
Management of Technical Cooperation for Development

Objective

To enhance the relevance, socioeconomic impact and efficiency of the technical cooperation programme by planning and implementing a need based and responsive technical cooperation programme and by enhancing the technical capacities of Member States in the peaceful application of nuclear technologies.

The Technical Cooperation Programme

The Agency's technical cooperation programme continued to build capacities in Member States to support the peaceful application of nuclear technology, helping to address development priorities in health and nutrition, food and agriculture, water and the environment, industrial applications, and nuclear knowledge development and management. It also helped Member States to identify and meet future energy needs, and to improve nuclear safety and security worldwide, including by providing legislative assistance. Through its technical cooperation programme, the Agency aims to achieve tangible socioeconomic impact by contributing directly in a cost effective manner to the achievement of the major sustainable development priorities of each country, including relevant nationally identified targets under the Sustainable Development Goals (SDGs).

Country Programme Frameworks and Revised Supplementary Agreements

The Country Programme Framework (CPF) serves as one of the main reference documents and the main planning tool for the development of the national technical cooperation programmes for Member States receiving technical cooperation assistance. In 2015, CPFs were signed by 15 Member States — Azerbaijan, Bosnia and Herzegovina, Colombia, Czech Republic, Egypt, Fiji, Georgia, Indonesia, Marshall Islands, Mongolia, Palau, Papua New Guinea, Sudan, Tunisia and Viet Nam.

The Agency continued in 2015 to further strengthen the analytical content of the CPF, with a focus on assisting Member State authorities in identifying relevant national and international partners for their CPF and their projects, and in linking technical cooperation assistance to national sustainable development priorities. This approach supports more effective resource mobilization and longer term partnerships, and a move from small scale, short duration national projects to larger scope programmes that offer greater opportunities for social and economic benefits and longer term national development impact.

Revised Supplementary Agreements Concerning the Provision of Technical Assistance by the IAEA (RSAs) govern the provision of technical assistance by the Agency. Fiji's RSA entered into force in 2015.

Managing the Agency's Technical Cooperation Programme

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Member State priorities in 2015, as reflected in programme disbursements, were safety, health and nutrition, and food and agriculture (Fig. 1), with some variations in emphasis across regions. By the end of the year, 807 projects were active. During the course of the year, 261 projects were closed, of which three were cancelled in consultation with the relevant Member States, and an additional 278 projects were in the process of being closed. Eight Programme Reserve projects were implemented, in Burkina Faso, Côte d'Ivoire, Ghana, Myanmar, Nepal, Niger, Nigeria and the Philippines.

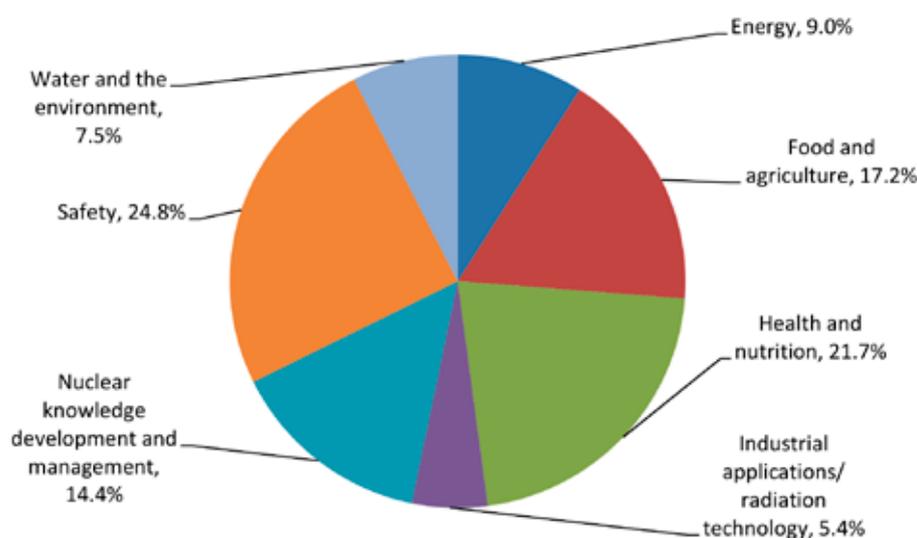


FIG. 1. Actuals by technical field for 2015. (Percentages may not add up to 100% owing to rounding.)

