International Conference on the AEA Technical Cooperation Programme Sixty years and beyond **Contributing for the State S**

30 May-1 June 2017

Board Room B/M1 First Floor, M-Building Vienna, Austria

Programme







3 GOOD HEALTH AND WELL-BEIN

_/\/





17 PARTNERSHIPS FOR THE GOALS

B

13 CLIMATE

15 UFE ON LAND

2



Tuesday, 30 May 2017

9:30–11:00

Opening session

Moderator: Mr Dazhu Yang, Deputy Director General, Head of the Department of Technical Cooperation, IAEA

Mr Yukiya Amano, Director General, IAEA His Excellency Mr Tabaré Vázquez, President, Eastern Republic of Uruguay Her Excellency Ms Ameenah Gurib-Fakim, President, Republic of Mauritius Her Excellency Sheikh Hasina, Hon'ble Prime Minister, Government of the People's Republic of Bangladesh

His Excellency Tebogo Joseph Seokolo, Chairman of the IAEA Board of Governors Mr René Castro Salazar, Assistant Director-General, Food and Agriculture Organization of the United Nations (FAO)

11:00–12:30 **Session 1** The evolving IAEA Technical Cooperation Programme (TCP)

Session moderator: Mr Martin Nesirky, Director, United Nations Information Service, Vienna

Session 1 will set the stage for the Conference, with particular emphasis on how the IAEA's technical cooperation (TC) programme has contributed to the establishment of national nuclear infrastructure and capabilities in support of national development priorities.

IAEA film: Technical Cooperation – The IAEA's Driving Force for Development

TCP features and trends

Mr Shaukat Abdulrazak, Director, Division for Africa, Department of Technical Cooperation, IAEA

Member States' journey with the TCP: achievements and impact

Achievements and impact of the TCP in Bosnia and Herzegovina HE Mr Igor Crnadak, Minister, Ministry of Foreign Affairs, Bosnia and Herzegovina

Achievements and impact of the TCP in China Mr Yongde Liu, Secretary General, China Atomic Energy Authority (CAEA), China

Achievements and impact of the TCP in Cuba

HE Ms Elba Rosa Pérez Montoya, Minister, Ministry of Science, Technology and Environment, Cuba

Achievements and impact of the TCP in Egypt

HE Mr Mohamed Hamed Shaker El-Markabi, Minister, Ministry of Electricity and Renewable Energy, Egypt

Achievements and Impact of TCP in Indonesia

HE Mr Mohammad Nasir, Minister of Research, Technology and Higher Education, Indonesia

12:30–14:00 Lunch

14:00–17:30 **Session 2** The IAEA TC programme: Contributing to Member States' national development

This session will present Member State experiences in leveraging the support of the TC programme to address pressing developmental challenges. Through six sub-sessions, the focus will be on the impact of nuclear science and technology in key thematic areas, including human health and nutrition, food and agriculture, water and the environment, radiation technology, energy and safety, linking IAEA support in these sectors to sustainable development.

14:00–15:00 Session 2.1 Human health and nutrition



Session moderator: Ms Najat Mokhtar, Director, Division for Asia and the Pacific, Department of Technical Cooperation, IAEA

Overview of nuclear applications in human health and nutrition Ms May Abdel Wahab, Director, Division of Human Health, Department of Nuclear Sciences and Applications, IAEA

Safe cancer treatment with radiotherapy

Mr Eduard Gershkevitsh, Head, Medical Physics Service Radiotherapy Centre, North Estonia Medical Centre, Estonia

Enhancing cancer management

Mr Abdul Jalil Nordin, Dean, Faculty of Medicine and Health Sciences, Putra University Malaysia (UPM), Malaysia

Tissue grafting for human health Ms Susana M. Petrick, President, Peruvian Institute of Nuclear Energy, Peru

Improving infant and mother nutrition

Ms Wade Salimata, Former Director, Nutrition Laboratory, Cheikh Anta Diop University (UCAD), Senegal

Panel: Future perspectives of the TCP in human health and nutrition

HE Mr Alassane Seidou, Minister, Ministry of Health, Benin

Mr Jun Hatazawa, President, Asia and Oceania Federation of Nuclear Medicine and Biology, Professor at Osaka University, Japan

