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GC65 Special Edition, October 2021

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Foreword by the Director – Division for Africa



As the world continues to adapt to the pandemic and related restrictions, we were glad to see many of our friends and counterparts from Africa visiting IAEA headquarters to attend the 65th IAEA General Conference (GC65) in person. It was a pleasure

for me to meet with 23 delegations of African Member States headed by distinguished officials, including Ministers and Deputy Ministers from the Ministries of Health, Energy, Environment, and Education, as well as the Chairs of Atomic Energy Commissions/Authorities, and the Ambassadors and Permanent Representatives of several African Member States to the IAEA.

For those with whom we did not have the chance to interact, we are delighted to release this special edition newsletter which contains key highlights for the Division for Africa during GC65 week.

New Country Programme Frameworks were signed for Burundi, Djibouti, Egypt, Ghana and Niger, covering the period 2022–2027.

Strategic discussions were held with Ministers, Ambassadors and high-level government officials on urgent national issues related to their respective national programmes.

Three esteemed experts from Africa were invited by the Agency to speak about their expertise and valuable contributions in combatting zoonotic diseases at this year's Scientific Forum on 'Preparing for Zoonotic Outbreaks: The Role of Nuclear Science'.

A side event featured Africa's achievements and strategic programmatic direction in enhancing human resource development in nuclear science and technology. In addition, the Division for Africa participated in a side event on gender equity, organized in cooperation with the Global Women in Nuclear (WiN).

Above all, the 65th General Conference offered the opportunity to meet Member States representatives in person. I take this opportunity to thank you all for your active engagement, commitment, resilience and leadership, which underpinned the active participation of Africa at GC65.

I look forward to our continued collaboration in strengthening the role of African men and women in nuclear science and technology, and for more successes and achievements in pursuit of our continent's aspirations.

Shaukat Abdulrazak, Director, Division for Africa

Web Story *New CPFs signed*

Five Country Programme Frameworks (CPF) were signed on the margins of the 65th IAEA General Conference.

Djibouti

On 20 September 2021, HE Dr Nabil Mohamed Ahmed, Minister of Higher Education and Research, Djibouti, and Mr Hua Liu, IAEA Deputy Director General and Head of the Department of Technical

Cooperation, signed Djibouti's first CPF for the period 2022–2027.



HE Dr Nabil Mohamed Ahmed, Minister of Higher Education and Research, Djibouti, together with DDG-TC Hua Liu at the signing ceremony for Djibouti's CPF.

The new CPF identifies seven national priority areas: human health and nutrition (cancer control and non-communicable diseases), food and agriculture (soil and crop management, and food safety), water resource management, environmental protection and climate change, energy planning, mining exploration, and radiation protection.

Burundi

On 23 September 2021, Ambassador Remy Barampama, Technical Adviser to the Minister of Foreign Affairs and Development Cooperation, and DDG-TC Hua Liu signed Burundi's second CPF for the period 2021–2026.



Ambassador Rémy Barampama and DDG-TC at the signing ceremony for Burundi's CPF.

The new CPF identifies five priority areas: nuclear and radiation safety, food and agriculture, human health, water resource management and environment, and tertiary education programme on nuclear science and technology.

Niger

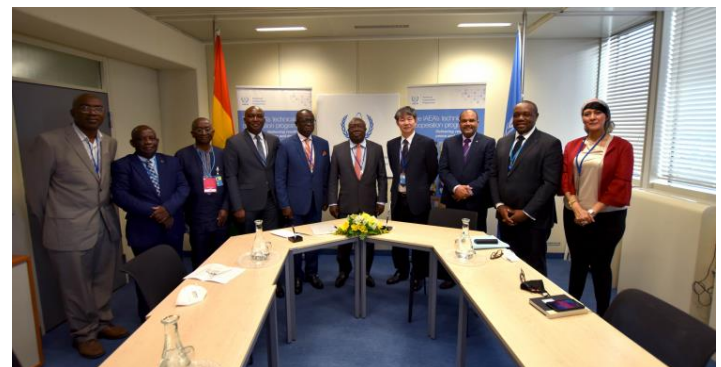
On 21 September 2021, HE Mr Mahamane Sani Mahamadou, the Minister of Petroleum, Energy and Renewable Energies of Niger, and DDG-TC Hua Liu signed Niger's fourth CPF for the period 2022–2027.