Financial Highlights

Payments against the 2015 Technical Cooperation Fund (TCF) totalled €65.5 million (not including National Participation Costs and assessed programme cost arrears), against the target of €69.8 million, with the rate of attainment on payments as at 31 December 2015 standing at 93.8% (Fig. 2). The use of these resources resulted in a TCF implementation rate of 84.8%. Total payments received in 2015 include €2.4 million either of deferred or of additional payments by 16 Member States. Excluding these payments, the 2015 rate of attainment on payments would have been lower by 3.4%.

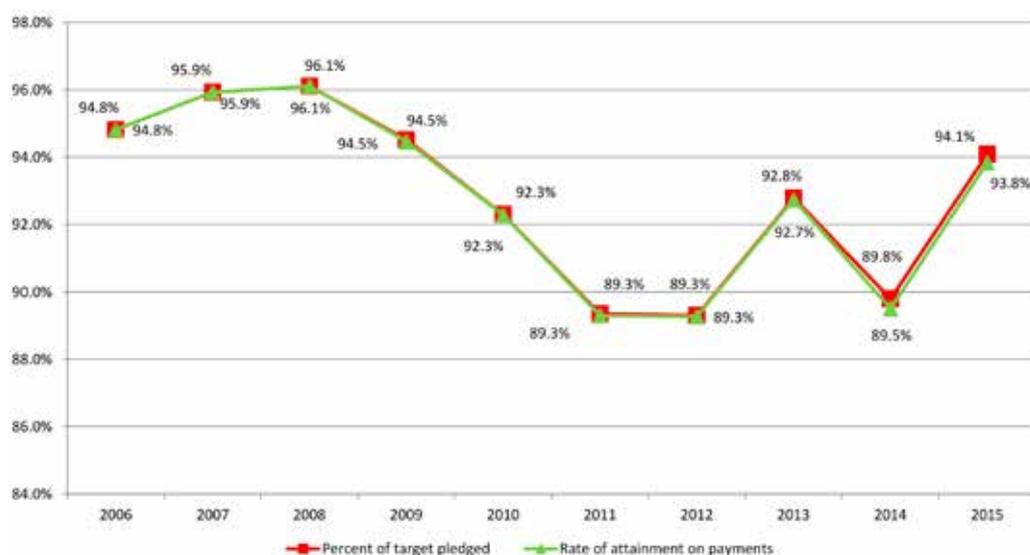


FIG. 2. Trends in the rate of attainment, 2006–2015.

Improving the Quality of the Technical Cooperation Programme

In line with continuing efforts to enhance the quality of the technical cooperation programme, in 2015 the Agency supported Member States as they developed their projects for the 2016–2017 technical cooperation cycle. The goal was to ensure that the projects would be of high quality, with measurable, attainable and timely objectives. Country visits, project design meetings, workshops, training events and programme briefings were conducted for a range of technical cooperation stakeholders, including project counterparts and National Liaison Officers (NLOs). These provided support in the efficient and effective use of the logical framework approach for the design of new projects and of monitoring and evaluation tools for ongoing projects.

For example, NLOs from the Africa region attended an induction workshop in April 2015, which aimed at enhancing common understanding of the Agency's technical cooperation programme. Participants discussed challenges in delivering the programme and received an update on the programme review and assessment process. At a second event, NLOs learned about best practices and experiences resulting from the design and formulation of the 2016–2017 technical cooperation cycle. Discussions were held on the alignment of CPFs with the Common African Position on the Post-2015 Development Agenda and on the SDGs.

