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**Strengthening of the coordination of humanitarian and disaster relief assistance of the United Nations, including special economic assistance: strengthening of international cooperation and coordination of efforts to study, mitigate and minimize the consequences of the Chernobyl disaster**

# Optimizing the international effort to study, mitigate and minimize the consequences of the Chernobyl disaster

## Report of the Secretary-General

*Summary*

The present report is submitted in accordance with General Assembly resolution 68/99 on the strengthening of international cooperation and coordination of efforts to study, mitigate and minimize the consequences of the Chernobyl disaster, in which the Assembly requested the Secretary-General to submit at the seventy-first session a report containing a comprehensive assessment of the implementation of all aspects of the resolution.

During the period 2006-2016, United Nations agencies and other international organizations have been engaged in the Decade of Recovery and Sustainable Development of the Affected Regions. At the end of 2016, the Decade and the United Nations action plan on Chernobyl to 2016 will come to an end. The present report provides a comprehensive overview of the activities undertaken by the funds, programmes and specialized agencies of the United Nations system to promote recovery from the Chernobyl disaster. It also documents the outcomes of substantive dialogue with technical experts of United Nations agencies and Member States, initiated by the United Nations Coordinator of International Cooperation on Chernobyl, to define a new vision for post-2016 international cooperation on Chernobyl.

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The United Nations system remains committed to supporting the governmental efforts to place the affected regions on a sustainable path of development. Further recovery work will be linked to attaining the Sustainable Development Goals, which should serve as the guiding paradigm for ensuring that no one is left behind. The United Nations family will be guided by the vision for post-2016 international cooperation on Chernobyl, developed in the course of expert meetings in 2015 and 2016.

# I. General situation

1. The global community, led by the United Nations, has implemented many recovery initiatives in Belarus, the Russian Federation and Ukraine since the accident at the Chernobyl nuclear plant on 26 April 1986. The efforts began with emergency relief and humanitarian assistance and gradually shifted to capacity-building and sustainable development for the affected regions and communities.

2. During the period 2006-2016, United Nations agencies and other international organizations have been engaged in the Decade of Recovery and Sustainable Development of the Affected Regions. The United Nations action plan on Chernobyl to 2016 was adopted as a framework for the implementation of the Decade. It built on the agencies' mandates and strong partnership with the Governments of the affected countries.

3. During the Decade, the Governments of Belarus, the Russian Federation and Ukraine, in cooperation with the international community, proclaimed the ultimate goal that the area would fully overcome the stigma that it suffered, communities take full control of their lives and normalcy become a realistic prospect. At the end of 2016, the Decade and the action plan will come to an end. The present report documents the activities undertaken by the funds, programmes and specialized agencies of the United Nations system and other relevant actors and stakeholders aimed at recovery from the Chernobyl disaster.

# II. Coordination of the work of the United Nations

4. Since 2004, the United Nations Development Programme (UNDP) has been leading Chernobyl-related activities in the United Nations system and facilitating the joint effort of the three affected countries and 12 organizations of the United Nations system. The Administrator of UNDP serves as the United Nations Coordinator of International Cooperation on Chernobyl.

5. The Inter-Agency Task Force on Chernobyl, comprising international agencies under the leadership of UNDP and the three affected countries, serves as a coordinating mechanism for the international cooperation. On 30 May 2014, the Task Force met in Minsk and, on 11 April 2016, at UNDP headquarters in New York. The Administrator of UNDP and the UNDP Deputy Director of the Regional Bureau for Europe and the Commonwealth of Independent States chaired the meetings. Both meetings involved the wide participation of representatives of United Nations agencies, Governments and other organizations. The agencies reported on progress with their recovery efforts and acknowledged numerous examples of the United Nations family delivering as one on Chernobyl.

# III. Ongoing United Nations assistance efforts

6. During the reporting period, the Chernobyl-related activities of the United Nations family were organized around the priorities listed in the following sections.

## A. Community-based development

7. UNDP focused its programming on local community and economic development priorities, with large-scale area-based and community-based initiatives implemented in Belarus and Ukraine.

8. In Belarus, Chernobyl-affected communities benefited from the Maria Sharapova Foundation Scholarship for Youth from the Chernobyl-affected Areas of Belarus, which was implemented in partnership with the Belarusian State Academy of Arts and the Belarusian State University. It enabled talented students from Chernobyl-affected families and regions to gain better access to high-quality education. A project on sports recovery in the affected regions focused on the restoration of sports facilities in rural areas of Belarus and the Russian Federation. An ongoing UNDP/European Union project to support local development in Belarus is aimed at assisting national counterparts to improve good governance standards through a participatory approach and strengthened dialogue between the authorities, businesses, non-for-profit organizations and citizens. The projects contributed to the following results:

(a) Involvement of at least 11,000 citizens in local decision-making through the implementation of 61 community-based initiatives as part of area-based development activities;

(b) Establishment of six information and communications technology (ICT) centres in affected communities for skills training and the creation of employment opportunities;

(c) Increased market profit by between 5 and 20 per cent for local households in affected regions thanks to support for more efficient agricultural production, better access to markets and better compliance of produce with radiation safety standards;

(d) Opening of 10 radiation monitoring centres in local schools, providing citizens with access to trustworthy information on the Chernobyl legacy and the possibility of conducting radiation tests for berries, mushrooms and agricultural produce at convenient times and locations.

9. In Ukraine, UNDP Chernobyl-related assistance was provided through a recovery and development project, a community-based approach to local development project, the International Chernobyl Research and Information Network and a project on mainstreaming the environment into local strategies in affected areas. The projects contributed to the following results:

(a) A total of 279 community-based organizations, eight ICT centres and three entrepreneur support centres were established, and 190 infrastructure projects were implemented in the most affected communities;

(b) The area-based development approach to local development, piloted by UNDP in the affected regions, became a national best practice. It provided a solid platform for expansion nationwide through the joint European Union/UNDP initiative to support community-led development in rural areas. UNDP-led community-based initiatives have contributed to the sustainable local development of all regions of Ukraine, including those affected by the accident. More than

$40 million has already been invested to support 2,500 community initiatives, with many more under way;

(c) UNDP worked in three affected provinces (Kyiv, Rivne and Zhytomyr), building local planning and decision-making capacity for the improvement of local governance and boosting entrepreneurial activity among the population;

(d) Information on the consequences of the accident in the form of practical advice on healthy and productive lifestyles was effectively disseminated to the residents of the affected areas.

