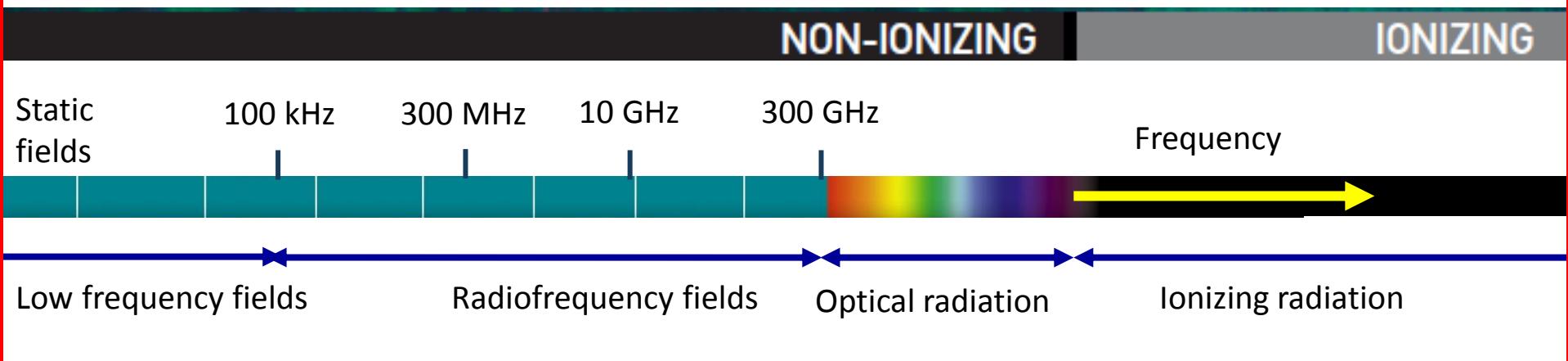
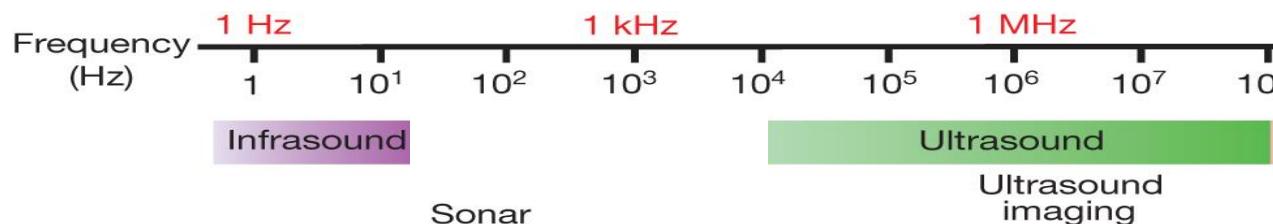