Mr Noël Marie Zagre, Regional Nutrition Adviser, UNICEF Regional Office for West and Central Africa

Mr Pablo Jiménez, Regional Advisor on Radiological Health, World Health Organization (WHO)/Pan American Health Organization (PAHO)

15:00–16:00 Session 2.2 Food security



Session moderator: Ms Najat Mokhtar, Director, Division for Asia and the Pacific, Department of Technical Cooperation, IAEA

Overview of nuclear applications in food and agriculture

Mr Qu Liang, Director, Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture, Department of Nuclear Sciences and Applications, IAEA

Breeding new crop varieties to support food security

Mr Mirza Mofazzal Islam, Chief Scientific Officer and Head, Plant Breeding Division, Bangladesh Institute of Nuclear Agriculture, Bangladesh

Increasing crop production

Mr Pascal Houngnandan, Vice Rector, National University of Agriculture (UNA), Benin

Enhancing fruit and vegetable safety through pest control

Mr Oscar Antonio Zelaya Estradé, Executive Director, MOSCAMED Programme, Guatemala

Improving livestock production through artificial insemination

Mr Yussuf Haji Khamis, Director, Department of Livestock Development, Ministry of Agriculture, Natural Resources, Livestock and Fisheries, Zanzibar, United Republic of Tanzania

Panel: Future perspectives of the TCP in food and agriculture

Mr Thierry Lefrancois, Director, Joint Research Unit on Animal Health, International Cooperation Centre of Agricultural Research for Development (CIRAD), France

Mr Kauser Malik, Former Chairman, Pakistan Agricultural Research Council, Pakistan

Ms Rebecca Bech, Associate Deputy Administrator, United States Department of Agriculture, United States of America

Ms Ismahane Elouafi, Director General, International Center for Biosaline Agriculture (ICBA)

16:00–16:30 Coffee break

16:30–17:30 Session 2.3 Clean water and environment



Session moderator: Mr David Osborn, Director, IAEA Environment Laboratories, Department of Nuclear Sciences and Applications, IAEA

Overview of nuclear and isotopic applications in water and environmental management

Mr David Osborn, Director, IAEA Environment Laboratories, Department of Nuclear Sciences and Applications, IAEA

Optimizing water resource development

Mr Héctor Mario Herrera Parra, Specialist in Environmental Sciences, Regional Autonomous Corporation of Sucre, Colombia

Evidence-based water resources management

Mr Hamid Marah, Scientific Director, National Centre for Nuclear Energy, Sciences and Technology (CNESTEN), Morocco

Protecting our oceans from harmful algal bloom

Ms Elvira Z. Sombrito, Former Chemistry Section Head, Philippine Nuclear Research Institute, Philippines

Climate change and its impact on water resources

Ms Elena Finaeva, Scientist, Institute of Water Problems, Hydropower Engineering and Ecology, Academy of Sciences of the Republic of Tajikistan, Tajikistan

Panel: Future perspectives of the TCP in water and the environment

Ms Muhayatun Santoso, Senior Researcher, Center for Applied Nuclear Science and Technology, National Nuclear Energy Agency (BATAN), Indonesia

Mr John Ramsdell, Chief, Harmful Algal Bloom Research and Analytical Response Branch, National Oceanic and Atmospheric Administration (NOAA), United States of America

Mr Harald Egerer, Head, UNEP Vienna Office, Secretariat of the Carpathian Convention, United Nation Environment Programme (UNEP)

Mr Henrik Enevoldsen, Head, Science and Communication Centre on Harmful Algae, Intergovernmental Oceanographic Commission (IOC), United Nations Educational, Scientific and Cultural Organization (UNESCO) International Conference on the IAEA Technical Cooperation Programme

Sixty years and beyond

Contributing to development

Wednesday, 31 May 2017

09:30–12:30 **Session 2** *(continued)* The IAEA TC programme: Contributing to Member States' national development

09:30–10:20 Session 2.4 Innovative solutions in industry



Session moderator: Ms Meera Venkatesh, Director, Division of Physical and Chemical Sciences, Department of Nuclear Sciences and Applications, IAEA

Overview of applications in radiation technology

Ms Meera Venkatesh, Director, Division of Physical and Chemical Sciences, Department of Nuclear Sciences and Applications, IAEA