## B. Provision of information to affected communities

10. The programme of the International Chernobyl Research and Information Network, a joint initiative by the International Atomic Energy Agency (IAEA), UNDP, the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO), implemented with support from the United Nations Trust Fund for Human Security, was successfully completed. It delivered the overall goal of alleviating the social and mental suffering of people living in affected areas in Belarus, the Russian Federation and Ukraine by meeting their information needs. Improved access to information significantly helped people to live safely and productively in those areas and enabled them to implement community-driven recovery initiatives. The Network was successful in addressing a broad range of interconnected issues and responded to multisectoral demands for human security, including those relating to the health, environmental, socioeconomic and cultural spheres. It provided specific and sustainable benefits to the some 200,000 people targeted, with a special focus on vulnerable groups in rural areas.

## C. Infrastructure

11. Over the two decades of World Bank cooperation with Belarus, the Russian Federation and Ukraine, the post-Chernobyl agenda has always occupied a place in the country work programmes of the World Bank Group. In Belarus, an effort was made to mainstream the post-Chernobyl agenda in projects supporting the provision of public services. Thus, the Post-Chernobyl Recovery Project (2006-2013, $80 million) contributed to improving the livelihood of 300,000 Belarusians residing in the three affected provinces (Brest, Homyel and Mahilyow), allowing them to have energy-efficient and reliable heat and hot water services. The project reached 300 schools, hospitals and kindergartens with improved lighting and heating, window and door replacements and other energy-efficiency measures. A total of 3,000 homes were connected to a gas system, enabling those households to benefit from an improved, more reliable and affordable heat supply.

12. The World Bank's ongoing water supply and sanitation project is aimed at increasing the efficiency, quality and sustainability of water supply and sanitation services to 1.7 million people, including in the affected areas. An energy-efficiency project is scaling up energy-efficient improvements in heat and power generation for 120,000 people, including in Homyel and Mahilyow. A forestry development project, in addition to enhancing silvicultural management and increasing the use of

felling residues, is aimed at developing a system of support for decision-making concerning forest management in radioactive contamination areas. An education modernization project supports the consolidation of the school network, while improving access to a high-quality learning environment in selected general secondary schools, including in the affected areas.

## D. Health

13. The International Agency for Research on Cancer completed its project to develop a strategic research agenda for future Chernobyl studies, funded through the European Atomic Energy Community seventh framework programme.[1] A key to the success of the implementation of the recommendations is the creation, maintenance and follow-up of life-span cohorts. A recommendation was made to set up a mechanism to coordinate and fund studies that would enable an assessment of the overall long-term health effects of the Chernobyl accident. To act upon the findings, in the period 2015-2016, an international group of experts and advisers, under the auspices of the project, carried out a European Union-funded project on cooperation on Chernobyl health research (http://co-cher.iarc.fr/). The group assessed the existing research infrastructure and identified research priorities to form a basis for sustainable future research on Chernobyl. The established international network of institutions and individual experts in epidemiology, clinical medicine, mental health, dosimetry, molecular biology, pathology and risk communication met in subgroups to discuss and agree upon the priorities in their field to develop a research programme. The project brought together key scientists, stakeholders and potential funding partners to agree on the coordinating mechanism, in order to decide on the research priorities and to seek sustainable funding for those priority areas.

14. IAEA supported Belarus and Ukraine in improving the effectiveness of radiotherapy services for oncological patients from the Chernobyl-affected areas. In 2015, the brachytherapy service at the N.N. Alexandrov National Cancer Centre of Belarus in Minsk was strengthened with the installation of dedicated imaging equipment. In Ukraine, national capability in radiotherapy quality assurance was improved through the development of additional equipment and human resources. IAEA also supported Ukraine in improving the national measurement standards through the establishment of a secondary standard dosimetry laboratory to ensure that the national calibration services for radiotherapy dosimetry were traceable to the international measurement system.

15. The Belarusian Red Cross and the Ukrainian Red Cross continue to deliver thyroid and breast screening programmes in close cooperation with national counterparts. In Belarus, two Red Cross mobile medical teams work in the Mahilyow region, screening more than 40,000 people every year. The affected population is also supported with a healthy lifestyle programme.

16. Most recently, the International Federation of Red Cross and Red Crescent Societies (IFRC) worked on building the capacities of national societies in the area of nuclear and radiological emergency preparedness. The lessons from the

[1] See http://arch.iarc.fr/documents/ARCH_SRA.pdf.

Chernobyl and Fukushima disasters led to the development of guidelines[2] addressing the specific challenges that first responders, such as the relief teams of Red Cross and Red Crescent staff and volunteers, will face when a nuclear and radiological emergency occurs.

17. UNICEF in Belarus supported the implementation of State policy on overcoming the consequences of the Chernobyl disaster. It contributed to the capacity development of health professionals and caregivers in affected areas, who were provided with essential, easy-to-understand information on children's health and development in a special edition of the "Facts for life" publication (see http://ffl.unicef.by). Parents of young children in selected affected areas were supported with parenting programmes (counselling, workshops and educational materials) covering aspects of early development, nutrition and health. Created with UNICEF support, information centres at schools continued their activities aimed at raising awareness of radiation safety among children and young people.

