Protecting the public from EMF: an EU perspective

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Structure

- **Legal basis**
  - The Precautionary Principle
  - Product safety
  - Safety of food
  - Safety of medicines
  - EMF at the European Commission
  - Recommendation 1999/519/EC
  - Review of exposure limits
  - Research
Legal basis: the EU Treaty – Internal Market

Article 95 §3: “The Commission, in its proposals... concerning health, safety, environmental protection and consumer protection, will take as a base a high level of protection.”
Legal basis: the EU Treaty – Public Health

Article 152 §1: “A high level of human health protection shall be ensured in the definition and implementation of all Community activities and policies”.

Article 152 §4: provides for the adoption of recommendations by the Council “with a view to complement national policies for improving public health, preventing human illness and diseases, and obviating sources of danger to human health”.
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The Precautionary Principle - 1

- Prescribed by the EU Treaty specifically for the environment
- Commission Communication (2000)1
- Applied in practice
  - « Where preliminary *objective scientific* evaluation indicates that there are reasonable grounds for concern »

- When potential hazards may be inconsistent with the « *high level of health protection* » chosen for the Community.
The Precautionary Principle - 2

- Should be considered within a structured approach to risk analysis
- Its use must follow a **scientific evaluation** showing evidence of a plausible association between exposures and potential impacts
- It is a **risk management** measure that examines **costs and benefits**
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Safety of Consumer Products -1

- General Product Safety Directive (2001/95/EC)
- Generic definition of a safe product
- Obligation of producers and distributors to put **safe products on the market**
- Obligation for MS to ensure market **surveillance**
- **RAPEX** system: alert on dangerous products, info shared with all EU authorities
Safety of Consumer Products - 2

- GPSD complemented by sector-specific legislation
- Chemicals (REACH, biocides)
- Toys
- Personal protective equipment
- Cosmetics
- Pharmaceuticals
- Machinery
- Recreational craft
- Liability for defective products
Safety of Consumer Products - 3

- Also specific legislation for EMF emitting equipment
  - Directive 1999/5/EC (telecoms equipment)
  - Directive 2006/95/EC (« low voltage » Directive)

- So-called ‘New approach’ directives

- Rely on harmonised standards ensuring that public exposure remains within agreed safety levels
Safety of Consumer Products - 4

- Handsets and masts covered
- EMF has not given rise to safeguards nor product withdrawals
- No RAPEX alerts issued
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Safety of Food - 1

- **Integrated approach to food safety**
- Regulation EC/178/2002: **EU food law**
- To assure a high level of **food safety**
- Right of consumers to safe food and accurate information - confidence
- Coherent **farm-to-table measures** and adequate **monitoring**
- Risk analysis
- Food law underpinned by **strong science**
Safety of Food - 2

- Effective control systems
- Traceability
- Evaluation of **compliance with EU standards**, also in third countries for their exports to the EU;
- Risk assessment performed by the European Food Safety Authority (**EFSA**)
- **Science-based risk management**
- Precautionary principle (Art. 7 of Regulation)
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Safety of Medicines - 1

- Directive 2001/83/EC
- Regulatory controls on **quality, safety and efficacy** of medicines
- System of standards
- **Pharmacovigilance** remains a high priority
  - Significance of clinical trials limited
  - In practice, safety can only be assessed after marketing
Closer integration of EU regulatory system: creation of EMEA in 1995
- Centralised authorisation procedure and
- Decentralised authorisation procedure/mutual recognition

Pharmacovigilance based on national systems

Co-ordination through EMEA and CHMP
Safety of Medicines - 3

- Rapid Alert – Non Urgent Information System between EU regulators
- Risk management
- Most common source of identification of safety concerns is **spontaneous reporting** of adverse effects
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Commission services dealing with EMF

**Policy making**
- Health and Consumers DG (SANCO)
  - public health
- Employment DG (EMPL)
  - occupational health
- Enterprise DG (ENTR)
- Environment DG (ENV)

**Funding of research**
- Research DG (RTD)
  - health issues
- Information Society and Media DG (INFSO)
- Components and Systems Directorate

*European Commission*
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Recommendation 1999/519/EC

- Based on Article 152 § 4 of the Treaty
- Establishes a **Community framework** for the exposure of the general public
- Defines **restrictions** to ensure a high-level of protection for all population groups and to provide the **basis for monitoring** the situation in various conditions of exposure
- Provides a **reference framework for EU legislation** on electric and electronic products and devices emitting EMF
- Provides a basis for national policies to limit citizen's exposure
The Recommendation requires that Basic Restrictions and Reference Levels be based on the **best scientific evidence** of the health effects of EMF.

