

THE VIEW FROM ICNIRP

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Chairman of ICNIRP

Workshop on EMF and Health: Science and Policy to address public concerns

Brussels, 11-12 February 2009



THE INTERNATIONAL COMMISSION ON NON-IONIZING RADIATION PROTECTION

ICNIRP is an independent scientific organization that:

- provides **guidance and advice** on the health hazards of non-ionizing radiation
- develops **international guidelines** on limiting exposure to non-ionizing radiation that are independent and science based
- provides **science based guidance** and recommendations on protection from non-ionizing radiation exposure

A MULTI-DISCIPLINARY APPROACH

Individual competences

- Medicine
- Biology
- Toxicology
- Epidemiology
- Physics
- Engineering

Collective evaluation

STRUCTURE OF ICNIRP

- **Main Commission**
(Chairperson, Vice Chairperson, 12 members)
- **3 Standing Committees on EMF**
(up to 8 members, typically 2 from the Main Commission)
- **Consulting experts**

APPROACH TO HEALTH RISK ASSESSMENT

ICNIRP Guidelines are based upon:

- Rigorous methodology
- Science only
- Weight of evidence
- Consensus

THE WAY TO CONSENSUS

- Draft prepared by an ad hoc working group
- Discussion and approval by the Main Commission
- Open consultation
- Incorporation of comments
- Final approval and publication

REVIEW OF THE LITERATURE

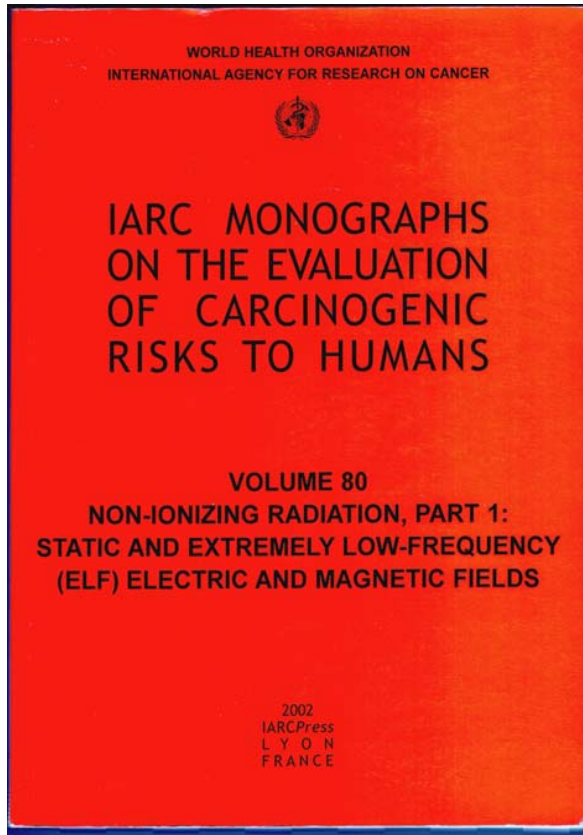
All published studies are taken into consideration

The evidence is **weighted** based upon:

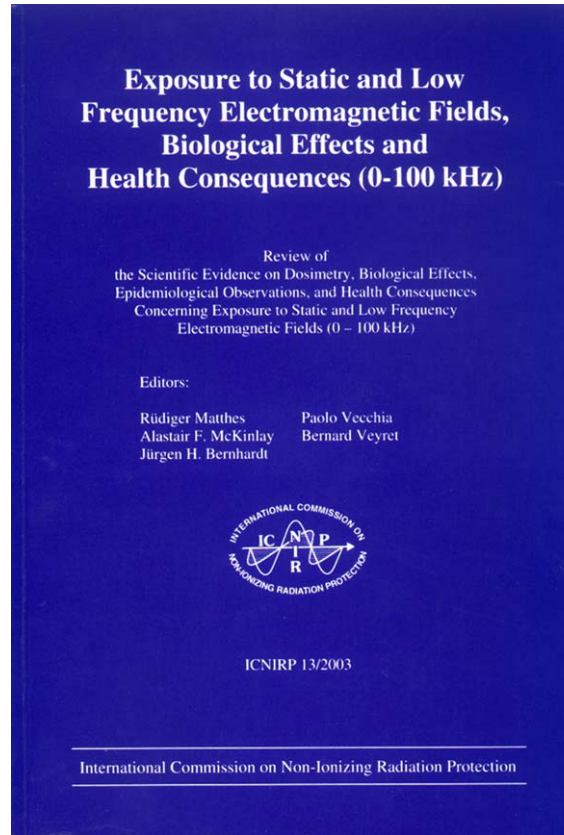
- Scientific quality
- Replicability
- Consistency

