ICRP Committee 1 addresses issues pertinent to tissue reactions, risks of cancer and heritable diseases, radiation dose responses, effects of dose rate and radiation quality. In addition, it reviews data on effects of radiation on embryo/fetus, genetic factors in radiation response, as well as uncertainties in providing judgments on radiation-induced health effects. The Committee advises the Main Commission on the biological basis of radiation-induced health effects and how epidemiological, experimental and theoretical data can be combined to make quantitative judgments on health risks to humans. The emphasis is on low radiation doses, in the form of detriment-adjusted nominal risk coefficients, where there are considerable uncertainties in both the biology and epidemiology. Furthermore, Committee 1 reviews data from radiation epidemiology studies and from publications on the molecular and cellular effects of ionising radiations relevant to updating the basis of the 2007 Recommendations found in *Publication 103*. This presentation will provide an overview of the activities of Committee 1, the updated work of the Task Groups and the Working Parties, and the future activities being pursued by Committee 1.