HE Mr Mahamane Sani Mahamadou, Minister of Petroleum, Energy and Renewable Energies of Niger, with DDG-TC, DIR-TCAF, Section Head and Niger PMO at the CPF signing ceremony for Niger.

The new CPF identifies five priority areas: nuclear and radiation safety and security, food and agriculture, health and nutrition, water and the environment, and mining, energy, and industry.

Ghana



Dr Kwaku Afriyie, Ghana's Minister of Environment, Science, Technology and Innovation, together with DDG-TC, DIR-TCAF, Section Head in TCAFI, and the respective PMO at the CPF signing event.

HE Dr Kwaku Afriyie, Minister of Environment, Science, Technology and Innovation of Ghana, and DDG-TC Hua Liu signed Ghana's fourth CPF for the period 2022–2027 on 22 September 2021.

The new CPF identifies seven priority areas: nuclear safety and security, food and agriculture, human health and nutrition, water resources and environment, energy (nuclear power development), nuclear knowledge management, and applications.

Egypt

Dr Amr Elhag Ali, Chairman of the Egyptian Atomic Energy Authority, and DDG-TC Hua Liu signed Egypt's fourth CPF for the period 2022–2027 on 21 September.



Dr Amr Elhag Ali, DDG-TC, DIR-TCAF, and the TCAF1 Section Head at the signing ceremony for Egypt's CPF.

The new CPF identifies seven priority areas: nuclear and radiation safety and nuclear security, energy planning and nuclear power, industrial applications/radiation technology, water and environment, food and agriculture, human health, and nuclear knowledge development and management.

Nader Hajizadeh, PO, TCAF

Zimbabwe Joins Four Multilateral Treaties in Nuclear Safety and Security

The Republic of Zimbabwe pledged its commitment to nuclear safety and security by depositing legal instruments and therefore becoming a party to various international treaties under the auspices of the IAEA. Zimbabwe, which uses nuclear technologies in health, agriculture and research, joined the Convention on Early Notification of a Nuclear Accident, the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, the Convention on the Physical Protection of Nuclear Material (CPPNM), as well as the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.

Mr Soda Zhemu, Minister of Energy and Power Development, handed over the instruments to IAEA Director General Rafael Mariano Grossi at a short ceremony held during the annual Treaty Event on the margins of GC65.

Enhancing Human Resource Development in Nuclear Science and Technology in Africa *TCAF Side Event*

The Division for Africa organized a side event on enhancing Human Resource Development in Nuclear Science and Technology in Africa on the margins of the 65th IAEA General Conference.

The event was moderated by Mickel Edwerd, Section Head in TCAF1, and was followed by a presentation from Shaukat Abdulrazak, DIR-TCAF, entitled, *Overview of the IAEA Human Resource Development Programmes and Collaboration with Regional and International Partners with the Aim to Address HR Needs in Africa.*

Mr Abdulrazak emphasized that the curriculum development and content already available in different fields of nuclear science and technology are of the utmost importance, as these can help to identify what other areas to build on. He noted that the ongoing academic programmes of the Division for Africa and the IAEA in general, including long-term training programs such as the PhD Sandwich programme, the AFRA Masters Programme, Masters in Radiopharmacy, collaboration with AFRA networks (Network for Education in Nuclear Science and Technology (AFRA-NEST), WiN AFRICA, Federation of African Medical Physics Organizations (FAMPO), African Organisation for Research and Training in Cancer (AORTIC), Forum for Nuclear Regulatory Bodies in Africa (FNRBA), African Radiation Oncology Group (AFROG), African Federation of non-Destructive Testing (AFNDT), Regional Advisory Safety Committee for Research Reactors in Africa (RASCA), AFRA Regional Designated Centres), and IAEA collaborating centres, are approaches and avenues for capacity building.

Mr Abdulrazak pointed out some of the Division's strategies for synergy in human resource development, including potential partnerships with different institutions such as the African Union Commission, African Capacity building Foundation, World Academy of Sciences, AfDB, bilateral donors, and so on.

He stressed the importance of establishing new joint fellowship schemes in nuclear science and technology with partners, working with regional and international institutions, attracting government cost-sharing in undergraduate and graduate fellowship schemes,

developing joint funding proposals to foundations and private sector, and assisting countries to develop human resource development plans in the area of nuclear science and technology.