TYPICAL SEQUENCE OF ACTIONS

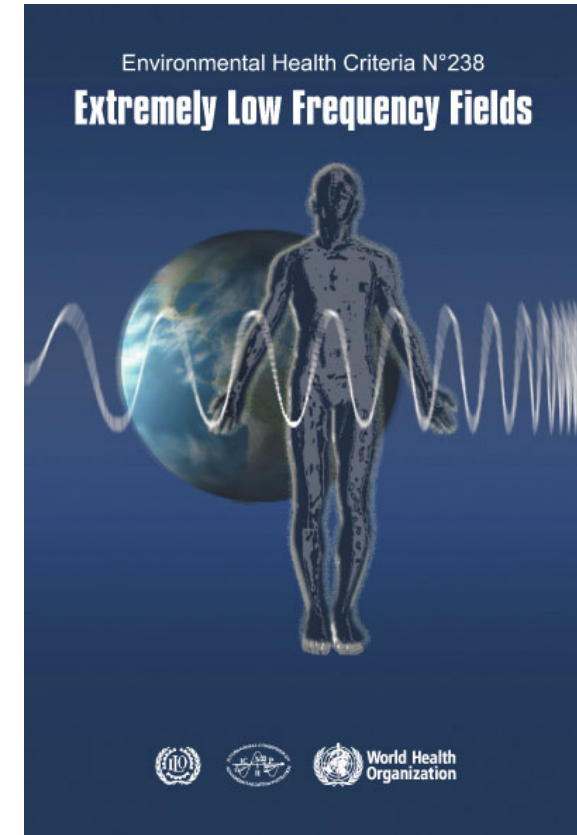
- Update of science (Blue Book) ICNIRP
- Evaluation of carcinogenicity (Monograph) IARC
- Overall evaluation of health hazard (EHC) WHO-ICNIRP
- Revision of standards ICNIRP



IARC 2002



ICNIRP 2003



WHO 2007

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WHICH EFFECTS?

ICNIRP limits are intended to protect against established, acute effects (that exhibit thresholds).

Protection measures for suggested long-term effects should be based on acceptability, rather than prevention, of risks.

A judgement of acceptability requires consideration of:

- Credibility of the adverse effect
- Expected health impact
- Costs
- Comparison with other risks

UPDATE OF GUIDELINES

Depending on the evaluation of the literature, the guidelines may be subject to:

- Global revision
- Refinement/clarification
- Confirmation

WHY TO REVISE A STANDARD?

- New scientific evidence (new effects, changes in thresholds, refinement of dosimetry)
- New technologies (revision of safety factors, possibility of relaxation)
- Outdated research database

NOT REASONS TO REVISE SCIENCE-BASED STANDARDS

- Social pressure
- Different regulations issued by national or local authorities
- Time passed from last revision

ICNIRP ACTIVITIES SINCE 1998

General

- Article on General approach to NIR protection 2002

Static fields

- Blue Book 2003
- EHC Document 2006
- Revised guidelines May 2009

ELF Fields

- Blue Book 2003
- EHC Document 2007
- Draft guidelines expected 2009

RF Fields

- Review of Epidemiology 2004
- Blue Book expected 2009
- Statement on validity of guidelines expected 2009

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THANK YOU FOR YOUR ATTENTION

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