In the Asia and the Pacific region, the Agency held an induction workshop for new NLOs and National Liaison Assistants at Agency Headquarters in June, providing a grounding in what the technical cooperation programme can provide to Member States. The Agency carried out intensive upstream work throughout the year in preparation for the 2016–2017 technical cooperation programme, which resulted in the development of 174 national and 33 regional technical cooperation projects. It provided extensive support to new Member States in the region, including a subregional training course for small island developing States and Brunei Darussalam to provide training in establishing a regulatory entity and in preparing a quality national technical cooperation programme.

Finally, the Agency conducted two quality reviews of project designs for the 2016–2017 technical cooperation cycle to provide sound and constructive feedback to the project teams on improving the quality of their projects, to obtain an overall assessment of the quality of the 2016–2017 technical cooperation programme, and to identify lessons learned and areas for improvement in future technical cooperation cycles.

Monitoring and Evaluating Technical Cooperation Projects

Member States and potential donors are increasingly interested in seeing how the technical cooperation programme contributes to promoting and improving the scientific, technological, research and regulatory capabilities of Member States through the development of effective programmes with well defined outcomes. In preparation for the 2016–2017 technical cooperation cycle, the Agency developed specific monitoring and evaluation plans covering the entire project life cycle for selected technical cooperation projects. The experience gained and lessons learned during the development process are expected to provide a basis for expanded outcome monitoring in future technical cooperation cycles.

Also during the year, the Agency continued to review complementary monitoring instruments such as Project Progress Assessment Reports (PPARs), field monitoring missions (Fig. 3) and self-evaluations. These instruments provide a mechanism to identify and communicate lessons learned, and give a valuable snapshot of the status of completion of project outputs.



FIG. 3. Participants in a field monitoring mission to Beirut, Lebanon.

Partnerships with the United Nations System and Other International Organizations

In 2015, the Agency continued its engagement with the United Nations system, other international organizations, research organizations and non-governmental organizations. The Agency will place increased emphasis on partnerships for improving the socioeconomic impact of its projects, and for contributing to, inter alia, Sustainable Development Goal 17 (Strengthen the means of implementation and revitalize the global partnership for sustainable development) and its targets.

United Nations Development Assistance Frameworks

During the year, the Agency continued to contribute to the development and implementation of United Nations Development Assistance Frameworks (UNDAFs) in relevant countries. UNDAFs offer a useful framework for identifying potential areas of collaboration between the Agency and other United Nations entities, and help to ensure minimal overlap between the actions of different agencies. By identifying linkages between the goals and objectives of the CPF and those of the UNDAF, joint work to address national priorities in sustainable development can be facilitated. In 2015, the Agency participated in the preparation process and co-signed the UNDAF for Algeria, which covers the period 2016–2020. It was also involved in finalization of the ZUNDAF for Zimbabwe, which covers the period 2016–2020. This was signed by the United Nations Resident Coordinator on the behalf of the Agency in May. The United Nations Partnership Agreement Framework for Indonesia was renewed in 2015, incorporating Indonesia’s planned national technical cooperation programme into the new United Nations comprehensive framework. In Europe, the Agency signed the UNDAF for Belarus in October. This document also describes the progress made in preparations for the introduction of nuclear power into the country’s energy mix. In November, the Agency signed the UNDAF for Georgia, covering the period 2016–2020. The Agency will contribute through its technical cooperation national projects to the country’s development in three of the eight outcomes contained in the document, covering livelihood and social protection, health, and human security and resilience. To date, the Agency has signed 42 UNDAFs in total.

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Cooperation with the United Nations and Other International Organizations

During the year, the Agency strengthened its cooperation with national focal points of the United Nations Convention to Combat Desertification (UNCCD) in support of sustainable land management in the Africa and the Asia and the Pacific regions. The Agency organized a side event at the twelfth session of the Conference of the Parties to the UNCCD (COP12) in Turkey, in collaboration with UNCCD national focal points in the environment ministries of Morocco and Madagascar. The environmental officials stressed the importance of embedding soil science (including soil erosion measurements using isotopes) not only in the national research agenda, but also in the national environmental decision making agenda.