Non-Ionizing radiation

Electromagnetic radiation spectrum

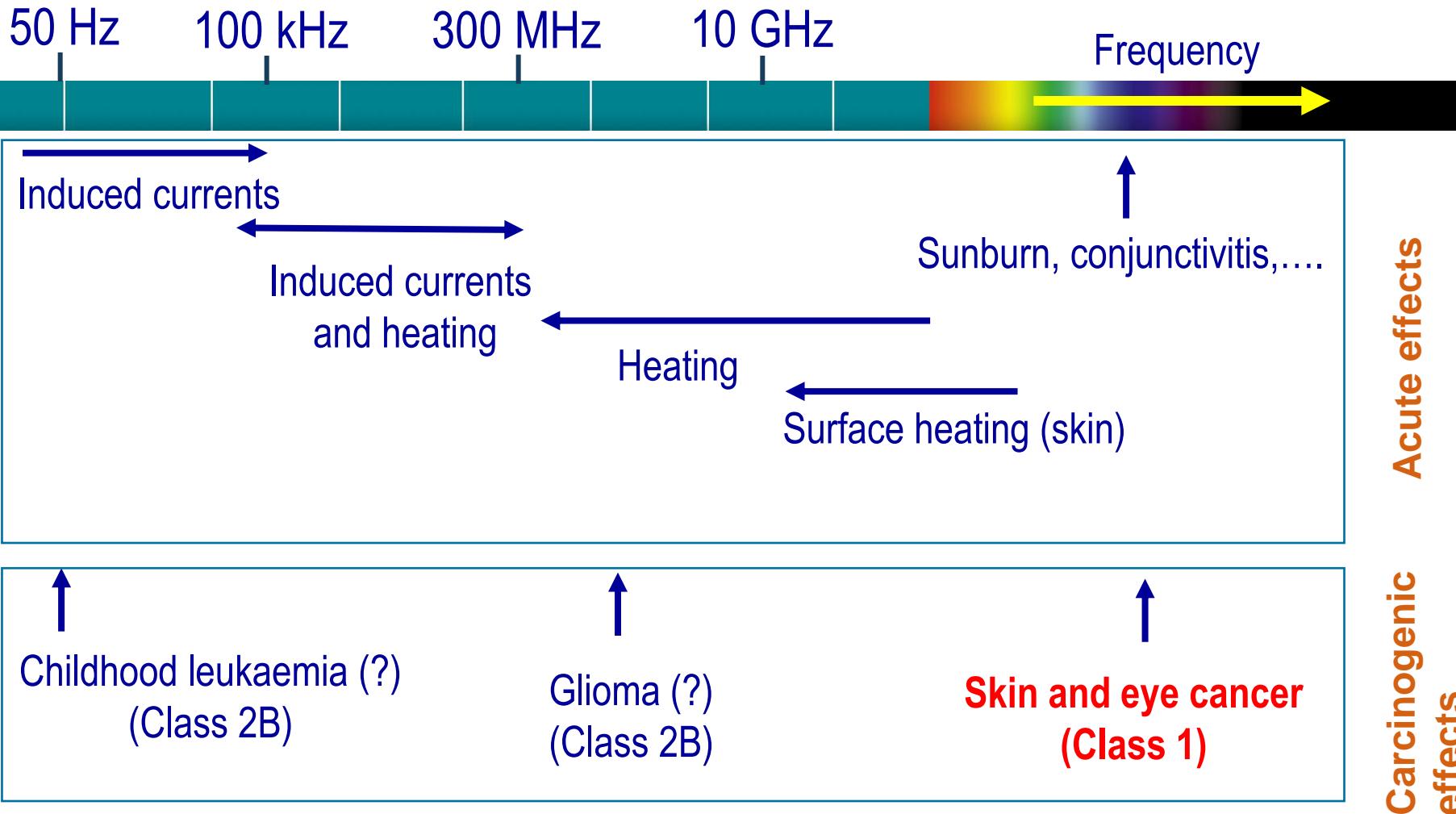


Acoustic spectrum



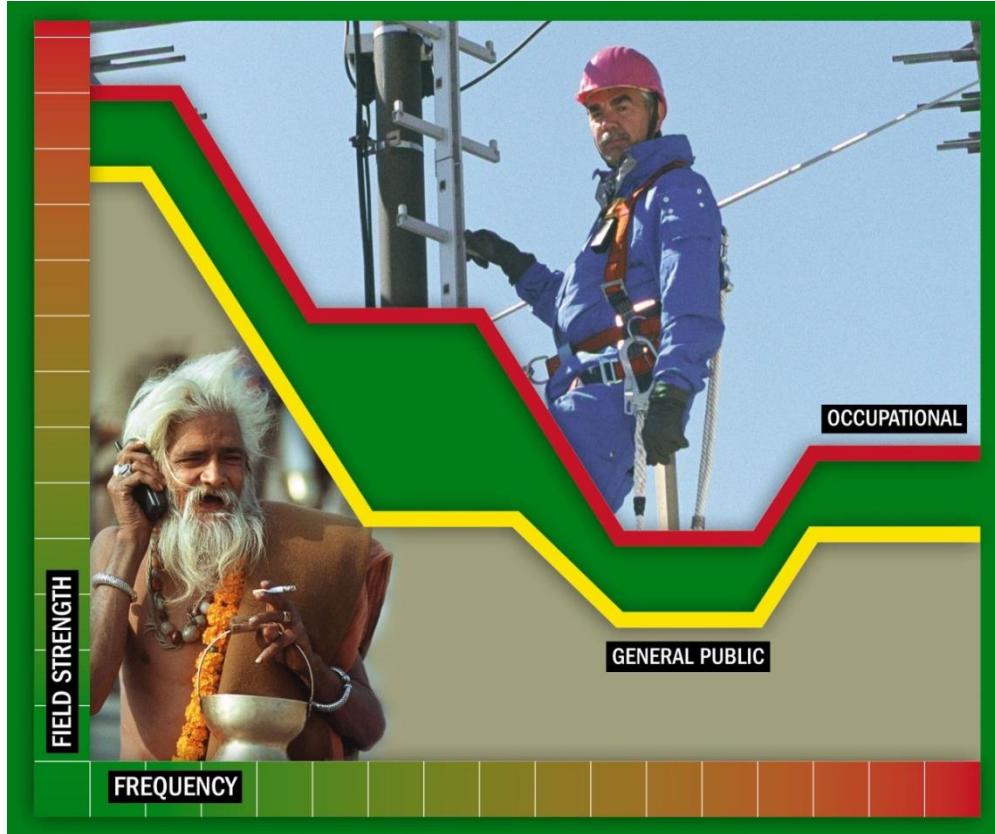
What do we know?