18. UNICEF also supported local initiatives on the promotion of healthy lifestyles among adolescents, with a special focus on those most at risk. With UNICEF support, the municipalities adopted child-friendly city strategies to ensure that the voices, needs, priorities and rights of the child were fully upheld. In total, 11 cities in three Chernobyl-affected regions joined the initiative: Brest, Dobrush, Homyel, Horki, Kostyukovichi, Mahilyow, Mazyr, Pinsk, Pruzhany, Shklow and Svyetlahorsk.

19. The needs and interests of children and their families living in affected areas remain the focus of the UNICEF country programme in Belarus. Work will continue on promoting healthy lifestyles and health-securing living practices among children and parents in the affected areas, strengthening a reliable information dissemination network and improving radiation safety knowledge and skills among children and young people through high-quality radioecological advice and education.

20. The United Nations Scientific Committee on the Effects of Atomic Radiation is the body mandated by the General Assembly to assess scientifically the levels and effects of exposure to sources of ionizing radiation. It has been engaged with matters relating to Chernobyl since 1986, issuing major authoritative reports in 1988, 2000 and 2008 on the radiation health and environmental effects of the accident. In collaboration with scientists from Belarus, the Russian Federation and Ukraine, the Committee last submitted a report to the Assembly in 2008, on its updated findings in respect of the health effects caused by irradiation from the accident (see A/63/46). The United Nations published the supporting scientific annexes in English in 2011[3] and in Russian in 2012[4] to facilitate dissemination to those most affected by the accident.

21. Currently, the Committee has no plans to write another specific report on Chernobyl, but continues to follow scientific developments closely to integrate them into its knowledge base on radiation levels and effects. It will also make a small evaluation of the most recent thyroid cancer data in the affected regions, with a view to discussion at its sixty-fourth session, in 2017, and subsequent publication.

[2] See www.ifrc.org/Global/Documents/Secretariat/201602/1296000-NuclearRadio.Emer.Guide-Int-EN-LR.pdf.

[3] Available from www.unscear.org/docs/reports/2008/11-80076_Report_2008_Annex_D.pdf.

[4] Available from www.unscear.org/docs/publications/2008/UNSCEAR_2008_Annex-D_Russian.pdf.

To that end, the inclusion of Belarus and Ukraine as full members of the Committee since 2011 has helped to ensure that the scientific lessons can best be used for improving understanding worldwide.

22. The forthcoming health sector modernization project of the World Bank in Belarus will target the rural population with limited access to high-quality health services.

## E. Radiation mitigation and standard setting

23. IAEA recently completed two regional projects on the rehabilitation and return to normal radiological environmental conditions of the affected areas. Five relevant national projects were carried out in Belarus (on remediation, improvement of radiotherapy services, forest management and transuranium assessment) and three in Ukraine (on the decommissioning of the power plant, assistance with the shelter and waste management). The regional projects contributed to, among other things, the harmonization of national concepts, documents and decision-making tools used in Belarus, the Russian Federation and Ukraine for the rehabilitation of the affected areas. In addition, human resources (through capacity-building) and technical infrastructure (through the procurement of specialized equipment), with an emphasis on the radiological monitoring, remediation and recovery of the affected areas (including forested land), were strengthened with IAEA support.

24. Through its Environment Laboratories, IAEA has continued its long-standing support to the relevant institutions in Belarus, the Russian Federation and Ukraine by providing information on suitable and cost-effective remediation technologies, harmonizing national experiences in the creation and management of territories with a special status and limited access (such as the radioecological reserve in Belarus and the exclusion zones in Ukraine and the Russian Federation) and providing training in remediation and environmental monitoring.

25. The Food and Agriculture Organization of the United Nations (FAO), through its Technical Cooperation Programme and Joint FAO/IAEA Division, supported the development efforts of Member States in promoting scientific exchanges and technological cooperation in the affected countries. In the future, it will encourage research on techniques to support sustainable agricultural production, including in areas affected by radioactive contamination, with a focus on the development of remediation countermeasures; methods for monitoring and detecting levels of radioactive contaminants and trace levels in agricultural land and water; the development of protocols for contaminant analyses; data management with GPS and GIS tools; and the development of remediation techniques and technologies in food and agricultural production.

## F. Reactor safety and nuclear waste management

26. Two major Chernobyl-related projects funded by the European Bank for Reconstruction and Development, as well as donor funds managed by the Bank, are scheduled for completion in 2017. The construction of the new safe confinement to safely enclose the destroyed reactor and the old shelter is scheduled to be completed

in November 2016 and the confinement thereafter slid in place. The installation of equipment, such as the heavy-duty cranes for future dismantling works and the sophisticated ventilation system, is close to completion. Testing and commissioning are expected to be completed by November 2017. The construction of the facility to process and store the spent nuclear fuel stemming from the operation of units 1 to 3, currently stored in a dilapidated wet store, is making good progress. The delivery and installation of specialized equipment for the processing facility will largely be completed by the end of 2016. Integrated testing of the facility is scheduled for March 2017, to be followed by hot testing in the middle of 2017. Hot testing marks the beginning of fuel processing and storage, which, once completed, will resolve one of the most significant nuclear safety hazards at the site.

27. IAEA supports an ongoing regional project on the radiological management of abandoned areas, a national project in Belarus on transuranium assessment and national projects in Ukraine on the decommissioning of units 1 to 3, the shelter and radioactive waste management. Support is expected to continue throughout the period 2018-2019.

## G. Environmental sustainability

28. The United Nations Environment Programme (UNEP) is implementing a project funded by the Global Environment Facility aimed at collecting and synthesizing research on the accident into a single repository, which will be globally available to scientists and decision makers for future nuclear disaster prevention. Given that there is significant research on the radiation effects and social consequences of the disaster, UNEP is focusing on the ecological and ecosystem aspects of the exclusion zone.

29. UNEP is also working on the establishment of an environmental centre in the exclusion zone, which will identify and fill in gaps in current research. IAEA is contributing to the development of the infrastructure for the sustainable management of the Palyessye radiological reserve created on the Belarusian side of the exclusion zone.

