

Public Health Response To Radiation Emergencies And The Role Of The Helsinki Project Office

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Introduction

The aims and objectives of the Helsinki Project Office are concerned with the protection of public health through effective response to nuclear emergencies. Effective response cannot take place without effective contingency planning for such events. Thus the activities of the Project Office fall into two categories, namely contingency planning or preparedness, and response.

The European region faces unique problems in connection with nuclear emergencies. It houses the largest concentration of nuclear facilities in the world, combined with, in parts, very high population densities relying, often heavily, on fresh dairy produce as a staple in the diet. Two out of the three accidents to nuclear reactors (2 civil and one military) have occurred in the region as well as a number of other accidents and past practices involving exposure to radioactivity through environmental routes to the population.

Added to this regional dimension is the global dimension of climate change driven by the build-up of "greenhouse" gases. As the transition from theory to reality is made (and that is happening now) pressure to exploit non-carbon burning sources of energy will increase. In some cases this may mean the construction of "rough and ready" nuclear reactors but more likely it will mean the extension of the operating lifetime of existing facilities. The probability of accidents will therefore increase as equipment ages and becomes more prone to failure.

While prevention of accidents will remain a high priority for the future through better engineering, safe procedures etc. preparedness and response to accidents will require greater attention in the future. Already, on the basis of past practical experience of accidents, the probability of another accident in the next decade is about 0.67. This I stress is based on past experience, the last accident was in 1986, we should have learned from that so reducing the future risk but equally the age of the generating stock is that much greater - little of it has been replaced and already the operating life of some stations has been extended beyond their originally anticipated lifetime. We therefore already face a new and unknown situation. If we are confident that the lessons of Chernobyl have been learned and that risks of future accidents have been dramatically reduced I guess we share much in common with the ostrich.