Mechanisms of interaction



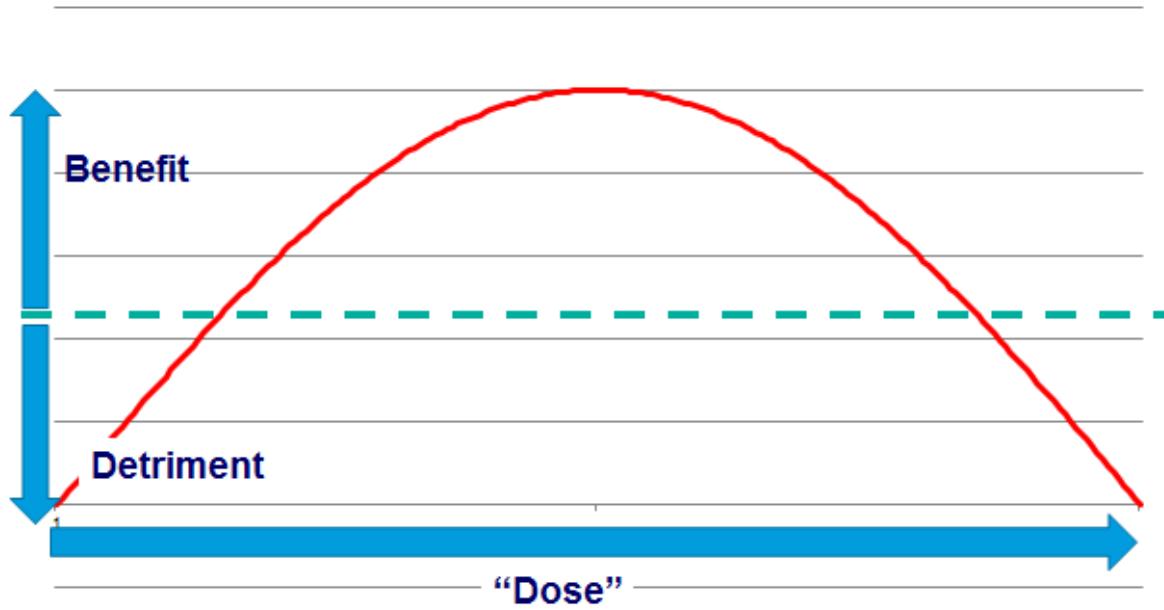
Electromagnetic fields

Reference Levels



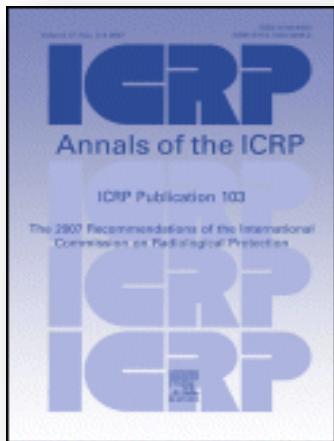
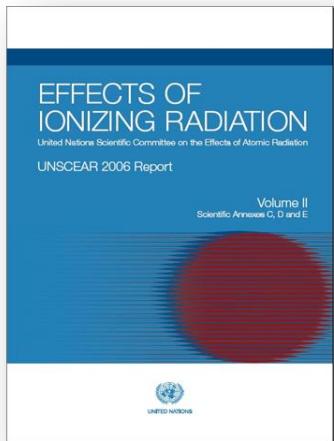
Ultraviolet radiation

Detriment vs. benefit



The IR Landscape

Science, recommendations, standards



Scientific basis
Effects, risks,
sources, levels,
trends, ...

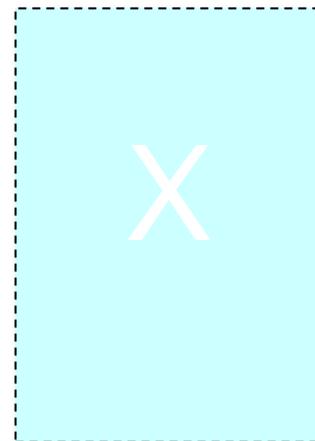
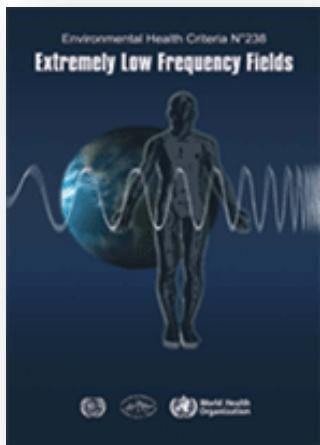
Recommendations
System of RP
(philosophy, principles,
dose criteria, ...)

Standards
(safety requirements,
regulatory language,...)

National regulations

The NIR landscape

Science, recommendations, ...



Scientific basis
Effects, risks,
sources, levels,
trends. Many
international reviews

Recommendations
System of RP
(philosophy, principles,
limits). Other bodies
CIE, ICES

Standards
(safety requirements,
regulatory language,...)

**National
regulations**

The System of Radiological Protection

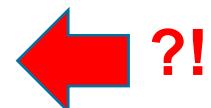


- **Three exposure situations**
 - Planned
 - Existing
 - Emergency
- **Three categories of exposure**
 - Public
 - Occupational
 - Medical
- **Three principles**
 - Justification
 - Optimization
 - Limitation

NIR Protection



- **Three exposure situations**
 - Planned
 - Existing
 - ~~Emergency~~
- **Three categories of exposure**
 - Public
 - Occupational
 - Medical
- **Three principles**
 - Justification
 - Optimization
 - Limitation



Example

ELF magnetic fields and childhood leukaemia