30. IAEA prepared two documents with recommendations on optimizing environmental monitoring and transition to normal life conditions, which were submitted to the competent authorities in Belarus, the Russian Federation and Ukraine. IAEA also continued to update international and national Internet resources (www.chernobyl.info) addressing the long-term consequences of the accident, the current radiological situation and the cost-effective use of contaminated land.

31. In Belarus, the ongoing European Union/UNDP project on supporting the transition to a green economy works on green growth concepts and environmentally sustainable production and consumption patterns by supporting local green initiatives and an information campaign. The UNDP/Global Environment Facility project on a landscape approach to management of peatlands advocates the multiple ecological and economic benefits derived from peatlands, including biodiversity conservation, enhanced carbon stocks and multiple ecosystem services.

# IV. Anniversary commemorations, advocacy and public awareness

32. 26 April 2016 marked the thirtieth anniversary of the disaster. In the framework of the anniversary commemorations, the Administrator of UNDP and the United Nations Coordinator of International Cooperation on Chernobyl participated in an international conference that dealt with the move from emergency to recovery and the sustainable socioeconomic development of the affected areas, held in Minsk on 25 April. The United Nations system was also represented at commemorative events on 26 April in Ukraine, including a visit to the plant. Other events included an international forum entitled "Chernobyl's legacy for the nuclear safety of the world", held in Kyiv from 21 to 23 April, a session of the Nuclear Safety Account Assembly of Donors, held in Kyiv, a pledging conference for the Nuclear Safety Account, held in Kyiv on 25 April, numerous cultural events and exhibitions.

33. At Headquarters, a special commemorative meeting was held by the General Assembly on 26 April 2016, while a photo exhibition entitled "Chernobyl: tragedy, lessons, hope" was organized by the Permanent Mission of Belarus to the United Nations jointly with the Russian American Foundation and Project Chernobyl.

34. In statements released on the twenty-eighth, twenty-ninth and thirtieth anniversaries of the Chernobyl disaster and widely circulated in English and Russian, the Secretary-General addressed the impact of the accident on the region and commended the Governments of Belarus, the Russian Federation and Ukraine and the international community on their joint efforts for the recovery of the affected areas and the success of the development approach led by UNDP. In his statement on the thirtieth anniversary, the Secretary-General called for future Chernobyl recovery efforts to be linked to the Sustainable Development Goals, ensuring that no one would be left behind.

35. On 13 May 2016, the UNDP Office in Geneva and the Permanent Mission of Belarus to the United Nations Office and other international organizations in Geneva organized a round table on the lessons of international cooperation efforts for the achievement of the Sustainable Development Goals in the Chernobyl-affected regions in order to discuss experiences and lessons learned in 30 years of Chernobyl cooperation. A round table on preventing and overcoming major technological accidents, taking the case of United Nations cooperation on Chernobyl, was organized by the Permanent Mission of Belarus to the United Nations in New York on 3 June 2016 and enriched the discussions on post-2016 international Chernobyl cooperation by putting the lessons of Chernobyl into the context of the Sendai Framework for Disaster Risk Reduction 2015-2030.

36. On the occasion of the thirtieth anniversary, IAEA published a series of articles in leading international and national journals reviewing the experience in mitigating the environmental consequences of the accident and supported the preparation of national reports.

37. WHO updated its fact sheet[5] and participated in the following gatherings: an international conference on the health consequences of the Chernobyl accident

[5] See www.who.int/ionizing_radiation/chernobyl/en/.

(Ukraine, 18-19 April 2016); an international conference on the theme “Health effects of Chernobyl: prediction and actual data 30 years after the accident” (Russian Federation, 17-19 May 2016); the WHO/International Agency for Research on Cancer international scientific symposium entitled “Chernobyl: 30 years after” (Lyon, France, 11 June 2016); and the fourth international seminar on the theme “Radiation medicine in research and practice: health effects 30 years after Chernobyl, 5 years after Fukushima” (Würzburg, Germany, 16-17 June 2016).

38. United Nations agencies also focused on the dissemination of documents, such as materials of the Chernobyl Forum, through dedicated websites and printed matter, in order to raise greater awareness of nuclear hazards among the public, local authorities and communities, as well as national and international non-governmental organizations.

# V. Lessons learned and knowledge management

39. The Chernobyl accident was a significant landmark, not only for the three countries most affected by it, but also for the entire international community. It changed the way in which Governments deal with nuclear power, safety and security and challenged the manner in which the world can comprehensively prevent, react to and mitigate the long-term consequences of a complex human-caused disaster. One of the principal lessons learned was that the international community should remain vigilant and united in the face of such disasters.

40. Lessons have been learned by UNDP in overcoming the consequences of Chernobyl and in regions affected by nuclear legacy issues, such as through the implementation of community-based projects in the areas affected by nuclear tests in Semipalatinsk, Kazakhstan, and uranium tailings in Central Asia. To capture these lessons and make the codified experience available worldwide, UNDP produced a knowledge product called “Recovery from Chernobyl and other nuclear emergencies: experiences and lessons learnt” in 2013. It revealed that nuclear emergencies were accompanied by unique long-lasting and deeply rooted human challenges, such as stigma and fear, that led to “victim syndrome” and a culture of dependency in the affected regions. It showed that the needs of people in the affected areas were best addressed by projects providing up-to-date accurate information on the risks and impact of the disaster, as well as psychological support to ease fears, helplessness and feelings of abandonment. Recovery efforts in affected regions should be aimed at promoting a spirit of activism and the restoration of self-reliance and self-sufficiency through the implementation of community-based development initiatives and reinforcement of partnerships between communities, civil society and local authorities.

41. The experience of Chernobyl recovery has demonstrated that, while recovery and development activities in the aftermath of technological accidents are crucial, it is equally important to work on prevention or minimizing the impacts of such disasters, ensuring that development activities are risk-informed. At the Third United Nations World Conference on Disaster Risk Reduction, held in Sendai, Japan, in March 2015, the case of Chernobyl recovery was presented at a side event organized by UNDP, the Office for the Coordination of Humanitarian Affairs, UNEP and IFRC, in cooperation with the Government of Belarus.

