

THE PRECAUTIONARY PRINCIPLE

Terms used in the context of risk assessment are the Precautionary Principle, the Precautionary Approach, Prudent Avoidance and ALARA (As Low As Reasonably Achievable).

For the purpose of this document the Precautionary Principle could be seen as the fundamental precepts upon which a practical precautionary approach could be based.

The issue of risk assessment can be summarised as the weighing up of likely harm based on all available scientific evidence, with the cost of commercial adjustment by the Carrier.

The fundamental concept of the Precautionary Principle was summed up in 1992 at the UN Conference on Environment and Development (UNCED) in Rio de Janeiro.

Here, the Precautionary Principle was explicitly recognised and included in the Rio Declaration. It is listed as Principle 15 among the principle of general rights and obligations of national authorities.

"In order to protect the environment, the precautionary approach should be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

The application of the Precautionary Principle requires commitment to the idea that scientific proof of a causal link between human activities and its effect is not required.

1. Australia's Inter-governmental Agreement on the Environment (IGAE) notes:

"Essentially, the precautionary principle offers administrators advice about how to act responsibly in the face of uncertainty and lack of full scientific knowledge. Under this Principle, policy makers are advised to use great care when authorising resource use where the outcomes of that use cannot be predicted with confidence, where one or more of the possible outcomes could have extremely adverse implications for future generations, or where no known substitutes exist for the resource being used."

And that:

- *Careful evaluation to avoid, wherever practicable serious or irreversible damage to the environment; and*
- *An assessment of the risk-weighted consequences of various actions.*

2. However the European Commission Communication on the Precautionary Principle attempts to establish more detailed guidelines for its application, and to this end notes that:

"The Precautionary Principle should be considered within a structured approach to the analysis of risk which comprises three elements: risk assessment, risk management, risk communication. The Precautionary Principle is particularly relevant to the management of risk."

The Summary notes that:

Appendix 6

"The issue of when and how to use the precautionary principle, both within the European Union and internationally, is giving rise to much debate, and to mixed, and some times contradictory views. Thus, decision-makers are constantly faced with the dilemma of balancing the freedom and rights of individuals, industry and organisations with the need to reduce the risk of adverse effects to the environment, human, animal or plant health. Therefore finding the correct balance so that the proportionate, non-discriminatory, transparent and coherent actions can be taken, requires a structured decision-making process with detailed scientific and other objective information."

But also that:

"The Precautionary Principle applies where scientific evidence is insufficient, inconclusive or uncertain – and preliminary scientific evaluation indicates that there are reasonable grounds for concern that the potentially dangerous effects on the environment, human, animal or plant health may be inconsistent with the high level of protection chosen by the EU."

And that:

"In some cases, the right answer may be not to act or at least not to introduce a binding legal measure. A wide range of initiatives is available in the case of action, going from a legally binding measure to a research project or a recommendation. Where action is deemed necessary, measures based on the precautionary principle should be, inter alia:

- *proportional to the chosen level of protection;*
- *non-discriminatory in their application;*
- *consistent with similar measures already taken;*
- *based on an examination of the potential benefits and costs of action or lack of action;*
- *subject to review, in the light of new scientific data; and*
- *capable of assigning responsibility for producing the scientific evidence necessary for a more comprehensive risk assessment.*

The application of the Precautionary Principle to the siting of radiocommunications infrastructure should include a consideration of the uncertainty of the science on a-thermal effects.

There is a need to balance the requirement for the telecommunications industry to provide adequate service with the need of the community to be ensured of living in an environment that will not be a potential threat to health.

3. The World Health Organisation's advice on electromagnetic fields and public health with respect to mobile telephones and their base stations (fact sheet 193 June 2000) includes the following precautionary measures

Precautionary measures

- **Government:** *If regulatory authorities have adopted health-based guidelines but, because of public concerns, would like to introduce additional precautionary measures to reduce exposure to RF fields, they should not undermine the science base of the guidelines by incorporating arbitrary additional safety factors into the exposure limits. Precautionary measures should be introduced as a separate policy that encourages, through voluntary means, the reduction of RF fields by equipment manufacturers and the public. Details of such measures are given in a separate WHO Background document.*

Appendix 6

- Individuals: Present scientific information does not indicate the need for any special precautions for use of mobile phones. If individuals are concerned, they might choose to limit their own or their children's' RF exposure by limiting the length of calls, or using "hands-free" devices to keep mobile phones away from the head and body.