DIR-TCAF presenting the overview of the IAEA Human Resource Development Programme in Africa.

“We must know where we stand, baseline data is very critical, we must know where we want to go in terms of human resource,” said Mr Abdulrazak, adding that it was essential to have a clear roadmap to identify the strengths and gaps to thoroughly contribute to building capacity in our Member States.

Mr Abdulrazak ended his presentation with questions to Member States on how many postgraduate students in NST there are in Africa currently, how to align/include NST within existing university programmes, how to attract the diaspora to increase involvement in the programmes, how to promote research, innovation, and new intellectual property, how to synergize with regional networks to develop HR capacity building schemes, and how to turn brain drain into brain gain and brain circulation.

Nader Hajizadeh, PO, TCAF

Cooperating with Women in Nuclear: Supporting Talent in the Nuclear Field *WiN Side Event*

A side event organized by WiN Global and WiN IAEA in collaboration with the Division for Africa and hosted by the Permanent Mission of Mexico on the margins of GC65 discussed the challenges of gender parity in the nuclear sector and enhanced awareness and visibility of the role of women in nuclear science and technology and development.

WiN is an international non-profit organization with over 35 000 members, dedicated to highlighting and expanding the role of women in the nuclear sector.

HE Luis Javier Campuzano Pina, Ambassador of Mexico to the IAEA, told participants that Australia and Mexico had co-chaired a group of Friends of Women in Nuclear since 2017, a partnership of IAEA Member States united in a shared mission to advance gender equality in the nuclear field in general and within the IAEA Secretariat in particular.

“The group was formed because there was a very clear gender deficit in the IAEA despite of a number of statements and commitments on paper. Since then, the goal has been to make sure that the issue of gender equality is on the agenda of the decision-making bodies of the IAEA,” he said. Mr Campuzano Pina noted that it was very encouraging to see WiN in partnership with the IAEA Secretariat, and to see WiN establishing partnerships at the regional and national levels. He emphasised that these partnerships were key to accelerating progress towards gender equality in the nuclear field.

“Mexico and the Group of Friends will continue to provide political backing for the gender equality initiatives under way by WiN and by the Secretariat, under the leadership of the IAEA Director General,” the Ambassador said, referring to unsatisfactory progress towards gender equality in recent months. “The objective is to ensure that they receive enough human and financial resources,” he added.

Mr Abdulrazak, DIR-TCAF, the second speaker of the event, quoted the IAEA Director General. “Gender equality and empowerment of women lie at the heart of the sustainable development goals (SDGs), and they are vital to fully realizing the rights and the potential of everyone. These fundamental aims must also inform our work at the IAEA,” he said. “Quite a number of times, the challenges are not with women, but the challenges are with men. I think we need to change the conversation. We need to bring more men and be agents of change in the room so that men can understand that we’re all talking about humanity.”

Mr Abdulrazak highlighted the challenges that women are facing today in the African continent. These include early marriages and falling rates in the areas of science and technology, engineering and mathematics for girls moving from primary to secondary and university.



Shaukat Abdulrazak, Dir-TCAF, speaking at the WiN Global side event in the margins of IAEA GC65.

“The existing challenges require transformative leadership,” he said. “We must be very loud on unconscious bias. We must have the confidence that if a man can do a job, a woman can do it better. We can look for ways and means of how we can mainstream gender in each and every of our activities.”

He spoke about the need for mentoring programmes and for encouraging young girls and reminded the audience that addressing gender mainstreaming had to come from the brain and the heart. “We must have a will to change, and I believe we can change,” he said, referring to the Marie Slodowska-Curie fellowship programme as a key example of the several mechanisms that the IAEA is using to get more women involved in the sector.

Ms Dominique Mouillot, President of WiN Global, introduced WiN Global. A global non-profit organization of women founded in 1993, WiN Global has around 35,000 members including chapter members and individuals from 145 countries.



President of WiN Global presenting on the mission and vision of WiN Global.

WiN members work in medicine and health care, in regulatory authorities, in industry and as independent researchers. Ms Mouillot described WiN Global as a forum for exchanging and raising awareness of the benefits of nuclear and radiation applications in enhancing the quality of life. She spoke of the importance of safety, environmental sustainability and climate, and the promotion of gender equality.