42. Taking the lessons of Chernobyl forward, IFRC organized a reference group on nuclear emergency preparedness. The Japanese Red Cross has established a Red Cross nuclear disaster resource centre, which operates a digital knowledge platform (http://ndrc.jrc.or.jp). The platform contains information, reports and facts on the disaster and the activities of IFRC and its national societies and is available to the public. IFRC also contributed to a specialized workshop on risk communication and community engagement following a nuclear disaster, organized by the United Nations University in Tokyo. Best practices of and the continuous challenges facing community-based programmes from the areas affected by the Chernobyl and Fukushima disasters were discussed and analysed.

43. To capture critical lessons from the IFRC Chernobyl Humanitarian Assistance and Rehabilitation Programme, which ran from 1990 to 2013, an operational review took place in 2015 that produced key issues and provided a comprehensive collection of the 23 years of IFRC activities addressing the short-term and long-term humanitarian consequences of the disaster.

# VI. Post-2016 international cooperation on Chernobyl

44. In response to the request of the General Assembly in its resolution 68/99 to consider further approaches to international cooperation on Chernobyl after the end of the Decade of Recovery and Sustainable Development of the Affected Regions, a substantive dialogue with technical experts from United Nations agencies and Member States was initiated by the United Nations Coordinator of International Cooperation on Chernobyl at the Inter-Agency Task Force meeting in May 2014. As a result, three expert group consultations were held in 2015-2016 to define a new vision for post-2016 international cooperation on Chernobyl.

45. The first expert consultation, held in May 2015 in Minsk, brought together participants from United Nations agencies, the countries most affected by the disaster and other stakeholders. They reviewed the implementation of the United Nations action plan on Chernobyl and the unfinished work and agreed to continue cooperation, within their respective mandates, and in line with the priorities outlined by the Governments of Belarus, the Russian Federation and Ukraine, as follows:

(a) Socioeconomic development of the most affected regions: promote a more favourable investment climate; develop small and medium-sized enterprises; support agricultural activities, especially where restrictions and zoning will be lifted; ensure lower dependency of the population on social assistance; destigmatize the affected territories and put the resettled areas back into socioeconomic use, where possible; promote cultural, scientific and green tourism; and protect cultural heritage;

(b) Risk management and radiation mitigation: minimize the risks to targeted populations in the most contaminated areas; undertake radioactive rehabilitation of the most “critical” settlements; undertake long-term health monitoring of the most “critical” groups of people; address the specific long-term health consequences of the affected population; and modernize State systems for environmental and radioecological monitoring;

(c) Knowledge management and policy advice: cooperate on scientific research; engage in knowledge management and use of lessons and experiences from Chernobyl response and recovery in global work on disaster risk reduction with a specific focus on nuclear emergencies and technological hazards; consider the governance of technological/nuclear risks in the region; and improve the legislative base to streamline Chernobyl spending and target assistance to the most vulnerable groups of people.

46. During the second expert consultation, held in Vienna in October 2015, the Government of Belarus made the following suggestions for post-2016 international Chernobyl cooperation:

(a) Upon the completion of the Decade of Recovery, consider declaring the next decade the decade of investment in Chernobyl-affected regions;

(b) Enhance activities aimed at the realization of local development projects in the settlements most "critical" from a radiological point of view;

(c) On the basis of the Belarus Palyessye international radioecological reserve, establish a research centre on the long-term consequences of the accident;

(d) Use available data, information and resources to establish regional security centres, with a focus on learning and applying available knowledge in complex situations;

(e) Strengthen the coordination mechanism and intensify international cooperation on Chernobyl;

(f) Assess the remaining Chernobyl-specific needs and work with all stakeholders on joint outreach to potential donors;

(g) Organize an international conference in Minsk in April 2016 on Chernobyl 30 years later.

47. At the third and final expert consultation, held in Minsk in February 2016, it was agreed that post-2016 international Chernobyl cooperation would continue under the initiative "Achieving the Sustainable Development Goals in the Chernobyl-affected regions through partnerships, innovation and investment". The priorities for the new period were reflected in the final outcome document, as follows:

(a) Undertaking further joint efforts aimed at the rehabilitation and sustainable development of the affected territories and the achievement of socioeconomic growth with the active participation of local communities;

(b) Preserving and sharing the unique knowledge and experience of Chernobyl disaster recovery for the benefit of the international community;

(c) Strengthening national and regional capacity to prevent and respond to emergencies, including through environmental monitoring, timely forecasting of risks of emergencies and education and training programmes;

(d) Maintaining and strengthening health-care systems in the affected regions and continuing long-term medical follow-up of exposed populations and the provision of effective medical assistance to high-risk individuals;

(e) Undertaking epidemiological studies on the medical consequences of the disaster, with a view to improving the understanding of low-dose radiation risks for human health and to increasing the effectiveness of medical assistance for individuals residing in the radioactively contaminated areas;

(f) Engaging in knowledge management, policy advice and informational support, with a special focus on the needs of children and women;

(g) Rehabilitating the abandoned territories and putting them back into safe economic use, including for agriculture and forestry, and manufacturing safe and clean products;

(h) Enhancing conditions for promoting scientific exchanges and environmentally sound technologies tailored to the affected territories;

(i) Strengthening scientific and technological cooperation in the field of safe use of nuclear energy.

48. The following actions were proposed under the renewed Chernobyl initiative:

(a) Monitoring the affected regions to assess the efficiency of international assistance;

(b) Launching the new stage of international Chernobyl cooperation early in 2017;

(c) Developing an action plan for the post-2016 period;

(d) Establishing an international scientific network to study the long-term medical, radioecological, radiobiological and other consequences of the disaster, with research sites being established on the basis of national scientific institutions;

(e) Establishing regional centres to inform people about safe life activities;

(f) Supporting a global information campaign to enhance awareness of the needs of people and territories affected by the disaster, including the development and use of Internet resources;

(g) Collecting information on best practices in managing and overcoming the psychosocial consequences of Chernobyl through effective risk communication and sharing those practices with the international community.

