



International Atomic Energy Agency

# BOARD OF GOVERNORS GENERAL CONFERENCE

GOV/2821-GC(39)/13  
10 August 1995

GENERAL Distr.  
Original: ENGLISH

Sub-item 3(a) of the Board's provisional agenda  
(GOV/2820)  
Item 16 of the Conference's provisional agenda  
(GC(39)/1)

## STRENGTHENING OF THE AGENCY'S TECHNICAL CO-OPERATION ACTIVITIES

### Report by the Director General to the Board of Governors and to the General Conference

#### Background

1. In resolution GC(XXXVIII)/RES/8, the General Conference last year stressed "the need, in conformity with the Statute, to strengthen technical co-operation activities and also their effectiveness and efficiency" and requested the Director General "to present, in consultation with Member States, new initiatives to strengthen the technical co-operation activities of the Agency through the development of effective programmes aimed at improving the scientific and technological capabilities of developing countries in the fields of peaceful applications of nuclear energy and achieving sustainable development". It further requested the Director General to continue to take follow-up actions on initiatives approved by the Board and the General Conference, including the model project approach.
2. In addition, the General Conference requested the Director General to report on the implementation of the resolution to the Board of Governors periodically and to the General Conference at its thirty-ninth regular session under an agenda item entitled "Strengthening of the Agency's technical co-operation activities".
3. The Director General reported on follow-up actions to the Third Technical Co-operation Policy Review Seminar (held in September 1994) to the Technical Assistance and Co-operation Committee in November and to the Board of Governors in December. Also, he reported on measures being taken to strengthen technical co-operation at the March and June 1995 sessions of the Board. Finally, the present document has been prepared for the consideration both of the Board and of the General Conference.

**Developments since the General Conference's 1994 session**

4. Several initiatives have been taken by the Secretariat in consultation with Member States since the last General Conference session. They relate to:

- radiation protection and radioactive waste management
- Country Programme Frameworks
- the Model Project concept and the concept of the Agency as a "Partner in Development"
- a new Special Training Programme
- the establishment of a Standing Advisory Group on Technical Assistance and Co-operation (SAGTAC).

The initiatives relating to radiation protection and radioactive waste management and to Country Programme Frameworks derive from recommendations made at the Third Technical Co-operation Policy Review Seminar.

- Radiation protection and radioactive waste management<sup>1/</sup>

5. At the Third Technical Co-operation Policy Review Seminar, the question was examined of establishing Action Plans for the development of radiation protection and radioactive waste management infrastructures in developing Member States, and the recommendations made at the Seminar helped in the formulation of follow-up activities and the development of strategies that were outlined to the Technical Assistance and Co-operation Committee in November and approved by the Board of Governors in December.

6. The preparation of a comprehensive plan covering these two fields has been initiated. The goal is an ambitious one: to upgrade by the year 2000 the radiation protection and radioactive waste management infrastructures in all Member States where the minimum standards have not yet been met. Some elements of the plan are already being implemented.

7. To facilitate the identification of common infrastructure needs, developing Member States have been classified according to the uses which they make of radioisotopes, those engaged in similar radioisotope applications being grouped together. On the basis of the types and amounts of radioactivity involved, minimum radiation protection and radioactive waste management requirements have been determined by Agency staff and outside experts.

---

<sup>1/</sup>

Technical assistance in the fields of radiation protection and radioactive waste management is intended especially to establish or strengthen legal frameworks, regulatory bodies and the technical and infrastructural capabilities required for the enforcement of radiation safety and radioactive waste management safety standards.

Several technical co-operation activities, including two Model Projects, have been initiated in order to assist Member States in meeting these requirements in the most direct and efficient way.

8. Profiles of existing radiation protection and radioactive waste management infrastructures are being prepared using information from reports on RAPAT, WAMAP and other expert missions. Profiles of radiation protection infrastructures will be prepared for most developing Member States and of radioactive waste management infrastructures for about 20. Efforts to create a computerized country profile database relating to radiation protection and radioactive waste management are under way.

9. A group of six countries (Albania, Cameroon, Colombia, Ghana, Sri Lanka and Uganda) has been selected for the implementation of improvements in infrastructures for radioactive waste management and radiation protection under a Model Project approved by the Board in 1994. Action Plans have been finalized for radiation protection activities and are in preparation for radioactive waste management activities. Plans to upgrade infrastructures in a second group of Member States whose infrastructures do not meet the minimum requirements set in the International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources (Interim edition - Safety Series No. 115-I) are to be initiated during 1995.

10. Standard packages for upgrading different components of radioactive waste management and radiation protection infrastructures are being prepared, both within the framework of the Agency's Regular Budget and under technical co-operation project INT/9/144. Three packages have been completed: "Reference Design for a Centralized Waste Processing and Storage Facility" (IAEA-TECDOC-776), intended for countries having waste from nuclear research reactors; "Reference Design for a Centralized Spent Sealed Sources Facility", intended for countries having radioactive waste from small nuclear research centres and nuclear applications; and "Sealed Radiation Sources Registry".

