

Declaration by Gruppo di lavoro per la Sicurezza Internazionale e il Controllo degli Armamenti (SICA)

Accademia Nazionale dei Lincei, 6 ottobre 2022

Nuclear weapons have a recognised function to dissuade opponents equipped with such weapons from using them, threatening catastrophic retaliation. "*Mutual Guaranteed Destruction*" marked out Cold War years.

Possible use "tactical" nuclear weapons in the war between Russia and Ukraine has been mentioned by different sources from aggressor Country.

However, simply evoking the possible use of "tactical" nuclear weapons is dangerous and opens up highly destructive scenarios.

Despite their reassuring name, each "tactical" weapon, nowadays available in huge numbers, has an explosive power comparable, and in many cases greater, to the two bombs used in history, in Hiroshima and Nagasaki, that caused hundreds of thousands of people killed instantly and a greater number of sick survivors as a result of nuclear radiation.

"Strategic" nuclear weapons, available in large numbers to the biggest nuclear Countries too, have an explosive power thousand times higher and their use in a total nuclear war could lead to the cancellation of humankind from Earth. This justifies the claim "*a nuclear war cannot be won and therefore must not be started*", as jointly declared by M. Gorbachov and R. Reagan years ago, the presidents of the two largest nuclear weapons Nations, the USSR and the USA.

Any use of tactical nuclear weapons in Ukraine would create a dreadful situation and endanger the whole world. Nations owner of nuclear weapons involved (directly or indirectly) in this war should avoid mentioning a possible use of nuclear devices, in order not to create devastating addictive effects of public opinion. Furthermore, it is possible the even limited use of nuclear tactical devices may lead, after lots of escalations, to a total war fought with strategic weapons. On the contrary, every effort must be made in the civilised world to achieve a ceasefire and a peaceful resolution of the reasons behind the conflict itself.

We address the scientists of Nations involved directly or indirectly, in particular the intellectual community that took part in Amaldi Conferences organized by our Academy, including Russian scientists, in order to step in to expose the real risks associated with the use of tactical nuclear weapons to

the public opinion and in order to ask their governments to explicitly commit themselves to the “no first use” of nuclear weapons. At the same time, we call for the immediate resumption of global negotiations on nuclear disarmament, involving all nuclear Nations.

Writing these notes, we wondered whether raising the issue of the dangers of using tactical nuclear weapons was not an implicit suggestion to give in to the ongoing nuclear blackmail. We are convinced that this is not the case. We believe that the answer to the nuclear threat is an exclusive trait of governments, but that, based on a correct information on the risks involved, they can step in to the most effective way.

In 1955 Einstein-Russell Manifesto, faced with the development of thermonuclear weapons, eleven scientists of international reputation asked governments to give up war to avert the danger of a nuclear holocaust. As then, we must think of humankind, leaving aside the rest. *Remember your humanity and forget the rest.*

This declaration has been prepared by SICA, composed by: D. Archibugi, F. Calogero, P. Cotta-Ramusino, F. Lenci, G. Losurdo, L. Maiani, E. Pellegrin, A. Pascolini, A. Quadrio- Curzio, C. Schaerf.

President of the Accademia dei Lincei, Roberto Antonelli, and Vice-President, Giorgio Parisi, endorse the statements of Gruppo di lavoro per la Sicurezza Internazionale e il Controllo degli Armamenti (SICA) and hope that dialogue, good sense and law in relationship between Countries start prevailing again in the interests of mankind.