The Agency continued its efforts to strengthen the relevance of its nutrition projects by linking them with national nutrition priorities in Member States as part of the Scaling Up Nutrition (SUN) movement. It reached out to the African Union led African Task Force on Food and Nutrition Development in South Africa in March, presenting planned nutrition interventions to better align them with national health priorities. To this end, a new interregional project on reducing stunting among children under five years of age has been developed jointly with Ministry of Health officials in participating countries. The first coordination meeting for this project took place in Vienna in August, with the participation of stunting-affected Member States, the World Bank, the SUN movement and other stakeholders.

To enhance the support given to countries affected by the Ebola virus disease and to better coordinate international efforts, the Agency participated in and organized meetings with the World Health Organization (WHO), the United States Centers for Disease Control and Prevention, South Africa’s National Institute for Communicable Diseases and other international partners. It also launched an extrabudgetary and off cycle cooperation programme to enhance regional capabilities to detect emerging zoonotic diseases, including Ebola virus disease and avian flu.

Under a technical cooperation project entitled ‘Supporting a Feasibility Study on the Suitability of the Sterile Insect Technique as a Strategy for the Integrated Control of *Anopheles Arabiensis*’, the Agency organized a meeting with the Islamic Development Bank, the Tropical Medicine Research Institute, the Permanent Mission of the Republic of the Sudan, and the Sudan Atomic Energy Commission. The meeting resulted in an agreement by the Islamic Development Bank to fund a gamma irradiator for applying the sterile insect technique to mosquitoes and the planning of an extensive recruitment programme; it also included an update on the construction of the mass rearing facility.

In the Asia and the Pacific region, five Practical Arrangements were concluded. These were with the International Center for Biosaline Agriculture, United Arab Emirates, to promote cooperation in the area of soil, water, crop and nutrient management; the Kuwait Institute for Scientific Research, for cooperation on marine environmental monitoring and protection; the King Hussein Cancer Center, Jordan, and the Chonnam National University, Republic of Korea, to establish the framework for cooperation in the area of capacity building for IAEA Curricula for Nuclear Medicine Professionals; and the National Oceanic and Atmospheric Administration, United States of America, for cooperation related to harmful algal blooms. These Practical Arrangements establish opportunities for joint programming and complementarities with a number of Member States, as well as the possibility of taking advantage of the expertise of specialized entities. An Agreement was also signed with the International Rice Research Institute in the Philippines, for cooperation in the field of enhanced rice productivity.

The Agency also played a role in the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) Forum in July, which established regional mechanisms for monitoring and accountability in transitioning from the Millennium Development Goals to the post-2015 development agenda (the SDGs).

In Latin America and the Caribbean, the Agency continued to expand its cooperation with traditional United Nations and non-United Nations partners, and to explore opportunities for cooperation in support of sustainable development with new partners in the region. In the field of human health, the Agency signed a Practical Arrangement with the Spanish Medical Colleges Organization (OMC) to work together to improve radiation medicine in countries in Latin America and the Caribbean. In addition, in conjunction with the Pan American Health Organization, the Agency organized several joint missions to support the health regulatory authorities of Member States.

The European Commission funded the First School of Emergency Management in Latin America and the Caribbean, implemented under a regional project entitled ‘Strengthening of National Capabilities for Response to Radiation Emergencies’ and held in Brazil at the end of 2015. In collaboration with the Food and Agriculture Organization of the United Nations (FAO) and UNCCD, and on the occasion of the 2015 International Year of Soils, the Agency improved regional capacities to measure soil water content, identify soil erosion patterns and soil degradation hot spots, and trace nitrogen fertilizer movement to optimize nitrogen use efficiency through a regional project entitled ‘Strengthening Soil and Water Conservation Strategies at the Landscape Level by Using Innovative Radio and Stable Isotope and Related Techniques’. The Agency strengthened its cooperation with the National Center for Electron Beam Research of Texas A&M University, and the Animal and Plant Health Inspection Service and the Agricultural Research Service of the United States Department of Agriculture, within the framework of a project entitled ‘Increasing the Commercial Application of Electron Beam and X Ray Irradiation Processing of Food’, to enhance phytosanitary control of fresh fruit and vegetables.