Supporting human health through radiopharmaceutical production Mr Jair Mengatti, Director, Radiopharmacy Center, Nuclear and Energy Research Institute (IPEN), Brazil

Quality control and inspection of oil pipelines through non destructive testing Mr David Ekoume, Director General, HYDRAC S.A., Cameroon

Innovative solutions for wastewater treatment

Mr Shijun He, Vice Director, Department of Environmental Application, Institute of Nuclear and New Energy Technology (INET), China

Fostering industrial development through radiation technology

Mr Andrzej G. Chmielewski, Director General, Institute of Nuclear Chemistry and Technology (INCT), Poland

Panel: Future perspectives of the TCP in industry

Mr Gilles Bignan, Head, User Facility Manager, The Jules Horovitz Research Reactor, French Alternative Energies and Atomic Energy Commission, France

Mr. Gautam Kumar Dey, Director, Materials Group, Bhabha Atomic Research Centre, India

Mr Tak Hyun Kim, Principal Researcher, Research Division for Industry and Environment, Advanced Radiation Technology Institute (ARTI), Korea Atomic Energy Research Institute (KAERI), Republic of Korea

Mr Robin Grimes, Chief Scientific Adviser, Foreign and Commonwealth Office, United Kingdom

10:20-11:10

Session 2.5 Energy planning and nuclear power infrastructure



Session moderator: Mr Ed Bradley Jr, Programme Coordinator, Department of Nuclear Energy, IAEA

Overview of energy planning

Mr Irej Jalal, Head, Planning and Capacity Building Unit, Department of Nuclear Energy, IAEA

Overview of nuclear power infrastructure

Mr Milko Kovachev, Head, Nuclear Infrastructure Development Section, Department of Nuclear Energy, IAEA

Capacity building for nuclear power plant life extension

Mr Osvaldo Calzetta Larrieu, President, National Atomic Energy Commission (CNEA), Argentina

Supporting safe operation of nuclear power plants

Mr Aleksei Raiman, Senior Counsellor, Permanent Mission of the Republic of Belarus to the IAEA, Belarus

Sustainable energy development

Mr Phumzile Tshelane, Chief Executive Officer, South African Nuclear Energy Corporation (Necsa), South Africa

Building national capabilities for managing nuclear power programmes

HE Mr Hamad Al-Kaabi, Resident Representative, Permanent Mission of the United Arab Emirates to the IAEA, United Arab Emirates

Panel: Future perspectives of the TCP in energy planning and nuclear power infrastructure

Mr Donato Marcos, Undersecretary, Department of Energy, Philippines

HE Mr Shi Zhongjun, Resident Representative, Permanent Mission of the People's Republic of China to the IAEA, China

Mr Khaled Toukan, Chairman, Jordan Atomic Energy Commission (JAEC), Jordan

Mr Andràs Molnar, Advisor to the Director General, Hungarian Atomic Energy Authority (HAEA), Hungary

Mr Joseph K. Njoroge, Principal Secretary, Ministry of Energy and Petroleum, Kenya

11:10–11:30 Coffee break

11:30–12:30 Session 2.6 Radiation and nuclear safety infrastructure



Session moderator: Mr Gustavo Caruso, Director, Office of Safety and Security Coordination, Department of Nuclear Safety and Security, IAEA

Overview of radiation and nuclear safety

Mr Peter Johnston, Director, Division of Radiation, Transport and Waste Safety, Department of Nuclear Safety and Security, IAEA

Upgrading regulatory infrastructure

HE Mr César Cardozo, Minister, Radiological and Nuclear Regulatory Authority (ARRN), Paraguay

Promoting nuclear and radiation safety

Ms Indah Annisa, Head, International Cooperation, Nuclear Energy Regulatory Agency (BAPETEN), Indonesia

Supporting the establishment of the safety infrastructure: achievement of a successful TC model project

Mr Khammar Mrabit, Director General, Moroccan Nuclear and Radiation Safety and Security Agency (AMSSNuR), Morocco

Supporting radiation safety for occupational exposure

Mr Shamsideen B. Elegba, Former Director General, Nigerian Nuclear Regulatory Authority, Nigeria

