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STANDARDS, PRECAUTIONARY POLICIES AND HEALTH ISSUES FOR EMF IN LATIN AMERICA

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EMF SPECTRUM

- Líneas de alta tensión
- Radio y T.V
- Microondas
- Infrarrojo
- UV
- Rayos-X
- Rayos Gamma

Telefonía móvil

Frecuencia (Hertz)

10^10 10^9 10^8 10^7 10^6 10^5 10^4 10^3 10^2 10^1

Energía (eV)

10^{18} 10^{17} 10^{16} 10^{15} 10^{14} 10^{13} 10^{12} 10^{11} 10^{10} 10^{9} 10^{8} 10^{7} 10^{6} 10^{5} 10^{4} 10^{3} 10^{2} 10^{1} 10^{0}
Latin America Countries
Currently Official Standards and Guidelines for
ELECTROMAGNETIC RADIATION
IONIZING (X-Ray Equipment, Radioactive Sources, Nuclear Power Plants)
All of them
and
NON IONIZING (ELF, OPTICAL, RF and MW)
Some of them and partially
X-rays, Gamma-rays, NPP
ELF
RF and MW
OPTICAL (UV, VISIBLE, IR)
Latin America Countries I  
Standards and Guidelines for EMF

(Based on AINSI) 100 kHz to 300 GHz  
National Entity for Electrical Regulation (ENRE) 50 Hz

(Based on FCC) 300 kHz to 100 GHz

Brazil: ANATEL. Resolução 303/2002  
(Based on ICNIRP) 9 kHz e 300 GHz.

Colombia: Norma Técnica aprox. 2005  
(Based on UIT K52-ICNIRP) 9 kHz to 300 GHz.

Chile: Decreto 594/00 Salud-SUBATEL N 505/00  
435 microW/cm² only for 800 and 1900 MHz

ELF
RF and MW
OPTICAL (UV, VISIBLE, IR)
Latine America Countries II
Standards and Guidelines for EMF

Costa Rica: Resolución No 2896/98 - Power Lines

Ecuador: Norma Técnica August 2004
(Based on ICNIRP) 9 kHz to 300 GHz

México: NOM 013/93 to be updated Aprox.2006
(Based prob. on ICNIRP) 9 kHz e 300 GHz.

Perú: Decreto Supremo MTC 038/2003
(Based on ICNIRP) 9 kHz to 300 GHz

Venezuela: Norma COVENIN NVC 2238-00-03
(Based on ICNIRP) 9 kHz to 300 GHz

ELF
RF and MW
OPTICAL (UV, VISIBLE, IR)
Latin America Countries III
Currently No Official Standards and Guidelines for EMF

Panama (In process)
Paraguay
Uruguay
Some other Countries from Central America and Caribbean Countries

ELF
RF and MW
OPTICAL (UV, VISIBLE, IR)
Latin America Countries

Official Institutions involved in:

- Precautionary Policies and Health Protection
- Environmental Exposures
- Exposure Limits and Guidelines
- Public Communication and
- Risk Assessment

ELF
RF and MW
OPTICAL (UV, VISIBLE, IR)
Latin America Countries
Official Institutions involved:

- Ministries of Health, Environment, Employment and Communications

- National Institutes for Protection

- Local Governments as Municipalities, Councils, Universities etc..
Latin America Countries

Some common issues:

- Usually Not Rational and Not Well established Process for Health Policy and Public Concern Communication.

- Different Regulations and Guidelines for the same Issue.

- Local Governments/Municipalities, Councils etc.. Do not agree many times with National Policies

ELF
RF and MW
OPTICAL (UV, VISIBLE, IR)
Sites in downtown Bs. As. -Argentina
Ministry of Health Building, Bs. As. -Argentina
RF EXPOSURE LIMITS  Argentina 1988

PUBLIC EXPOSURE VALUES
U.S.A ANSI C95.1 - ARGENTINA-BRASIL-PERÚ - ITALY

** Blue line: coincidence
WARNING SIGNALS

“Señales de Precaución”

ZONA SEGURA
RADIACIÓN DE RF
TIEMPO DE PERMANENCIA
ILIMITADO
Regional Situation I
National Organizations versus Local Governments

Argentina: Min. of Health, National Communication Commission, Ministry of Work and Employment, Local Governments. **Different Approach**

Bolivia: SITTEL, CATELBO, Municipality Council of La Paz, Secretary for Environment. **Different Approach**

Brazil: ANATEL, Ministry of Health (WG), Universities. **Some DA**

Colombia: Ministries of Communication, Environment and Sustainable Development. **Coincidence**

Chile: MOH (Old) Ministry of Transport and Communication (P)
Regional Situation II
National Organizations versus Local Governments


Ecuador: Mobil Telephony. Controversial approach between National and Local Authorities, especially University of Quito, based on lack of communication.

México: NOM 013/93 to be updated Aprox.2006 (Based prob. on ICNIRP) 9 kHz e 300 GHz.


Venezuela: National Government. Norma COVENIN NVC 2238-00-03. No mayor opposition
The worries about the use of EMF, especially mobile phones don’t have a solid basis:

There is a general perception that the electromagnetic frequencies are harmful for the health.

• The intangible character of the EMF and
• The deficient information propagated by some OPINION LEADERS

are two elements that cause great confusion among the population.
Regional Situation
National Organizations versus Local Governments

It is important that the national, regional and local authorities, with the support of the carriers, equipment providers, and recognized associations, generate conditions to avoid an unnecessary concern in the population that could affect the development of EMF’s uses and applications and the advantages that it brings to the end-user.
Regional Situation
On Health Effects and Regulations on EMF

Looking for Pan American Health Organization (PAHO)
Advice and Support
Latin America Countries Nowadays Approach

INTERNATIONAL WHO/PAHO EMF PROJECT

supported by

ICNIRP