The gender equality goals of WiN Global include attracting and bringing together the young generation within the nuclear sector and acting on gender balance issues. As a network of experts, Ms Mouillot noted that WiN Global aims to establish partnerships with international organizations focused on gender balance and diversity.



Keynote speakers and WiN Global regional office at the end of WiN global side event

WiN Global membership comprises skilled professionals with wide experience and knowledge in different areas related to technology, and subsidiary groups with expertise in key areas such as security (Women in Security Initiative-WINSI), nuclear medicine (Women in Nuclear Medicine Initiative-WINMI), decommissioning (Women in Decommissioning Initiative-WINDI), and nuclear innovation (Women in Nuclear Innovation-WNA).

Ms Mouillot spoke about the IAEA-WiN Global partnership through which the IAEA has sponsored participation in WiN Global Annual Conferences for over 10 years. She highlighted the strong support of the IAEA TC Division for Africa for the creation of WiN Africa in 2020.

Scientific Forum

Preparing for Zoonotic Outbreaks: The Role of Nuclear Science

The annual IAEA Scientific Forum, held on 21 and 22 September, was dedicated this year to investigating how nuclear science can further help the world to prepare for future zoonotic outbreaks. The Forum, on the theme *Preparing for Zoonotic Outbreaks: The Role of Nuclear Science*, was attended by high-level speakers. It was opened by Mr Rafael Mariano Grossi, IAEA Director General; Mr Tedros Ghebreyesus, Director General of the World Health Organization (WHO), Mr Qu Dongyu, Director General of the Food and Agriculture Organization (FAO), Ms Monique Eloit, Director General of the World Organization of Animal Health (OIE) and four eminent African scientists, who spoke at the opening ceremony and in the following sessions.

The Forum video showed how the world has been affected by various zoonotic outbreaks, including COVID-19, since the beginning of the 20th century. The Forum speakers examined the role of nuclear and related techniques in helping countries detect, mitigate and prevent the outbreak of zoonotic diseases.



IAEA Director General speaking during the opening of the Scientific Forum.

Director General Grossi described the Scientific Forum. “It is a space to exchange views with a robust scientific content, but also to address what needs to be done and what is needed to put this pandemic behind and to prevent such from happening again,” he said.

“We thought that by putting together an integrated effort which is in the acronym ZODIAC (Zoonotic Diseases Integrated Action) through multiple disciplinary approaches, we could make a real contribution,” he noted, adding that ZODIAC will

make a contribution to prevention that is essential for success.

Mr Tedros Ghebreyesus, Director General of the World Health Organization (WHO), recognized the contribution of the IAEA in strengthening health systems and pandemic preparedness and response globally. He noted that it complements the frameworks and mechanisms put in place by WHO and its partners.

Mr Qu Dongyu, Director General of the Food and Agriculture Organization (FAO), highlighted the close cooperation between FAO and the IAEA since 1964 to contribute to sustainable food security and safety by using nuclear techniques and biotechnology,

“As the world’s population continues to grow and compete for diminishing resources, we are reminded more than ever that the health of humans, animals and other organisms is of importance ... [and] we need to be more intelligent...” noted Ms Monique Eloit, Director General of the World Organization of Animal Health (OIE).



Dr Christian Happi, speaking at the opening of the Scientific Forum.

Dr Christian Happi, Director of the African Centre of Excellence for Genomics of Infectious Diseases (ACEGID) presented the outbreak of Ebola in Nigeria as an example of how the disease could be overcome in record time. He noted that the world can learn lessons from this.

“By the time we detect and categorize an emerging pathogen, it’s often too late,” he said. “But we’re in a cusp of a new era, we can change it. We heard the IAEA Director General talking about ZODIAC, it is one of those initiatives, building on knowledge, technology, capacity building, training with which we can overcome threats,” he added.



Dr Amadou Alpha Sal, at the opening of the Scientific Forum.

Dr Amadou Alpha Sall, Director of the Institut Pasteur de Dakar in Senegal, agreed that ZODIAC was a visionary approach. He explained that most past epidemics were zoonosis epidemics, and that these can be mitigated using nuclear science such as real-time PCR to detect and diagnose pathogens early and effectively.