Safely managing radioactive wastes

Mr Horia Grama, President, Nuclear and Radioactive Waste Agency (ANDR), Romania

Panel: Advancing radiation safety capabilities and culture

Mr Emi Reynolds, Director General, Nuclear Regulatory Authority, Ghana

Ms Nanthavan Ya-anant, Head, Radioactive Waste Management Section, Thailand Institute of Nuclear Technology (TINT), Thailand

Mr Jack Ramsey, Senior Advisor, Office of International Programs, Nuclear Regulatory Commission (NRC), United States of America

Mr Vince Novak, Director, Nuclear Safety Department, European Bank for Reconstruction and Development (EBRD)

Mr Pablo Jiménez, Regional Advisor on Radiological Health, WHO/PAHO

12:30–14:00 Lunch

12:30–14:00 IAEA Roundtable: The Role of the Private Sector: Partnerships for Development, Board Room A

14:00–17:30 **Session 3** Taking a regional approach: Cooperation to address common development issues

This session will present the TC regional programme approach to addressing common issues. Discussions will focus on the advantages and modalities of regional cooperation, how the IAEA and Member States can enhance regional cooperation for better delivery of the TC programme, and the role of South–South and North–South cooperation in contributing towards sustainability.



IAEA modalities and initiatives for enhancing south–south and north–south cooperation between IAEA Member States Mr Luis Carlos Longoria Gandara, Director, Division for Latin America and the Caribbean, Department of Technical Cooperation, IAEA

14:05–14:45 Example from Latin America and the Caribbean

Moderator: Mr Luis Carlos Longoria Gandara, Director, Division for Latin America and the Caribbean, Department of Technical Cooperation, IAEA

Regional efforts for combating Zika virus in Latin America Ms Margareth Capurro Guimarães, Associate Professor, University of São Paulo, Brazil

Panel: Lessons learned and best practices for future regional collaboration

HE Mr José Antonio Galdames, Minister, Ministry of Energy, Natural Resources, Environment and Mines, Honduras

HE Mr Marcel Fortuna Biato, Resident Representative, Permanent Mission of Brazil to the IAEA, Chair of the ARCAL Agreement, Brazil

Mr Patricio Aguilera Poblete, Executive Director, Chilean Nuclear Energy Commission (CCHEN), Chile

Ms Hillary Alexander, Permanent Secretary, Ministry of Science, Energy and Technology, Jamaica

Ms Lydia Paredes-Gutiérrez, Director General, National Institute for Nuclear Research (ININ), Mexico

Contributing to development

14:45–15:30 Example from Africa

Moderator: Mr Shaukat Abdulrazak, Director, Division for Africa, Department of Technical Cooperation, IAEA

Addressing water scarcity in Africa

Mr Callist Tindimugaya, Head, Department of Water Resource Planning and Regulation, Ministry of Water and Environment, Uganda

Panel: Lessons learned and best practices for future regional collaboration

Mr Abdelouahab Smati, Director, Mobilization of Water Resources, Ministry of Water Resources and Environment, Algeria

Mr Atef Abdel-Hameed Abdel-Fattah El-Kadime, Chairman, Egyptian Atomic Energy Authority (EAEA), Chair of the AFRA Agreement, Egypt

Mr Shiloh Dedeh Osae, Deputy Director-General, Ghana Atomic Energy Commission, Ghana

Mr Cheikh Gaye, Retired Professor of Hydrogeology, Cheikh Anta Diop University (UCAD), Senegal

Mr Abdel Kader Dodo, Head, Water Department, Sahara and Sahel Observatory (OSS), Tunisia

15:30–15:50 Coffee break

15:50–16:30 Example from Europe

Moderator: Mr Martin Krause, Director, Division for Europe, Department of Technical Cooperation, IAEA

Remediation of radiation contaminated lands: experience of Europe

Mr Iossif M. Bogdevitch, Expert, Belarusian Research Institute for Soil Science and Agrochemistry (BRISSA), Belarus

Panel: Lessons learned and best practices for future regional collaboration

Mr Mikhail Balonov, Head, Protection Laboratory, Scientific Research Institute of Radiation Hygiene, Russian Federation

Mr Bakhtiyor Gulyamov, State Inspectorate "Sanoatgeokontexnazorat" under the Cabinet of Ministers (SGKTN), Uzbekistan