Finally, the Agency provided technical assistance to support national efforts to contain the outbreak of Mediterranean fruit fly detected in the Dominican Republic. An action plan was implemented in collaboration with FAO, the Inter-American Institute for Cooperation on Agriculture of the Organization of American States, the International Regional

Organization for Plant and Animal Health (OIRSA) and the United States Department of Agriculture.

Regional Agreements and Programming

Regional agreements and other Member State groups promote horizontal cooperation, self-reliance and sustainability. Agency collaboration with these groups has led to stronger regional technical cooperation programmes that are focused on priorities identified at the regional level.

The African Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology (AFRA) continues to be the principal framework for promoting technical cooperation among developing countries in Africa and for enhancing regional cooperation among its 39 State Parties.

During the 59th regular session of the Agency's General Conference, AFRA organized an exhibition to highlight the unique contribution of its 28 regional designated centres in different fields, including human health, food and agriculture, industry, safety, energy and isotope hydrology. The 26th Meeting of AFRA Representatives also took place during the 59th General Conference. Participants adopted the *AFRA Annual Report 2014* and the *AFRA Mid-Term Strategy 2016–2018*, which is aligned with the SDGs and the Common African Position on the post-2015 Development Agenda endorsed by the Heads of State and Government of the African Union.

In July 2015, Morocco hosted the 26th AFRA Technical Working Group Meeting in Marrakech. The meeting participants reviewed and adopted concrete measures and actions to further enhance the implementation of AFRA regional projects and the management of its cooperative activities.

AFRA continued to implement its partnership building and resource mobilization strategy through a series of meetings in December between the AFRA Chair and the Vienna-based African Group and Resident Representatives of donor and potential partner countries in Vienna, sharing information on AFRA's policy and programme related matters. In 2015, the total contribution of AFRA State Parties to the AFRA Fund was €298 211, demonstrating the Parties' continued commitment.

With regard to the 2016–2017 technical cooperation cycle, AFRA prepared six project designs in human health, food safety, radiation safety, technical cooperation among developing countries and triangular cooperation, and AFRA management. The new programme places high priority on enhancing human resource development and strengthening existing infrastructure in the region.

In the Asia and the Pacific region, the Board of Representatives of the Co-operative Agreement for Arab States in Asia for Research, Development and Training related to Nuclear Science and Technology (ARASIA) adopted the strategic document *ARASIA Strategy and Cooperative Thrusts (2018–2027)* in September as strategic guidance on the overall upstream planning of ARASIA activities for 2018–2027. The document serves as a frame of reference for the preparation of specific programmes. By leveraging existing regional collaboration, the ARASIA agreement can further accelerate the process of development, and enable a process of knowledge transfer and sharing of capabilities.

Also in the Asia and the Pacific region, the Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology (RCA) adopted its new medium term strategy for the period 2018–2023, identifying common strategic priorities to be addressed through the technical cooperation programme. The new strategy therefore provides an opportunity to address common regional challenges through enhanced south–south cooperation and provides direction for the development of future programme cycles.

Upstream work on the preparation of the Regional Programme Framework (RPF) for Asia and the Pacific (2018–2028) started in December with discussions on the mechanisms, the outline and the timeline for the document. The RPF will set priorities for the development of regional programming over the next ten years, complementing other related strategic documents and correlating priorities with the SDGs.

In the Europe region, two agreements to facilitate the implementation of regional projects in the human health sector were signed with the European Association of Nuclear Medicine and the European Society for Radiotherapy and Oncology, for the joint management of training courses in radiotherapy and nuclear medicine.

The Agency carried out a thorough assessment of the new technical cooperation regional programme for Europe, based on the priorities established in the Regional Profile for Europe. As in previous years, the main regional activities were within four priority thematic areas: human health, radioactive waste management and environment restoration, nuclear power, and nuclear and radiation safety.

The Regional Co-operation Agreement for the Promotion of Nuclear Science and Technology in Latin America and the Caribbean (ARCAL), which promotes and coordinates activities for training, development and applications of nuclear science and technology, was extended for the first time for an additional period of five years, effective as of 5 September 2015. With Agency support, the Guidelines and Operating Rules for the ARCAL Agreement were revised and updated. This will contribute to strengthening implementation of the Agreement and will ensure high quality in the development and delivery of the ARCAL programme.

