

# Comments on HLEG Draft Report

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## A general comment

I recognise that the proposal made for a highly coordinated programme (MELODI) may be a political inevitability and note that the danger of it extinguishing innovation is recognised and catered for in various ways. However, it has to be recognised that the subject of radiological protection is highly polarised and researchers are subject to pressures that may compromise the integrity of their research (in both directions). The health effects of ionising radiation are a real and proper public health concern at the professional level and among the public. INDEPENDENCE, true independence, of these polar positions is the key to sound professional work and high public confidence in it. In my view such independence has been lacking in very many aspects of political and social life in the past decade (a failure of independence is a major factor in the present financial crisis) including in the area of radiological protection. The arrangements to ensure independence of the implementation of MELODI needs to be very carefully considered and the subject of extensive consultation in their own right.

## A specific comment

Hereditary effects seem to be relatively neglected in the draft report. There are two reasons why they should be given greater prominence:

- \* Published data do indeed suggest that hereditary effects were not seen the survivors of the atomic bombings in Japan. However, it is my understanding that those data together with additional data are in the process of re-evaluation (private communication with Dr Roy Shore).
- \* The transgenerational inheritance of radiation induced genomic instability observed in mice since 2002 is now an established phenomenon. There is some evidence to suggest that a similar effect occurs also in humans. There is evidence dating back to at least 1976 that is consistent with a radiation inducible non-Mendelian epigenetic inheritance process through the male germline that is not diluted with subsequent matings with female mice without a radiation history. There is evidence that qualitatively similar effects are induced in mice and rats by chemicals.