The current BR and RL derive from the 1998 ICNIRP guidelines.

These guidelines use a **safety factor of 50**

- a factor 5 (reduction of public exposure vs occupational exposure)
- a factor of 10 to cover variations of sensitivity and exposure conditions
The role of Member States - 1

- They are responsible for the protection of the population against potential risks from EMF.
- They may apply more stringent limits than those set in the Recommendation.
- The Council Recommendation asks the MS to implement a framework of Basic Restrictions and Reference Levels.
- To ensure that adequate health protection measures are taken.
- To ensure that the general public is adequately informed.
The role of Member States - 2

- Some MS introduced more stringent limits for masts.
- Exposure from masts are a factor 100-1000 below recommendation. More stringent limits only affect the immediate safety zone around a transmitter.
- More stringent rules for handsets have not been argued by MS:
  - They would fragment the market.
  - Therefore would need to be agreed at EU level.
- Exposure from handsets factors lower than safety levels as safety tests assume a worst case scenario:
  - Maximum power level only used when far from masts.
  - Exposure from handsets can be reduced by increasing the number of masts.
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Review of exposure limits

The Recommendation requires that Basic Restrictions and Reference Levels be based on the best scientific evidence.

Therefore, independent scientific reviews:

- CSTEE – 2001
- SCENIHR - 2007
- SCENIHR – 2008 (ongoing)
2007 Outcome

The independent reviews concluded that, so far, scientific evidence does not justify a modification of the current exposure limits.
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Research
Research needs

- The reviews were all based on the latest scientific evidence available
- Over the last decade, regular publication of new results
- Some results are inconsistent
- The 2007 review identifies research needs
EMF & Health projects in past Framework Programmes

**FP5**
- REFLEX
- INTERPHONE
- ADVICE PULSED FIELDS
- CEMFEC

12 M€

**FP6**
(2002-2006)
- PERFORM-A
- G U A R D
- C E M F E C

4 M€

In press
Topics/projects selected from first calls for proposals

FP7
(2006-2013)

Topics

Environment (including Climate change)

Environment and Health sub-activity

ERA-ENVHEALTH
Coordination of national E&H research programmes
€2M

ERA-NET for environment & health

Health impacts of exposure to radiofrequency fields in childhood and adolescence

1 project selected

Databases based on European cohort studies and their exploitation for advancement of knowledge of environment-health relationships

1 project selected

Improved exposure assessment to wireless communication devices

Call currently open

PROPOSED TOPIC
Other relevant activities
Just starting

Structure to help researchers in the field of EMF & Health share knowledge and information

Encourage multi-laboratory collaboration

Training of early-stage researchers in EMF & health

Facilitate identification of technological change

Identify impact of new applications on levels and spectral nature of EMF exposure of people and possible health effects
Selected under the European Public Health Programme

Starting soon

Follow-up to EMF - NET

Support to risk assessment

Fast response function
CONCLUSIONS
The Commission is dedicated to ensuring a **high level of health protection** in the EU

This is enshrined in the EU Treaty and is relevant for all EU policies, including food, consumer products and medicines.

The Commission is ready to use the **Precautionary Principle** according to Communication 2000/1 within its areas of competence.

This is equally applicable to food and consumer products.

For medicines, the risk/benefit equation is specific.
✓ For EMF, a framework is already in place to protect the public
✓ The EU EMF limit values are under periodic scientific review, latest one ongoing
✓ The Commission recognises that more research on the potential health impacts of EMF is needed to improve science-based policy making
✓ A wave of research is now coming to an end; a new wave must be prepared
✓ The EU Framework Programme for research will be the main source of research funding at the EU level.
Thank you for your attention!

EU Candidate countries
• Croatia
• Turkey
• FYROM