

Remote Sensing and Working Group on Direct Broadcasting by Satellites. It would be charged with a careful study of relevant aspects of the use of nuclear power sources in outer space, with a view to making recommendations for action by member states. This working group would, of course, depend on the full support and active participation of all members concerned with this technology. It could make a major contribution to the clarification of the issues, as did its predecessors in other areas of study, thus preparing the ground for constructive action in the Legal Sub-Committee, the parent committee and the General Assembly. At the same time as the working group is broadening our base of scientific and technical information, discussion of legal and other aspects could proceed in tandem.

The following are some of the questions and issues to which the proposed working group should address itself. What alternatives are available as power sources for satellites and what are their relative advantages and disadvantages, including safety considerations? As amongst various nuclear power sources, such as reactors using Uranium 235 and radioisotope generators using Plutonium 238, what are the relative advantages and disadvantages, including safety considerations? Should certain standards of radiation levels be established for space objects returning to earth? As a related question, should restrictions be placed on use of nuclear power sources in relation to altitude and lifetime of orbit and decay time (half-life) of radioactive material? What special precautions should be taken so as to rule out any possibility of uncontrolled fission reaction or explosion on aborted launch or after re-entry? What special safeguards or design standards should be developed regarding dispersal of radioactive material on re-entry or, alternatively, regarding intact re-entry and recovery? What measures are appropriate and feasible so as to provide notification of: (a) intention to launch spacecraft with a nuclear energy source on board? (b) risk due to re-entry? (c) probable time and place of impact? and, (d) actual impact? What role could be played by other U.N. organizations such as IAEA and UNDRO so as to enhance the level of safety of operations of such satellites and adequate international emergency response operations, if needed, for search, recovery and clean-up?

Other delegations may well have other questions to put to the working group and we offer these questions only as a preliminary indication of areas where we believe that technical studies should be pursued.