42nd Meeting of the Radiation Safety Standards Committee (RASSC) Vienna, Austria 12 – 14 June 2017

REPORTS FROM INTERNATIONAL ORGANIZATIONS Food and Agriculture Organization of the United Nations

- 1. The Food and Agriculture Organization (FAO) of the United Nations is represented at RASSC by the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture (Joint FAO/IAEA Division). This Division is a strategic partnership that continues to mobilize the talents and resources of both organizations to benefit their Member States in the peaceful application of nuclear science and technology in a safe and effective manner.
- 2. The Joint FAO/IAEA programme includes activities in five main areas: food and environmental protection; plant breeding and genetics; animal production and health; insect pest control; soil and water management and crop nutrition. These activities are underpinned by the international radiation safety standards of the IAEA as well as the international food safety and quality standards of the Joint FAO and World Health Organization (WHO) Codex Alimentarius Commission (Codex); the international phytosanitary standards of the FAO International Plant Protection Convention, and; the animal welfare, health and zoonosis standards of the World Organization for Animal Health. Both FAO and IAEA through the activities of their Joint FAO/IAEA Division strive to mobilize commitment and concerted action towards meeting the Sustainable Development Goals for agriculture and food security through the appropriate development and integration of nuclear and related technologies.

Standards for Radionuclides in Food

3. In its report to this committee in 2016, the Joint FAO/IAEA Division detailed how it has informed and up-dated Codex on radiation safety standards and RASSC activities related to food. For example, the Codex has been kept informed about the development and publication of the IAEA Technical Document on *Criteria for Radionuclide Activity Concentrations for Food and Drinking Water* (IAEA-TECDOC-1788) and an on-going initiative to harmonize standards and guidelines for radionuclide levels in food, drinking water and non-food commodities. The Codex Committee on Contaminants in Foods and Feeds (CCCFF) has expressed considerable interest and therefore a side event was held at the eleventh CCCF meeting in Rio de Janeiro, Brazil in April 2017. The side event was entitled "Radionuclides in Food: Standards, New National Guidance and Recent Developments". It was arranged by the Joint FAO/IAEA Division and the presenters were experts from international organizations; the IAEA; the Nuclear Energy Agency (NEA) of the Organisation for Economic Co-operation and Development (OECD); and the Joint FAO/IAEA Division. This event was attended by over 60 delegates and subsequent feedback has been very positive. In July, the Joint FAO/IAEA Division will participate at a meeting of the Codex Alimentarius Commission and will offer to arrange a similar side event at a future Commission meeting.

Workshop in Latin America and the Caribbean Region

4. In March 2017, the Joint FAO/IAEA Division participated at a regional workshop on Standards for Radioactivity in Food, Drinking Water and Commodities. The main purpose of the meeting was to seek feedback from countries in the Latin America and the Caribbean region on their experience in using international standards, including the identification of any aspects requiring further clarification or development. Discussions focused on the application of current international standards for managing radioactivity in food, drinking water and non-food commodities. The 46 participants from 18 countries of the Latin America and the Caribbean region supported further and improved harmonization of the standards for radioactivity in food, drinking water and non-food commodities and requested the responsible international organizations to work together to this end. The workshop was hosted in Buenos Aires, by Autoridad Regulatoria Nuclear of Argentina, and this organization held the workshop in collaboration with the IAEA, Joint FAO/IAEA Division, Pan American Health Organization and WHO. It was implemented within the framework of IAEA technical cooperation project RLA9078.

Radioactivity in Agriculture and a New Application

5. A coordinated research project of the Joint FAO/IAEA Division has developed DSS4NAFA (Decision Support System for Nuclear Emergencies Affecting Food and Agriculture), an innovative system for monitoring radionuclides in food and agriculture production¹. It supports data collection and management as well as visualization and mapping. The system can be accessed as an application on smartphones and is designed to link decision makers with field officers and analytical laboratories. Although developed to assist in nuclear emergency response, an intentional feature of DSS4NAFA is that the sampling, database and mapping functions can also be used in routine monitoring. The project is a collaboration that involves the European Commission and institutions in Belgium, China, the Former Yugoslav Republic of Macedonia, France, India, Japan, Morocco, Russian Federation and Ukraine. The DSS4NAFA software is undergoing an independent review to ensure that it meets strict internet and electronic security requirements. It will subsequently be made available online as a package that can be adopted and utilized by member countries.

Technical Workshop on Remediation of Radioactive Contamination in Agriculture

6. In its report to the 41st RASSC, the Joint FAO/IAEA Division provided an overview of the Technical Workshop on Remediation of Radioactive Contamination in Agriculture that was held at the IAEA headquarters, Vienna, Austria in October 2016. The event was hosted by the Joint FAO/IAEA Division in collaboration with Japan's National Agriculture and Food Research Organization (NARO). The presentations given at the workshop are now available online². The workshop served to improve understanding of radioactive contamination in agriculture and a publication is being produced to record the proceedings of the meeting. The year 2016 marked the fifth anniversary of the accident at the Fukushima Daiichi nuclear power plant (NPP) and the 30th anniversary of the accident at the Chernobyl NPP, both classified as major accidents at Level 7, the highest on the IAEA's International Nuclear and Radiological Event Scale. The major focus of the workshop was therefore on residual levels of caesium radionuclides in countries affected by these accidents.

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¹ <u>http://www-naweb.iaea.org/nafa/swmn/crp/swmcn-nuclear-emergency-food.html</u>

² http://www-naweb.iaea.org/nafa/news/2016-FAO-IAEA-NARO.html