# VII. National reports

49. The annexes to the present report contain reports from the three affected countries.

# VIII. Conclusions and recommendations

50. **Belarus, the Russian Federation and Ukraine, together with the United Nations family and other international organizations, gained unique knowledge and experience in recovering from the consequences of the Chernobyl nuclear disaster and created best practices in moving from recovery to development. To**

**preserve that knowledge and experience, and to continue assistance in sustainable development of the most affected regions, further coordination of international efforts is needed beyond the time frame of the current Decade of Recovery and Sustainable Development of the Affected Regions.**

51. **The United Nations system and partners remain committed to supporting governmental efforts to place the affected regions on a stable path of development. Further Chernobyl recovery work will be linked to attaining the Sustainable Development Goals, which should serve as the guiding paradigm for ensuring that no one is left behind. The future initiatives will not necessarily be labelled as "Chernobyl projects", but will be implemented for the benefit of the affected regions and communities. They may focus, for example, on promoting green growth, conserving biodiversity, preventing land degradation and forest fires, enhancing energy efficiency, improving local governance systems or preventing non-communicable diseases. In the future, United Nations agencies, funds and programmes will also continue to further leverage knowledge and experience in dealing with the consequences of the Chernobyl accident to help communities to recover more swiftly from the trauma caused by technological accidents and to protect them against all forms of disasters in the future.**

52. **The affected countries have asked UNDP and the Inter-Agency Task Force on Chernobyl to continue to coordinate international Chernobyl cooperation, ensuring linkages with aspects of sustainable development and the 2030 Agenda for Sustainable Development. UNDP will lead the coordination of United Nations assistance efforts at the country level, under the leadership of resident coordinators in Belarus and Ukraine. UNDP will also host meetings of the Task Force. The Secretary-General will continue to commemorate anniversaries of the accident and rely on the Member States concerned in the preparation of future reports and resolutions on international cooperation on the subject. The Secretary-General calls upon Member States to remain seized of the matter and to continue consideration of the issue as appropriate.**

53. **Overall, the United Nations family will be guided by the vision for post-2016 international cooperation on Chernobyl developed in the course of the three expert consultations in 2015-2016. It will focus on preserving and sharing the experience of overcoming the complex consequences of a nuclear disaster in a broader United Nations context, including the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction 2015-2030. It will also work on creating new partnerships for innovation and investment in the affected regions, in order to highlight the utmost priority of peoples' prosperity as a result of efforts to overcome crises and achieve sustainable development.**

# Annex I

## Report of Belarus

[Original: Russian]

The Chernobyl disaster has caused many billions of dollars' worth of damage to the Belarusian economy and the clean-up has been an unprecedented challenge for the young Belarusian State. For over 25 years now, extensive work has been under way in Belarus for the rehabilitation and recovery of the affected areas.

Self-reliance is a mainstay of State policy to deal with Chernobyl and State-run programmes have been established on that basis in Belarus for post-disaster clean-up and recovery of the affected areas.

Five State-run programmes, focused on concern for people's well-being, have been implemented since the early 1990s and 137,000 people have been resettled from regions of Belarus contaminated with radionuclides. They have been rehoused and have decent living conditions, a health-care system and social protection.

The clean-up has provided a strong impetus for the development and introduction of innovative practices in agribusiness and forestry.

Over the years, the State budget of Belarus has allocated a total of approximately 22 billion dollars for remedial action in the wake of Chernobyl.

The Republic of Belarus has received important international support, in the form of technical assistance programmes and projects, through the agencies of the United Nations system and from the Governments of China, France, Japan and Switzerland, as well as through European Union programmes.

Significant assistance is being provided by charitable organizations in Germany, Ireland, Italy, Spain and the United Kingdom of Great Britain and Northern Ireland. With their assistance, more than 1 million Belarusian children have received treatment for their health in these countries since the early 1990s.

The Republic of Belarus expresses its gratitude to the international organizations, foreign States and citizens of the countries that are actively involved in efforts to rehabilitate the living conditions of Chernobyl-affected regions of Belarus.

The Government of Belarus notes with satisfaction that the General Assembly proclaimed the Decade of Recovery and Sustainable Development of the Affected Regions (2006-2016), which contributed to international projects that successfully complemented national efforts in the area of radioecological education, skills development for safe habitation in affected areas and the active engagement of local communities in addressing specific socioeconomic development issues of affected regions.

Belarus stands ready to share its unique experience of the Chernobyl disaster clean-up with interested countries and international organizations, and to provide the Polesie State Radioecological Reserve as an international research site (testing area) for projects involving and/or led by international partners.

Belarus regards the following as priorities for the rehabilitation and sustainable development of the affected region:

– Ensuring safe living conditions over the long term in areas contaminated with radiation following the accident;

– Tackling pressing socioeconomic development problems through investment, innovation, the modernization of existing industries and the creation of new ones, as well as new job creation, including by enhancing the entrepreneurship of local communities;

– Improving radiation protection and providing long-term environmental radiation monitoring and radioactive contamination control of agricultural products with a view to ensuring the radiation safety of the population;

– Introducing advanced technologies into agricultural production and forestry to minimize radionuclide intake and enhance effective production;

– Developing an effective radiation safety information support system;

– Studying the indirect health effects of the Chernobyl disaster and developing ways to overcome them;

– Providing adequate medical care to citizens living in areas contaminated with radiation.

As an initiator and active participant in international cooperation on Chernobyl, Belarus understands that Chernobyl is not just a problem for affected States and that its consequences cannot be overcome alone.

In connection with the thirtieth anniversary of the disaster at the Chernobyl nuclear power plant, an international conference on Chernobyl was held in Minsk on 25 April 2016 and was attended by representatives of States Members of the United Nations and its agencies.