- Country Programme Frameworks

11. Another important question examined during the Third Technical Co-operation Policy Review Seminar was how best to ensure that the Agency's technical assistance is in line with Member States' national development goals and priorities.

12. There was agreement that Medium-Term Country Plans for the use of nuclear technology in support of national development objectives could provide the necessary frames of reference and strategies for countries' programmes of technical co-operation with the Agency. Member States were encouraged to prepare such plans, but it was agreed that in the absence of formal Medium-Term Country Plans other relevant documents could be used. By the end of July 1995, however, only six Medium-Term Country Plans had been received from Member States.

13. It was recommended that, on the basis of Medium-Term Country Plans or other relevant documents and of information received from Member States, the Secretariat elaborate a concise Country Programme Framework (CPF) for Agency technical co-operation with each recipient country, the CPF indicating the areas where nuclear applications could play a significant role in the achievement of national development objectives and where the Agency should therefore concentrate its technical co-operation efforts and resources. The CPFs, covering a period of 4-6 years, would be elaborated in close collaboration with the governments concerned and endorsed by them. They would be working documents providing a frame of reference for future projects and a basis for project design. The primary reason for introducing CPFs is to establish the basic principles of the Model Project initiative as the dominant feature of the Agency's entire technical co-operation programme and thus to enhance the programme's social and economic impact. Also, CPFs are intended to:

- improve liaison between the Agency and governments through a clear joint commitment to priority activities;
- facilitate co-ordination with other UN organizations at the country level; and
- enable the Agency to mobilize more resources for its technical co-operation programme.

14. The Secretariat has addressed letters to Member States announcing its plans for the elaboration of CPFs and requesting that, where possible, Member States provide the Secretariat with documents such as national medium-term development plans. Also, it has developed preliminary guidelines for the preparation of the CPFs. Seven CPF missions (to Belarus, Croatia, Kazakhstan, Madagascar, the Philippines, Romania and Zimbabwe) have already been carried out, and there are plans for nine more this year and for about 15 in 1996. As the Secretariat already has sufficient information to elaborate CPFs for a number of Member States without fielding missions, it is estimated that by the end of the 1997-98 programme cycle CPFs will have been elaborated for most Member States receiving Agency technical assistance.

- Model Projects and the Agency as a "Partner in Development"

15. The major effort to broaden the principal objective of the Agency's technical co-operation programme from infrastructure-building to the achievement of social and economic goals is continuing. The strategy, outlined at the 1994 session of the Technical Assistance and Co-operation Committee and discussed in informal meetings with various groups of Member States, is based on the premise that Model Projects are the central mechanism for establishing a "partnership in development" between Member States and the Agency, which is offering models of how nuclear-based technologies can produce lasting and visible benefits.

16. In December 1994 the Board of Governors approved 11 Model Projects, bringing to 23 the total number of such projects being implemented by the Secretariat. Several of the 11 new Model Projects were proposed by Member States in the light of the experience gained during 1994 with such projects. The others were initiated by the Secretariat, but the project proposals were finalized in close co-operation with the prospective recipient countries.

17. The current Model Projects illustrate ways in which significant social and/or economic impacts can be achieved in the following areas:

- . Radiation protection;
- . Radioactive waste management;
- . Food production;
  
- . Groundwater resources development;
- . Geothermal resources development;
- . Insect pest eradication;
- . Food irradiation;
- . Nutrition;
- . Nuclear medicine;
- . Radiotherapy and medical physics;
- . Human tissue banking;
- . Nuclear power plant safety;
- . Regulation of nuclear activities
  
- . Industrial-scale applications of electron beam technology.

18. The Secretariat is continuing to refine the Model Project concept, focusing on the formulation of project objectives in such a way that the Agency and Member States can determine whether they are being achieved and on the development of performance indicators for use in assessing progress.

19. As Model Projects require more rigorous planning, organization, co-ordination and technical support than traditional projects, the Model Project initiative has led to major improvements in the design and management of the technical co-operation programme by the

Agency and recipient Member States. The result is projects which are better budgeted and more realistically planned and which should therefore be more effective.

20. In addition, the Model Project initiative has led to a series of related initiatives for strengthening the technical co-operation programme as a whole. One such initiative, currently at an early stage, is the development of sectoral or thematic programming activities around "technology packages" designed to facilitate the application of standardized nuclear technologies in specific development sectors.

21. The strengthening of collaboration with other organizations active in the development field and the mobilization of additional resources are other offshoots of the Model Project initiative:

- (a) As urged by the Board of Governors, the Secretariat is working to achieve more effective collaboration between the Agency and other international organizations. The Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture provides a natural link with FAO, and major collaboration is under way in the area of food security and in the control or eradication of the tsetse fly and trypanosomiasis in Africa. The "National radiotherapy and nuclear medicine network" Model Project in Ghana (GHA/6/009) is being co-ordinated with WHO's National Cancer Control Programme in that country, and similar collaboration will be established in respect of other countries. The Agency has been approached by WHO regarding collaboration in the field of nutrition. Preparations are being made for collaboration with UNIDO in examining the industrialization potential of certain processes for the large-scale rearing of sterile insects for release in pest eradication programmes. The Agency is also collaborating with UNESCO/IOC<sup>2/</sup>, UNEP, WMO, UNDP and the World Bank in a project entitled "Environmental restoration of the Black Sea". In addition, the Agency is attempting to develop (in collaboration with these same organizations) a similar project on pollution in the Caspian Sea.
- (b) The Agency is seeking closer relations with major organizations involved in development funding. Links are being established with the World Bank, with regional development banks such as the African Development Bank and the Inter-American Development Bank and with the International Fund for Agricultural Development (IFAD). Also, more active collaboration is being sought with major bilateral development agencies. In addition, new resource mobilization strategies are being pursued with a view to the greater utilization of the resources of the UN system (mainly UNDP and the World Bank) and the European Community.

---

<sup>2/</sup> IOC = Intergovernmental Oceanographic Commission.

- Special Training Programme

22. The Secretariat recently launched a training programme aimed at developing the human resource base of - primarily - least developed countries in the field of peaceful applications of nuclear energy. This initiative arose from an evaluation of technical co-operation with least developed Member States carried out in 1993 by the Secretariat and decisions taken subsequently by the Board of Governors. This Special Training Programme, which will supplement existing short-term on-the-job training related to ongoing technical co-operation projects, will give graduates from - primarily - least developed countries an opportunity to perform research on topics not available in their home countries and obtain an advanced degree or a specialized qualification. The term "special" denotes the fact that the training, which would extend over several years, would be split between an institution in an "advanced" country and the trainee's home institution, with which the trainee would therefore remain in contact; in the course of the training, the trainee might even help to solve problems being encountered by his/her home institution.<sup>3/</sup> The programme is a further way of arranging for an institution in a least developed country and one in an "advanced" country to co-operate as "sister organizations" in a specific application of nuclear technology.

23. The programme will be based on the award of fellowships which each have a total duration of up to 18 months but which may be broken down into several short periods to accommodate the training that takes place abroad. The fellowship awards will include provision for the purchase of books and for participation in conferences, workshops etc. related to the research in question. The Agency will pay for up to two monitoring visits by each trainee's supervisor and for minor laboratory supplies.

24. To date, the applications of about ten candidates (from Ethiopia, Liberia, Sudan and Zaire) have been approved, and applications from Ghana, Uganda and Zimbabwe are being processed. Two "advanced" institutions - the International Centre for Theoretical Physics in Italy and Uppsala University in Sweden - are already participating in the programme, and it is expected that they will be joined by institutions in Germany, the United Kingdom and the United States.

- Standing Advisory Group on Technical Assistance and Co-operation

25. At the Board's March 1995 session, the Director General put forward the idea of establishing a Standing Advisory Group on Technical Assistance and Co-operation (SAGTAC) - a new mechanism for the regular review and assessment of the technical co-operation programme and related activities. The idea was endorsed by the Board.

26. It is envisaged that, besides regularly reviewing and assessing the technical co-operation programme and related activities, SAGTAC will advise on technical co-operation policies and strategies, on the direction of the technical co-operation programme

---

<sup>3/</sup> Such "special" training is sometimes referred to as "sandwich" training.

and on measures for increasing the programme's effectiveness and efficiency. SAGTAC will be asked in that connection to identify areas which are of particular relevance to developing countries and require special action or attention on the part of the Agency and its policy-making organs.

27. On 11 May 1995 the Secretariat addressed to Member States a Note setting out the terms of reference and other provisions for the establishment and functioning of SAGTAC and inviting Member States to nominate candidates to serve on it. At its June 1995 session, the Board expressed the hope that the formalities for constituting SAGTAC would soon be completed by the Director General.

28. SAGTAC will have 12 members with wide experience in the peaceful uses of atomic energy or in the management and funding of technical assistance and co-operation activities. The selection of members from among the candidates nominated by Member States has started, and it is expected that SAGTAC will hold its first session before the end of 1995.

#### **Internal management practices**

29. Against the background of the various initiatives outlined above, the improvement of internal management practices is a major objective of the Secretariat, which has been endeavouring to streamline procedures so that resources may be released for high-priority activities. Project management and project co-ordination in the Department of Technical Co-operation have been re-examined, and it has been concluded that the use of more up-to-date computerized management systems would result in significantly greater effectiveness and efficiency. An amount of US \$650 000 from the Regular Budget has been made available in this connection, and an assessment of user requirements has been initiated. It is expected that a fully fledged Project Information Management System will be operational by the end of 1996.

30. The use of more up-to-date computerized management systems will not, however, appreciably reduce the need for additional staff in the Department of Technical Co-operation in order to deal with the greater workload involved in achieving higher technical co-operation programme quality and improving programme delivery.

#### **Outlook**

31. The Secretariat will, in response to the wishes of the General Conference and the Board of Governors, seek to consolidate the initiatives already taken and continue - with further initiatives - its efforts to strengthen the Agency's technical co-operation activities. However, it will be successful only if its efforts are matched by an equally strong commitment to the technical co-operation programme on the part of Member States in terms of resources and implementation support.