The regional projects submitted by ARCAL for the 2016–2017 technical cooperation cycle address the needs and priorities identified in *ARCAL Regional Strategic Profile for Latin America and the Caribbean (RSP) 2016–2021* (IAEA-TECDOC-1763). The RSP served as a key programmatic tool for the development of the new proposals and is expected to help foster regional cooperation and promote cooperation between countries.

Programme of Action for Cancer Therapy (PACT)

The Agency continued to support low and middle income countries in strengthening national cancer control capacities throughout 2015, while advocating for the sustainable integration of radiation medicine in comprehensive national cancer control strategies.

In 2015, recognition of PACT's role as a key player in cancer control increased through the strengthening of ties with strategic partners and the organization of discussions at important cancer related events such as the Stop Cervical, Breast and Prostate Cancer in Africa Conference, held in Kenya, and the Islamic Conference of Health Ministers and the World Cancer Leaders' Summit, held in Turkey. The Agency also conducted a number of training and capacity building workshops during the year, including a workshop on resource mobilization for cancer control for ten Francophone countries held in November at the International Cancer Conference of the African Organisation for Research and Training in Cancer (AORTIC) in Morocco.

Integrated missions of PACT (imPACT) reviews, related expert missions and capacity building measures continued to provide Member States with a broad platform for country wide comprehensive cancer control planning and implementation. Through PACT, the Agency conducted eight imPACT review missions, to Algeria, Bosnia and Herzegovina, Dominica, El Salvador, Kyrgyzstan, Madagascar, Mauritania and Myanmar, and identified opportunities to strengthen healthcare relevant radiation safety infrastructure and improve the management of radioactive sources.

The Agency continued to support PACT Model Demonstration Sites in Ghana, Mongolia, Nicaragua, Sri Lanka, the United Republic of Tanzania and Viet Nam through expert advice, capacity building and the provision of training and equipment. For example, Mongolia upgraded the radiotherapy treatment planning system at the National Cancer

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Centre, with funding from Japan and the Principality of Monaco; Nicaragua continued to implement a project seeking to strengthen diagnosis of cervical and breast cancer at Bertha Calderón Hospital in Managua, with funding from Spain; Viet Nam initiated a cervical cancer screening campaign in the Hanoi and Can Tho regions, with funding from the OPEC Fund for International Development (OFID); and the United Republic of Tanzania continued to enhance palliative care services, also funded through OFID.

Following the completion in 2014 of the first five year cycle of the Advisory Group on Increasing Access to Radiotherapy Technology in Low and Middle Income Countries (AGaRT), the Agency facilitated a consultation process to plan for the group's next phase (2015–2020). AGaRT's objective is to provide advice to Member States on access to affordable, sustainable, quality radiotherapy solutions through maximizing opportunities offered by existing global initiatives and partnerships in cancer control programming.

Within the framework of the United Nations Interagency Task Force on the Prevention and Control of Non-Communicable Diseases, preparatory work continued on the joint project on cancer control being undertaken by the Agency, the International Agency for Research on Cancer (IARC) and WHO, which aims to support the planning and implementation of comprehensive cancer control programmes in a selected group of Member States.

Following the conclusion of the pilot phase of the Virtual University for Cancer Control and Regional Training Network (VUCCnet) in December 2014, the programme underwent a full review in 2015. The results confirmed VUCCnet's ability to substantially contribute to improving human capacity development and training in low and middle income countries. As requested by Member States, plans are being developed to scale up the project across sub-Saharan Africa.

Donors remained unwavering in their commitment to PACT's efforts to strengthen national cancer control capacities. In 2015, PACT received €719 765 in extrabudgetary contributions from Agency Member States and partners for cancer control activities.

Through PACT, the Agency provided input from a comprehensive cancer control perspective to the preparation of technical cooperation projects for the 2016–2017 technical cooperation programme cycle. This informed many components, including national cancer control infrastructure and capacity, the involvement of relevant stakeholders and partners, and the development of resource mobilization strategies and targeted opportunities.