A key provision of the declaration adopted at the conference is the need to continue international cooperation on Chernobyl under the auspices of the United Nations after 2016, with a view to achieving the Sustainable Development Goals in the affected regions through partnership, innovation and investment.

Belarus looks forward to support for this approach from Member States and United Nations agencies.

# Annex II

## Report of the Russian Federation

[Original: Russian]

The basic principles of State policy to support citizens of the Russian Federation living in areas contaminated by the accident at the Chernobyl nuclear power plant are as follows:

– Comprehensively meeting the needs of the affected population through the provision of targeted social assistance;

– Supporting and implementing measures to restore the affected areas to economic activity with a view to improving their investment attractiveness;

– Actively involving the local community in decision-making processes for the socioeconomic recovery of the areas;

– Improving national capacity in preparedness to respond to such disasters;

– Intensive outreach to the affected population and psychological assistance.

The Russian Federation has adopted and implemented the Act on the social protection of citizens exposed to radiation caused by the disaster at the Chernobyl nuclear power plant, which sets out the obligations of the Russian Federation towards affected citizens.

This Act guarantees affected citizens compensation for the damage caused to their health and property by radiation, as well as cash payments for the risk of living in areas contaminated by radiation.

Targeted programmes have become an essential tool for implementing State policy of the Russian Federation to ensure the health and safety of people living in contaminated areas.

Since 1992, the Government of the Russian Federation has adopted and implemented five targeted programmes, four programmes to protect the child population and two programmes to provide housing for those involved in the post-accident clean-up.

The programmes were mainly aimed at reducing the negative health, social and psychological effects of the accident to the lowest possible level, ensuring the environmental and economic rehabilitation of the areas contaminated by radiation and restoring the areas to normal living conditions.

As a result of programmes to deal with the consequences of radiation accidents from 1992 to 2015:

– Around 1.8 million square metres of housing stock were commissioned, providing accommodation to more than 70,000 people;

– Gas and heating were supplied for up to 1 million people, and water and sanitation systems for over 700,000 people;

– Hospitals were commissioned with 11,000 beds and clinics with a capacity of 1,700 visits per shift;

– Preschools were built with more than 4,500 places and general educational institutions with 30,500 places.

Medical check-ups were carried out for more than 3 million citizens exposed to radiation, of whom 63 per cent received inpatient specialized medical care.

Rehabilitation activities managed to restore 30 per cent of agricultural land to economic activity and 14 per cent of forest lands.

The range of programme activities carried out provided a qualitative improvement to the radioecological and socioeconomic situation in more than 3,000 locations of the Russian Federation inhabited by over 1 million people. This allowed these locations to be removed from the areas of radioactive contamination.

However, Chernobyl remains a topical issue.

There are still large areas of land to be returned to productive use. Without protective measures in highly contaminated areas, it is not possible to manufacture products that comply with the regulatory requirements for radionuclides. Permanent monitoring of the environment is required to ensure the radiation safety of the population.

Work to ensure the health and safety of people living in the contaminated areas is set to continue within the framework of relevant targeted programmes.

In the context of international cooperation on Chernobyl, the Government of the Russian Federation is currently considering making an additional contribution of up to 10 million euros in 2016-2017 to the Chernobyl Shelter Fund.

The total contribution of Russia to the Chernobyl Shelter Fund since 2008 is 60.3 million euros. Furthermore, in 2009 and 2012 Russia contributed 12.5 million euros to the Nuclear Safety Account. These funds were spent on the construction of a spent nuclear fuel dry storage facility on the site of the Chernobyl nuclear power plant.

# Annex III

## Report of Ukraine

[Original: Russian]

### 1. National strategy to mitigate the consequences of the Chernobyl disaster (General Assembly resolution 68/99, paragraph 11)

Pursuant to Decree No. 141/2016 of the President of Ukraine dated 13 April 2016 on additional measures to transform the Shelter into an ecologically safe system and regenerate the areas exposed to radioactive contamination as a result of the Chernobyl disaster, the State Agency of Ukraine on Exclusion Zone Management is developing a strategy to deal with the consequences of the Chernobyl disaster and regenerate the areas exposed to radioactive contamination.

The Strategy includes the following points:

– The regeneration of areas exposed to radioactive contamination and their return to normal life;

– Information support for State policy to deal with the consequences of the Chernobyl disaster;

– The restoration of systematic dosimetry certification for settlements in areas of radioactive contamination;

– Introducing a systematic review of contaminated border areas;

– Strengthening research on nuclear and radiation safety, and studying the impact of ionizing radiation on people and the environment;

– Creating the conditions for alternative energy facilities to be deployed in the exclusion and unconditional (mandatory) evacuation zones, and attracting investment for energy-efficiency projects to be implemented in facilities located in these zones;

– Strengthening the independence of Ukraine in managing spent nuclear fuel from domestic nuclear power plants and highly active radioactive waste.

### 2. Implementation of the United Nations Action Plan on Chernobyl

The United Nations Development Programme (UNDP) has been responsible for coordination to deal with the aftermath of the Chernobyl disaster since 2004.

Over the years, with the support of the Government of Ukraine, UNDP has implemented a number of significant initiatives that have contributed to the development of the affected territories:

The Chernobyl Recovery and Development Programme has been carried out in the four provinces of Ukraine most affected by the Chernobyl disaster: Kyiv, Zhytomyr, Chernihiv and Rivne. With its support, 270 community organizations have been set up in 192 villages where over 20,000 people live. These citizens' associations work in close cooperation with local governments and councils to address the villages' urgent social and economic problems: restoring the water and

gas supply, reconstructing schools, opening medical and obstetric centres and outpatient clinics, and establishing youth, public and trade service centres. Over the years this programme has financially supported 184 community projects.