Mr Valerii Kashparov, Director, Ukrainian Institute of Agricultural Radiology (UIAR), Ukraine

Mr Vince Novak, Director, Nuclear Safety Department, European Bank for Reconstruction and Development (EBRD)

16:30–17:10 Example from Asia and the Pacific

Moderator: Ms Najat Mokhtar, Director, Division for Asia and the Pacific, Department of Technical Cooperation, IAEA

Integrated strategies to address urban air improvement: experience of Asia and the Pacific

Ms Muhayatun Santoso, Senior Researcher, Center for Applied Nuclear Science and Technology, National Nuclear Energy Agency (BATAN) Indonesia,

Panel: Lessons learned and best practices for future regional collaboration

Mr Mark Alexander, International Affairs Manager, Nuclear Security, Government and International Affairs, Australian Nuclear Science and Technology Organisation (ANSTO), Australia

Mr Jafar Sadique, Chief Engineer and Director, Engineering Division, Bangladesh Atomic Energy Commission (BAEC), Chair of the RCA Agreement, Bangladesh

Mr Bilal Nsouli, General Director, Lebanese Atomic Energy Commission (LAEC), Chair of the ARASIA Agreement, Lebanon

Mr Hai Joo Moon, Director, RCA Regional Office (RCARO), Republic of Korea

Ms Samjhana Shrestha, Senior Economist, Environment, Natural Resources, and Agriculture Division, Asian Development Bank (ADB), Philippines

Ms Ismahane Elouafi, Director General, International Center for Biosaline Agriculture (ICBA), United Arab Emirates

17:10–17:30 Addressing global issues through interregional cooperation

Moderator: Ms Najat Mokhtar, Director, Division for Asia and the Pacific, Department of Technical Cooperation, IAEA

Supporting human capacity building and education through regional efforts: the case of the SESAME Project Mr Khaled Toukan, Chairman, Jordan Atomic Energy Commission (JAEC), Jordan

Panel: Lessons learned and best practices for future interregional collaboration

Mr Jean-Pierre Koutchouk, Senior Accelerator Scientist, Honorary Member of the European Organization for Nuclear Research (CERN)

Ms Clarissa Formosa Gauci, Secretary of the SESAME Council, United Nations Educational, Scientific and Cultural Organization (UNESCO)

18:00–20:00 Reception

Thursday, 1 June 2017

09:30–12:30 **Session 4** Global partnership for sustainable development

This session focuses on the IAEA's approach to building lasting and mutually beneficial partnerships with Member States and development organizations. In particular, it will highlight how the IAEA's TC programme has helped Member States to establish effective strategic partnerships with countries and development organizations. The session will examine how collaborative modalities may best evolve, given the new development context of Agenda 2030.



Session moderator: Mr Martin Nesirky, Director, United Nations Information Service, Vienna

Partnership in the TC programme

Ms Ana Raffo-Caiado, Director, Division of Programme Support and Coordination, Department of Technical Cooperation, IAEA

Examples of successful partnerships:

Partnership to fight cancer

Ms Nelly Enwerem-Bromson, Director, Division of Programme of Action for Cancer Therapy, Department of Technical Cooperation, IAEA

Eradication of Rinderpest from Africa

Mr Karim Tounkara, Regional Representative for Africa, World Organisation for Animal Health (OIE)

Addressing food value chain in Indonesia

Mr Philippe Scholtès, Managing Director, Programme Development and Technical Cooperation, United Nations Industrial Development Organization (UNIDO)

Panel: Collective efforts to advance partnership in the TC programme

HE Mr Didier Lenoir, Ambassador, European Union

HE Mr Jean-Louis Falconi, Resident Representative, Permanent Mission of France to the IAEA, France

Mr Takeshi Nakane, Special Assistant to the Minister for Foreign Affairs, Ministry of Foreign Affairs, Japan

Mr Xiaodong Liu, Vice President, East China Institute of Technology, China

Mr Vladimir P. Kuchinov, Advisor to the Director General, State Atomic Energy Corporation "Rosatom", Russian Federation

Mr Andrew Schofer, Chargé d'affaires a.i., Permanent Mission of the United States of America to the IAEA, United States of America

Mr Walid Mehalaine, Head, Grants and Technical Assistance Unit, Public Sector Operations Department, OPEC Fund for International Development (OFID)

