

Understanding Existing Exposure Situations

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The International Commission on Radiological Protection (ICRP) *Publication 103* removed the distinction between practices and interventions, and introduced three types of exposure situations: existing, planned and emergency. It also emphasised the optimisation principle in connection with individual dose restrictions to all controllable exposure situations. Existing exposures situations are those resulting from sources, natural or man-made, that already exist when a decision on control has to be taken. They have common features to be taken into account when implementing the general recommendations, such as: the source may be difficult to control; all exposures cannot be anticipated; protective actions can be implemented only after characterisation of the exposure situation; times are generally required to reduce exposure below the reference level; levels of exposure are highly depending on individual behaviour; a wide spread distribution of the individual dose is presented; exposures at work may be adventitious and not considered as occupational exposure; there is generally no potential for accident; and, many stakeholders have to be involved and many factors need to be considered. ICRP is currently developing a series of publications related to the practical implementation of *Publication 103* to some existing exposure situations: exposure from radon, from cosmic radiation in aviation, from processes using naturally occurring radioactive materials and from contaminated sites due to past activities.