The International Chernobyl Research and Information Network (ICRIN) project of the International Atomic Energy Agency, UNDP, the United Nations Children's Fund and the World Health Organization was implemented in Ukraine between 2009 and 2013. The project helped to provide the public with scientifically reliable information on health effects, safe residence in contaminated areas and the development of healthy lifestyles by disseminating information through the educational system, the media and medical and radiology specialists, as well as via training workshops.

From 2012 to 2013, UNDP implemented a project in Ukraine to integrate environmental protection into the local development strategy for areas affected by the Chernobyl disaster. Under the project:

– Public hearings were held on the status and severity of environmental issues in pilot areas;

– Local media representatives were trained in investigating and reporting on environmental issues;

– Draft plans were prepared for the environmental development of pilot areas (strategic environmental plans up to the year 2020) with the inclusion of short- and medium-term objectives;

– Work was carried out to improve the functioning of webpages belonging to the agencies and organizations of project partners;

– Recommendations were prepared for environmental protection issues to be integrated into plans for the socioeconomic and environmental development of the areas.

### 3. International cooperation on Chernobyl after 2016: needs and priorities for international assistance

A return to normal life is a real possibility for people living in the areas affected by the Chernobyl disaster. Achieving this goal to a large extent now depends on gradual socioeconomic development, job creation, attracting new investments and restoring community self-sufficiency. Significant changes have already been achieved, but international assistance is still necessary.

Given the long-term nature of the impact of the Chernobyl disaster, Ukraine considers further cooperation necessary with the United Nations and other international organizations in order to study and minimize the health, environmental and socioeconomic consequences of the accident at the Chernobyl nuclear power plant, and to foster the rebirth and development of the affected areas.

Ukraine supports the proposals for post-2016 international cooperation on Chernobyl, as contained in the report of the Secretary-General at the sixty-eighth session of the United Nations General Assembly.

In view of the current situation in Ukraine, we believe that United Nations agencies should focus their assistance on the following issues:

– Radiological rehabilitation of the most “critical” Ukrainian Polesie settlements by establishing programmes for their recovery, taking into account their environmental and socioeconomic characteristics;

– Promoting the development of initiatives to exchange best practices on the socioeconomic development and socio-psychological rehabilitation of local communities, both in countries affected by man-made disasters and worldwide;

– Assistance in modernizing State systems for monitoring doses of radiation absorbed by people living in contaminated areas;

– Assistance in carrying out psychosocial monitoring of people living in contaminated areas;

– Assistance in carrying out long-term medical monitoring of the health of persons affected by the accident at the Chernobyl nuclear power plant and the development of early diagnosis of diseases associated with exposure to ionizing radiation;

– Assistance in conducting scientific research into the long-term health effects of the Chernobyl disaster;

– Assistance in maintaining the unique cultural and historical heritage of the Ukrainian Polesie.

International technical assistance projects are currently under way at the Chernobyl industrial facility aimed at improving the nuclear safety of the Chernobyl nuclear power plant and converting the shelter facility (the destroyed fourth unit of the nuclear power plant) into an environmentally safe system. One of the most significant and important components of these projects is the construction of a new safe confinement. The confinement is being built within the framework of the Shelter Implementation Plan. The new safe confinement (arch) at the Chernobyl industrial facility is currently under construction according to the contract timetable. The arch is scheduled to be fitted over the existing shelter facility in November 2016. Work is continuing to install the main cranes for the arch. These will allow the existing unstable shelter structure to be dismantled in the future.

Work is also ongoing at the shelter industrial facility to build infrastructure for operation of the new safe confinement, for fire safety facilities and for engineering and technology research.

## 4. International events hosted in Ukraine to mark the thirtieth anniversary of the Chernobyl disaster (General Assembly resolution 68/99, paragraph 17)

From 21 to 23 April 2016, as part of events to mark the thirtieth anniversary of the Chernobyl disaster, the National Technical University of Ukraine “Kyiv Polytechnic Institute” held an international forum on the lessons of Chernobyl for global nuclear security, involving a broader audience of scientists, politicians and the general public.

Participants in the forum reaffirmed their intention to cooperate on nuclear safety in order to strengthen collective efforts to prevent and reduce the negative effects of such accidents in the future.

Events at the Chernobyl and Fukushima Daiichi nuclear power plants, as well as natural disasters, have demonstrated that only joint efforts by the international community are capable of strengthening nuclear security. The goal of meeting the needs of the population affected by the Chernobyl disaster can be achieved by developing and implementing integrated projects in priority areas, in cooperation with national and international partners at the governmental and non-governmental levels.

Participants called for the relevant agencies and regulating bodies of countries with nuclear power plants to draw the attention of the international community to the issue of a permanent solution to the problems of Chernobyl, particularly to the implementation of the next phase to transform the shelter facility into an environmentally safe system.

## 5. The dissemination of experiences and lessons learned from tackling the human consequences of the Chernobyl nuclear accident for application and replication in other nuclear disasters (General Assembly resolution 68/99, paragraph 24)

On 18 April 2012 the Governments of Ukraine and Japan signed an agreement on cooperation to advance aftermath response to accidents at nuclear power plants. This set out the legal basis for further cooperation aimed at combining scientific and technical capacities and resources, and using the knowledge and experience of specialists and experts from both countries, to recover from the consequences of such nuclear accidents. The agreement was ratified by Act No. 4669-VI of 27 April 2012 and entered into force on 30 May 2012.

In accordance with the provisions of the agreement, a joint committee was established on cooperation to advance aftermath response to accidents at nuclear power plants. The committee includes leading Ukrainian specialists on post-Chernobyl issues and Japanese experts involved in the clean-up from the accident at the Fukushima Daiichi nuclear power plant.

Both countries have acknowledged the useful of their experience, which they will endeavour to apply, inter alia: to a decision-making system for optimizing radiation protection activities; to improve the decision-making system for optimizing radiation protection activities, drawing on the experience of Chernobyl and Fukushima; and to remote measuring, including by satellites, in order to monitor sites contaminated by radiation as a result of a nuclear accident.