

**SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENTS
RELEVANT TO THE BIOLOGICAL WEAPONS CONVENTION**

Submitted by Argentina

(UNOFFICIAL TRANSLATION)

1. Present developments in science and the technology are of particular relevance to the implementation of the Biological Weapons Convention. Developments considered most relevant include:

- (i) The possibility of overcoming hosts' defences by certain pathogenic microorganisms through genetic recombination (Expression of Mouse Interleukin-4 by a Recombinant Ectromelia Virus Suppresses Cytolytic Lymphocyte Responses and Overcomes Genetic Resistance to Mousepox. *Journal of Virology*, Vol. 75, 2001).
- (ii) Access to information (bioinformation on the genome of a virus) together with the possibility of electronic ordering of biological material, allowing laboratories to synthesize a virus *in vitro*, using protein syntheses techniques (Chemical Synthesis of Poliovirus cDNA: Generation of Infectious Virus in the Absence of Natural Template. *Science*, Vol. 297, 9 august 2002).
- (iii) The possibility of modifying the properties of biological agents, such as altering its infectivity, pathogenic characteristics, or resistance to antibiotics, to transform agents that in the past were not considered risky from the point of view of the Convention, into agents of potential biological weapons use.
- (iv) Possibilities offered by developments in biotechnology and nanotechnology, access to information on technology distribution in the different areas of the biological sciences, and the possibility of accessing materials and equipment through electronic means (such as purchases over the Internet), constitute factors which might be considered, when in the future evaluating measures for fulfilling the provisions of the Convention, not to interfere with progress in the basic and applied sciences.

2. This situation has to be reflected in the design of codes of conduct for scientists and institutions and in the reformulation of the Confidence-Building Measures, modified for the last time in 1991, participation in which is low amongst the States Parties of the Convention.
