Forum for Nuclear Cooperation in Asia (FNCA) Joint Communique on the New Direction of the FNCA adopted at the 23rd MLM, held virtually on October 31, 2022

We, the heads of delegation of countries participating in the FNCA: the Commonwealth of Australia, the People's Republic of Bangladesh, the People's Republic of China, the Republic of Indonesia, Japan, the Republic of Kazakhstan, the Republic of Korea, Malaysia, Mongolia, the Republic of the Philippines, the Kingdom of Thailand and the Socialist Republic of Vietnam,

Recalling that the FNCA's objective is to promote social and economic development through active regional partnerships for the peaceful and safe utilization of nuclear technology, and that R&D, knowledge and information sharing, and capacity building are, inter alia, the main roles and activities of the FNCA, which will lead to social and economic well-being of the member countries,

Noting the potential value of nuclear energy, which can contribute to energy mix solutions, and to reducing and/or avoiding emissions of greenhouse gas,

Acknowledging the potentialities of radiation use and related FNCA projects in areas such as sustainable agricultural development, food safety, eco-friendly industrial development, mitigation of the effects of climate change, and conservation of natural ecosystems,

Noting the need for reinforcing cooperation among the member countries acknowledged through the discussion on the issue of "building up public trust in nuclear energy" in 2022 Study Panel and so on,

Appreciating the progress made by the FNCA clinical research project in radiation therapy and the associated ongoing clinical trials for cervical, nasopharyngeal, and breast cancer, as well as the importance of technical cooperation and interaction between industry and academia with respect to radiation therapy equipment and related cutting-edge technology,

Recognizing the necessity of securing required human resources in the nuclear science and technology field arising from an ageing in workforce, and the importance of succession of knowledge,

Recognizing the importance of research reactors and their application for the development of the

member countries including in neutron activation analysis (NAA), boron neutron capture therapy (BNCT), neutron radiography (NR), material studies and radioisotope production,

Noting that topic for 2023 Study Panel is "Outlook on Next Generation Nuclear Reactors including SMR",

Noting that the member countries agreed on the program of project activities in 2022, for their fullfledged resumption on the wane of the COVIC-19 pandemic, at the 22nd Coordinators Meeting held virtually in June 2022, and that it has commenced activities in a hybrid manner by applying in– person and online methods,

Welcoming the initiative "Rays of Hope" launched by IAEA in February 2022 to support establishing and expanding cancer therapy by radiation (cancer care for all), and recognizing the importance of cooperation between FNCA and nuclear-related international organizations such as IAEA, OECD/NEA and IFNEC,

Recognizing the importance of "cancer therapy with radiation" through discussions at 23rd MLM hosted by Mongolia,

Appreciating the progress of the FNCA project activities in agriculture, industry, medicine and environment,

Welcoming the continuous efforts being made by the IAEA to advance the safe and peaceful utilization of nuclear science and technology for the development of the socio-economic well-being of the world,

Have decided to work towards:

1. The normalization of FNCA project activities and regular meetings

Each FNCA member country under the present circumstances maximises efforts continuously to normalize promptly FNCA project activities and the regular meetings affected by the COVID-19 pandemic, with ensuring the safety of the project researchers and participants as a prerequisite and in response to the national health policies of the respective member countries,

Request the coordinators to proceed with the existing and the new projects by making the best use of hybrid methods including online gatherings where appropriate and face-to-face meetings as well under the current circumstances,

2. Future cooperation between the FNCA and the IAEA in the area of human health

Anticipating that the IAEA will make necessary coordination with the relevant international organizations including the WHO and FAO without duplicating existing mandates in combating zoonotic diseases including COVID-19, explore possible collaboration between the FNCA and the IAEA on the ZODIAC project in the future,

Seek future cooperation between the IAEA and the FNCA on "Rays of Hope" project, expecting that protocols for cancer treatment to be established by the relevant project of FNCA could be widely spread in hospitals under "Rays of Hope" framework, as both have affinities and can interact with each other under the same objective of broadly extending cancer radiotherapy to all countries.

3. Promotion of cancer treatments with radiation technology in Asia

Focusing on "Cancer Therapy with Radiation" discussed at the 23rd MLM hosted by Mongolia, promote continuously expanding cancer therapy with radiation in Asian region.

Based on the policy to enhance cancer therapy with radiation technology in the Asian region, established by the member countries, promote FNCA Radiation Therapy Project in the member countries under each project leader.

Continue and intensify the efforts also through the cooperation with the relevant international organizations to develop and disseminate innovative technology related to radiation therapy,

4. Cooperate in addressing environmental protection and countermeasures to climate change

In view of frequent occurrence of extreme weather worldwide in recent years, encourage the member countries to reinforce their policies on environmental protection, scientific investigation and measures against climate change, and to continuously promote cooperation toward the issues. The use of the nuclear technology and research development can be helpful in this effort.

5. Enhance the practical use of research reactors and accelerators

In accordance with the discussion on "The Enhancement of Utilization of Research Reactors and Accelerators" at the Round Table Discussion of the 22nd FNCA MLM, promote information exchange with respect to research reactors and accelerators as well as the reciprocal usage of the facilities among the member countries,

6. Information sharing on next generation reactors including SMR

In order to share among the member countries development situation on next generation reactors including SMR, adopt "outlook on next nuclear reactor including SMR" as the topic for 2023 Study Panel, and discuss by inviting experts on their possibilities and prospects in technology, safety and economy, to support nuclear energy use plan in each member country.

7. Spread of the R&D results

Encourage the member countries to utilize the outcomes of FNCA projects on mutation breeding, radiation processing, research reactor utilization, isotope production and neutron activation analysis with end-users, including the private sector, taking into account the possibility of their commercialization, which can more effectively contribute to the member countries' socio-economic well-being,

- 8. Other fields and activities to be promoted
- 1) Expanding public communication and public relations functions

Continuously work on building up public trust on nuclear science and technology in the member countries and the Asian region, and endeavor to expand public relations functions through FNCA website and open lectures held in the member states, and enhance cooperation with relevant international organizations such as IAEA, OECD/NEA and IFNEC,

2) Sustainable agriculture development and food safety, environmental protection, medical care and human health, nuclear safety and security culture

Promote activities related to the applications of nuclear science and technology, and radiation use

as well, particularly in sustainable agriculture development and food safety, environmental protection, medical care and human health, and infrastructure development for nuclear safety and security culture, which are in higher priorities in the member countries in general, by accelerating existing R&D areas, and by adopting possible future R&D areas to support their sustainable development,

9. Cooperation in Human Resource Development (HRD) of the nuclear science and technology field, and radiation use

Activate organizational exchange of human resources among universities and research institutions, and of information related to the reinforcement of HRD infrastructure in accordance with the individual demand and situation of the member countries by utilizing combination of in-person lectures or workshops, and webinars or online workshops.