During the two-day Forum programme, Dr Dina Husseiny, Medical Imaging Department, University for Science and Technology, Egypt, and Samantha Letsholo, from Botswana National Veterinary Laboratory, joined various experts and scientists to present their experiences in using nuclear and nuclear-related techniques to detect pathogens and monitor zoonoses, and to understand the emergence of infectious diseases at the animal-human interface. The speakers covered the role of radiation techniques in dealing with the impact of zoonoses on human health, and discussed the IAEA's support to countries and Member States in tackling and enhancing preparedness to control zoonotic diseases.

Nader Hajizadeh, PO, TCAF

Courtesy Meetings

Twenty-three bilateral meetings were organized with governments officials, including Ministers and Deputy Ministers, Chairmen of Atomic Energy Commissions/Authorities, Ambassadors and Permanent Representatives of African Member States during GC65. Representatives from Benin, Botswana, Burkina Faso, Burundi, Chad, Djibouti, Democratic Republic of the Congo, Egypt, Eritrea, Ghana, Lesotho, Malawi, Niger, Nigeria, Rwanda, Senegal, Sudan, Togo, United Republic of Tanzania, and Zimbabwe were

accompanied by their respective NLOs, NLAs and national experts.



Bilateral meeting with the delegation of Chad, led by Mr. Emil Ali Moussa Aladji Hamit, Advisor to the Minister of Petroleum and Mines.

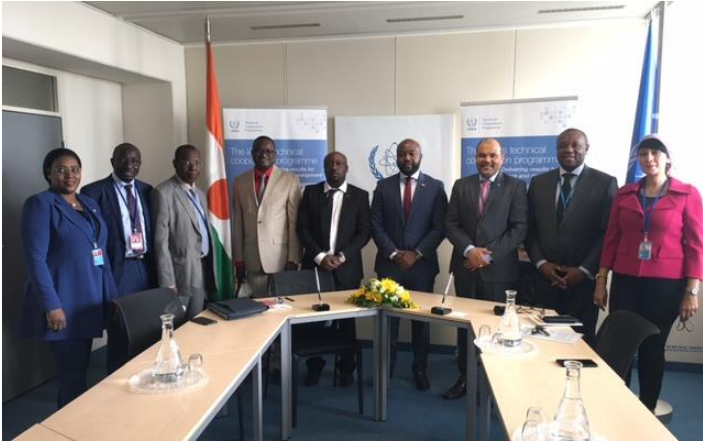
During these meetings, the status of implementation of TC projects was discussed. The Member State representatives noted their appreciation for the support provided by the IAEA through the technical cooperation programme and requested continued assistance for the future.



Bilateral meeting with the delegation of Botswana, led by HE Dr Douglas Letsholathebe, Minister of Tertiary Education, Research, Science and Technology.



Bilateral meeting with the delegation of Egypt, led by Prof. Dr. Amr Elhag Ali, Chairman, Egyptian Atomic Energy Authority.



Bilateral meeting with the delegation of Niger, led by HE Dr M. Sani Mahamadou, Minister of Petroleum, Energy and Renewable Energies.



Bilateral meeting with the delegation of the Democratic Republic of the Congo, led by HE Dr José Mpanda Kabangu, Minister of Scientific Research and Technological Innovation.



Bilateral meeting with the delegation of Senegal, led by HE Dr M. Cheikh Oumar Anne, Minister of Higher Education, Research, and Innovation.



Bilateral meeting with the delegation of Ghana, led by HE Philbert Abaka Johnson, Ambassador and Resident Representative.



Bilateral meeting with the delegation of Burkina Faso, led by Dr Maminata Traore/Coulibaly, Minister Delegate in Charge of Scientific Research and Innovation.



Bilateral meeting with the delegation of Lesotho, led by HE Dr Mohapi Mohapinyane, Minister of Energy and Meteorology.



Bilateral meeting with the delegation of Zimbabwe, led by HE Dr Zhemu. Soda, Minister of Energy and Power Development.



Bilateral meeting with the delegation of Malawi, led by HE Ms Queen Dube, Chief of Health Services.



Bilateral meeting with the delegation of Togo, led by HE Mr Komi Bayedze Dagoh, Ambassador and Permanent Representative of Togo.

Impressum

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