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SOME FEATURES OF THE ALTAI CASE STUDY

Dear Colleagues.

① It is my pleasure to welcome all participants of this very important international workshop. I hope that our work together will be interesting and efficient.

In the last decades of the XXth century the mankind became aware that our civilization had generated a set of global problems threatening the life on the planet Earth. This workshop is devoted to one of them - to the consequences of nuclear weapon tests for the health of the population and for the environment of territories neighbouring the testing sites.

Consequences of nuclear tests are a part of the global problem connected with accumulated nuclear fission materials. Science gave the mankind a new powerful source of energy. But it was used first of all with a detriment to people. Nuclear bombs explosions over Hiroshima and Nagasaki were senseless actions from the viewpoint of the Second World War ending but they opened the era of nuclear terrorism. The following "Cold War" years were the time of numerous nuclear tests aimed at the increased "efficiency" of these deadly weapons.

② In the period of 1945-1990 USA, USSR, UK, France and China performed more than 400 nuclear explosions. ~~(Slide 1)~~ These tests resulted in the release of a tremendous amount of radio-nuclides in the environment. ~~(Slide 2)~~

③ When the military stock of fission material reached the amount sufficient for killing all the people living on the planet Earth several times, the governments of nuclear states decided to sign agreement on the ban of nuclear tests and undissemination of nuclear weapons. But it was done too late. The gin of nuclear terrorism was let out of the bottle. Nowadays according to the published information it is sufficient to have 1 kg of weapon's plutonium or 1 kg of uranium-233 to make a nuclear bomb weighing less than 20 kg. Therefore, we should fear not only

state nuclear terrorism in our exciting world but also the terrorism of small groups of people.

4 Therefore, the knowledge about the consequences of nuclear
5 explosions for the health, and their effect on the environment is
6 very important for the living and future generations. A great
7 attention to this problem is paid by (SCOPE). You know that this
8 international Workshop is also organized in the framework of the
SCOPE RADTEST Programme. The Executive Committee of SCOPE believes
that Semipalatinsk-Altai Case Study is very important in the
context of the above-mentioned Programme. The reasons for this
are connected with usual difficulties in distinguishing consequences
of radionuclides impact and other local factors having negative
influence on the health of the population and the state
of the environment. In this relation the Altai Case Study is
9 characterized by the following ~~several favourable~~ circumstances:
(Slide 3)

- the industrial pollution of a large part of the Altai territory is not so strong as in many other cases;
- the Altai agriculture used less various chemicals because they were less available in Siberia than in other parts of the former Soviet Union;
- 10 - since the information about radioactive fallouts was secret psychological stress for the Altai population was not so strong as, for example, in the case of Chernobyl catastrophe where stressing factors influenced the health of the population much more drastically;
- 11 - the Altai area is characterized by ~~low~~ transregional migration of population;
- there are many very similar in other respects neighbouring settlements exposed and not exposed to radioactive fallouts caused by nuclear tests;
- a special state programme was launched several years ago devoted to studying long-term consequences of nuclear tests at Semipalatinsk site on the health of population of the Altai region and there is now a large volume of information relating to the Altai case.

It seems therefore that results of detailed and comprehensive critical analysis of the Altai data will be significant

contribution to a better understanding of the impact of radio-nuclides releases from various kinds of nuclear detonations on the health of people and on the state of the environment.

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~~We believe that it will also be~~ very important to compare results of the Altai case study with those obtained in other countries. During last years the accessibility of corresponding information was increased. This was stimulated by requirements of some international agreements and of general public that would like to strengthen its control over governmental activity.

According to Rio Declaration on Environment and Development (1992):

"States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage. States shall also cooperate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction."

The way of sustainable development proposed by the Rio-de-Janeiro Conference presumes very open and constructive collaboration of governments and public. Representatives of the world scientific community should help in the establishing such collaboration.

