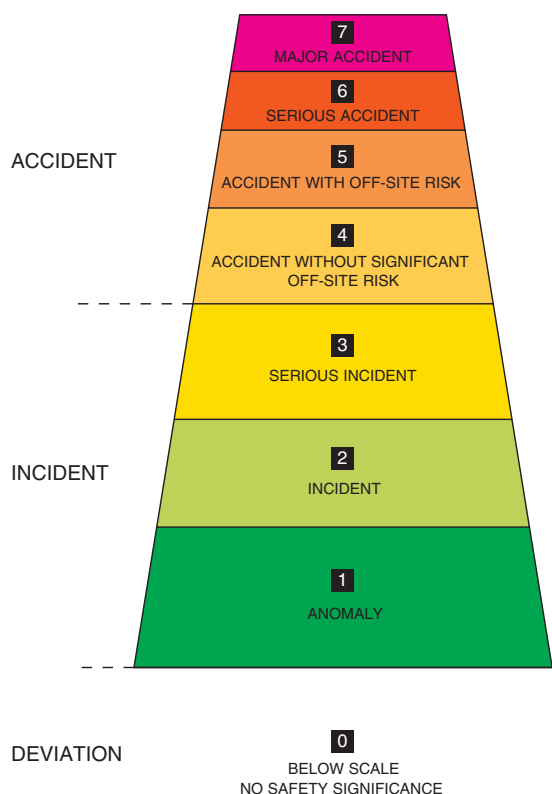


FIG. 1. The International Nuclear Event Scale.

version of the scale and clarification of various issues raised during that period. A total of 28 events were reported in 2001, of which 6 were rated at level 0, 8 at level 1 and 14 at level 2.

In co-operation with the OECD NEA and the World Association of Nuclear Operators (WANO), the Agency developed a Nuclear Events Web-based System (NEWS) to help disseminate information on events to participants in Member States more quickly and easily. The system underwent a one year trial beginning early in 2001 and is expected to go into full operation early in 2002. The success of the system will ultimately depend upon the readiness of participants to disseminate information on events quickly.

SUPPORT TO THE TECHNICAL CO-OPERATION PROGRAMME

During 2001, approximately 150 technical co-operation projects were supported, correspon-

ding to an adjusted budget of about \$18 million, in the areas of nuclear, radiation, transport and waste safety. In addition, about 110 training courses, workshops and seminars were held, most organized through the technical co-operation programme, but some also a part of the extrabudgetary programmes on the Safety of Nuclear Installations in the South East Asia, Pacific and Far East Countries, and on Mitigation of Intergranular Stress Corrosion Cracking in RBMK Reactors. The bulk of the training activities in radiation and waste safety were organized within the framework of the technical co-operation Model Project on upgrading radiation protection infrastructure.

Regional technical co-operation projects, including training courses, can be made more effective by consolidating objectives common to a number of Member States. In this regard, training courses in nuclear safety were held in France (for the Europe region) and in the USA (under the Extrabudgetary Programme on the Safety of Nuclear Installations in the South East Asia, Pacific and Far East Countries). Post-graduate educational courses in radiation protection and the safety of radiation sources were held in South Africa (for the Africa region) and in Malaysia (for the East Asia region), and a post-graduate diploma course on radiation protection (in Arabic) was held in the Syrian Arab Republic. The regular post-graduate educational course in radiation protection and nuclear safety (in Spanish) was held in Argentina.

Two Advisory Group meetings were held on education and training in nuclear safety and in radiation and waste safety. The recommendations of the Advisory Groups were used to develop a strategy for the Agency's activities in support of education and training. There is a gap between the knowledge needed in Member States and the ability of the Agency to provide training. Therefore, as a complement to its educational and training courses, the Agency is concentrating on helping Member States to establish sustainable national education and training programmes that are consistent with international safety standards. An essential element of this effort is the development of model training curriculums that can be used in training the trainers who will ultimately

CO-ORDINATION OF SAFETY ACTIVITIES

implement the national programmes. Other measures to be adopted include: greater use of distance learning to complement more traditional training; development of modular training material, which allows flexibility in the choice of material; increasing the use of and access to computer based material; and a systematic approach to the establishment of regional and national training centres and to the development of a network of such centres. A new feature of the Agency's training activities is the provision of advisory services to Member States wishing to evaluate their national train-

ing needs, and to organize and assist with the required training, or peer reviews of existing national programmes.

A pilot project was launched in 2001 to test the Agency's model programme for the training of regulatory staff for nuclear facilities in selected Member States (currently Pakistan, the Russian Federation and Slovakia, with the likely future addition of Brazil). The programme uses a systematic competency framework to determine the training needed and to identify gaps in existing national programmes.