Outreach and Communication

Agency outreach to Member States, current and potential partners, donors and the international development community was undertaken through a range of different communication channels in 2015. These included attendance at relevant meetings, participation in exhibitions, and presentations on the technical cooperation programme at various outreach and training events. The Agency used these opportunities to showcase its work in specific topic areas and to raise awareness of its technical cooperation programme among potential partners.

Exhibitions focusing on technical cooperation activities were organized at the International Conference on Global Emergency Preparedness and Response, the Asia-Pacific Forum on Sustainable Development 2015, and the Technical Meeting on Topical Issues in the Development of Nuclear Power Infrastructure, among others. At the 59th regular session of the Agency's General Conference, the Agency hosted a number of side events related to technical cooperation. These included a session to explore the Agency's role in the post-2015 development agenda and its potential contribution to the achievement of the SDGs; the introduction of a cancer staging smartphone application for medical professionals, developed through a project entitled 'Improving Cancer Management Through Strengthening the Computed Tomography Cancer Staging Process'; and the presentation of Member State experience and successes in soil management, highlighted at a side event entitled 'Managing

Soils for Climate Smart Agriculture'. The Programme of Action for Cancer Therapy also held a side event on addressing cancer, entitled 'The Future We Want'.

In October, the Agency held the Annual Seminar on Technical Cooperation for Diplomats at its Headquarters in Vienna. Designed to provide Permanent Missions with a comprehensive overview of the technical cooperation programme, the seminar was attended by 55 participants.

The Agency also posted targeted outreach material of relevance to specific 'United Nations Days', including World Cancer Day, World Water Day, World Environment Day and International Women's Day, using social media and the web to promote relevant technical cooperation activities.

The technical cooperation web site was updated with 94 web articles, 9 photo essays and 10 videos during 2015, and now has some 9476 visitors a month. In 2015, the site received over 113 000 visits. More than 900 tweets were sent out from the @IAEATC Twitter account. As of December 2015, the account had over 2500 followers, and the IAEA TC Fellows Alumni Group on LinkedIn now has over 1400 members. The Agency issued a number of new outreach products, including new technical cooperation project success stories and fact sheets on emergency preparedness and response, and soil conservation.

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Legislative Assistance

In 2015, the Agency continued to provide legislative assistance to its Member States through the technical cooperation programme. Country specific bilateral legislative assistance was provided to 18 Member States through written comments and advice on drafting national nuclear legislation. The Agency also reviewed the legislative framework of newcomer countries as part of Integrated Nuclear Infrastructure Review missions. Short term scientific visits to Agency Headquarters were organized for a number of individuals, allowing fellows to gain further practical experience in nuclear law.

The Agency organized the fifth session of the Nuclear Law Institute, held in Baden, Austria, from 28 September to 9 October 2015. The comprehensive two week course, which uses teaching methods based on interaction and practice, is designed to meet the increasing demand by Member States for legislative assistance and to enable participants to acquire a solid understanding of all aspects of nuclear law, as well as to draft, amend or review their national nuclear legislation. Sixty-three representatives from Member States participated. The Agency also continued to contribute to the activities organized at the World Nuclear University and the International School of Nuclear Law by providing lectures and sponsoring participants through appropriate technical cooperation projects.

Training courses and workshops on nuclear law were organized in Costa Rica, Guatemala, Malaysia and South Africa, drawing 60 participants from these countries. The workshops addressed all aspects of nuclear law and created a forum for the exchange of views on topics relating to the international legal instruments.

Treaty Event

The Agency's fifth Treaty Event took place during the 59th regular session of the General Conference, providing Member States with a further opportunity to deposit their instruments of ratification, acceptance or approval of, or accession to, the treaties deposited with the Director General, notably those related to nuclear safety, security and civil liability for nuclear damage. The special focus of this year's Treaty Event was again the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM). Representatives from several Member States were also briefed on the conventions adopted under Agency auspices.