11:00–11:20 Coffee break

11:20-12:30

Keynote speaker: The new dimension of global partnerships

Mr Paul Ladd, Director, United Nations Research Institute for Social Development (UNRISD)

Examples of public-private partnerships

Mr Suresh D. Pillai, Director, National Center for Electron Beam Research, Texas A&M University, United States of America

Mr Zulkafli Ghazali, Director, Radiation Processing Technology Division, Malaysian Nuclear Agency, Malaysia

Mr Chang Choy Chan, Chief Executive Officer, Wonderful Ebeam Cable, Malaysia

Testimony

Mr Ilham Akbar, Founding Manager, Salewangang Rice Seed Breeding Company, Indonesia

Panel: Innovative partnerships for the future

Mr Kaname Kanai, Executive Technical Advisor, Human Development Department, Japan International Cooperation Agency (JICA), Japan

Ms Dineo Mathlako, Director, African Renaissance and International Cooperation Fund (ARF), South Africa

Ms Samjhana Shrestha, Senior Economist, Environment, Natural Resources, and Agriculture Division, Asian Development Bank (ADB)

Mr Carl James Hospedales, Executive Director, Caribbean Public Health Agency (CARPHA)

Mr Abdul-Hakim Elwaer, Director, Cooperation and Integration Department, Islamic Development Bank (IDB)

Mr S.M. Ziauddin Hyder, Senior Nutrition Specialist, World Bank

12:30–14:00 Lunch

14:00-17:00 **Session 5** Beyond the horizon: paving the way to the future

In looking to the future, Session 5 brings together high level speakers and panellists to examine appropriate approaches and concrete measures that will help countries to maximize their use of nuclear science and technology in pursuit of the achievement of key Sustainable Development Goal (SDG) targets



Session moderator: Mr Martin Nesirky, Director, United Nations Information Service, Vienna

Keynote speaker: Science, technology and innovation in support of development

Mr Paul Ladd, Director, United Nations Research Institute for Social Development (UNRISD)

Panel: Strengthening Member States' capabilities in nuclear science, technology and innovation to meet their development needs

HE Mr Mary Teuw Niane, Minister, Ministry of Higher Education and Research, Senegal

Mr Andreas Richter, Professor, Department of Microbiology and Ecosystem Science, University of Vienna, Austria

Mr Benoît Martimort-Asso, Head, International Affairs unit, Institute of Research for Development (IRD), France

Mr Charles Abechi Oko, First Secretary, Permanent Mission of Nigeria to the IAEA, Nigeria

Mr Cameron Diver, Deputy Director-General, Secretariat of the Pacific Community (SPC)

Mr Aldo Malavasi, Deputy Director General, Head of the Department of Nuclear Sciences and Applications, IAEA

Coffee break 15:00-15:20

15:20–16:30 Panel: Looking into the future: contributing to the 2030 agenda for sustainable development

HE Ms Elba Rosa Pérez Montoya, Minister, Ministry of Science, Technology and the Environment, Cuba

HE Mr Seremaia Matai Nawalu, Minister, Ministry of Agriculture, Fisheries, Livestock and Forestry, Vanuatu

Mr Shantanu Mukherjee, Chief, Policy and Analysis Branch, Division for Sustainable Development, United Nations Department of Economic and Social Affairs (UNDESA)

Mr Juan Carlos Lentijo, Deputy Director General, Head of the Department of Nuclear Safety and Security, IAEA

Mr Dazhu Yang, Deputy Director General, Head of the Department of Technical Cooperation, IAEA

16:30–17:00 Closing session

Keynote speaker

Science for peace: borderless innovation for creative change HRH Princess Sumaya bint El Hassan, President, Royal Scientific Society, Jordan

Mr Dazhu Yang, Deputy Director General, Head of the Department of Technical Cooperation, IAEA



This programme is available in Arabic, Chinese, French, Russian and Spanish on the conference web page: All speakers have been listed in the alphabetical order of their respective countries, or in conformity with protocol. This programme does not include any changes made after 24 May 2017.



International Atomic Energy Agency PO BOX 100, Vienna International Centre 1400 Vienna, Austria Tel.: (+43-1) 2600-0 Fax: (+43-1) 2600-7 www.iaea.org