WHO-Workshop on Guiding Public Health Policy in Areas of Scientific Uncertainty
Ottawa, 11 – 13 July 2005

Precautionary Options for

- sitting of mobile phone-antennas
- mobile phone users

Eva Maršálek, PMI / Umweltdachverband, Austria
eva.marsalek@utanet.at
PMI

NON PROFIT ASSOCIATION - MEMBER OF:

• AUSTRIAN ENVIRONMENT UMBRELLA ASSOCIATION

  (member of EUROPEAN ENVIRONMENT BUREAU BRUXELLES)

• AUSTRIAN EMF-STANDARD SETTING COMMITTEE

• WHO-EU-PREC. PRINCIPLE-WORKING GROUP (Feb. 2003)

• BIOELECTROMAGNETICS SOCIETY BEMS
Siting of Mobile Phone antennas:

concern in general public

due to

- lower standards?

- other reasons?
WHO-DEFINITION OF HEALTH:
„A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity“

Absence of public involvement in siting - loss of democratic rights
Neighbour‘s income

Optical impacts, Environm. impacts
Exposure situation/values?
Responsibility in case of problems?
Property devaluation

Insurance-exclusion

Why privilegation of one industry = mobile communication industry?
Proof of exposure-minimisation?

Epidemiologic studies?
Two „study-interpretations?"
Chronic exposure effects?

Exposure control/monitoring?
People with medical implants excluded from protection…ICNIRP….
ICNIRP-RECOMMENDATIONS 1998…

…. also RAISE FEARS AND MISTRUST:

→ SEEM TO CHANGE SECURITY-FACTORS
   DEPENDING ON THE INDUSTRIAL
   BUT NOT ON THE SCIENTIFIC REQUIREMENTS

→ DEFINE BASIC LIMITS THAT CANNOT BE
   MEASURED UNDER REAL-LIFE CONDITIONS

→ DEFINE EVERYONE AS WORKER INSTEAD OF
   THOSE WHO ARE PROFESSIONALLY EXPOSED,
   DIFFERENCE WITH OTHER AGENTS:::
POSSIBLE OPTIONS:

DIFFERENT LIMITS FOR CHRONIC LONG-TERM EXPOSURE?

e.g. Italy for areas where people are more than 4 hours

THIS GARANTEES

the use / compliance for mobile-phones  = short-term-exposure!

SOMETHING SIMILAR SHOULD BE

→ DONE BY ICNIRP…

→ RECOMMENDED BY WHO…. 
ITALY:

Based on
- the Constitution art. 32
- the Precautionary Principle art. 174 – Treaty of Amsterdam/EC
- science: „documento congiunto“ ISS-ISPESL

DM 381/1998 art. 4, comma 1:
MINIMIZATION „as low as possibile to guarantee the service“

Law no. 36/2001 art. 8, comma 6:
for the population and the workers

Decree July 2003:
Attention level / Quality goal: 6 V/m

…promote technological innovation and „reconstruction“…..

ALARA - ALATA
LOW EXPOSURE-LEVELS FROM BTS ARE TECHNICALLY AND FINANCIALLY ACHIEVABLE:

- MEASUREMENTS AND MONITORING IN ITALY

- 3-YEAR MEASUREMENTS IN STYRIA-AUSTRIA

- DIFFERENT LOCAL AGREEMENTS
  e.g. Salzburg 2000 1 mW/m2, PARIS 2 V/m, etc.
CONSENS WITH CITIZENS IS POSSIBLE

e.g.
→ ROUND TABLES IN SALZBURG/AUSTRIA FOR 2 YEARS (PUBLIC RELATION AWARD 1998)

→ ROUND TABLES IN VENICE

→ OTHER LOCAL ROUND TABLES WITH PARTICIPATION- AND MINIMIZATION- SOLUTIONS (PARIS....)

....MEASURES RAISED ACCEPTANCE OF MOBILE PHONE INFRASTRUCTURE + WELLBEING
EXPOSURE-MINIMIZATION
IS POSSIBLE
e.g. BY „INTELLIGENT SITING“

e.g.
BAKOM - SWISS FEDERAL OFFICE OF COMMUNICATIONS

USED RF-CALCULATION-SOFTWARE in 2001/2002
TO COMPUTE RF-FIELDS EXPOSURE-SITUATION IN
SALZBURG/AUSTRIA
WITH EMF-SIMULATION-SOFTWARE

IT IS POSSIBLE TO

- SIMULATE RF-EXPOSURE

- CALCULATE EXISTING EXPOSURE

- PREDICT FIELD DISTRIBUTION/EXPOSURE OF SITES

WITH GREAT ACCURACY – RAISES TRUST!
BAKOM-PUBLICATION 2002:

SALZBURG-3D SIMULATION WITH „QUICK_PLAN™“

CAN BE USED

→ FOR NET-PLANNING
→ TO DETERMINE PLANNING-OPTIONS FOR EXPOSURE-MINIMISATION
→ EVALUATE THE EXPOSURE SITUATION IN URBAN AREA
→ PUBLIC-INFORMATION ABOUT EXPOSURE (INTERNET)
→ FACILITATES COMMUNICATION BETWEEN PUBLIC, PROVIDERS AND LOCAL AUTHORITIES
→ MAKES CLEAR THAT EXPOSURE-MINIMISATION CANNOT BE REACHED JUST AVOIDING BTS ON SCHOOLS, KINDERGARDENS WHILE SITED ON RESIDENTIAL HOMES
„QUICK_PLAN TM“
PRECAUTIONARY OPTIONS FOR MOBILE PHONE-USE:

- GOOD VISIBLE PUBLICATION OF SAR-VALUES ON MOBILE PHONES
- TECHNICAL INNOVATIONS TO MINIMIZE EXPOSURE?
- IS SAR THE „RIGHT VALUE?"
- RECOMMENDATION TO USE HANDSFREE KITS
- DISCOURAGE THE USE OF MOBILE PHONES BY CHILDREN
- PROBLEM OF MOBILE PHONE ADVERTISEMENT FOR CHILDREN‘S USE
- CASE-STUDIES MUST INCLUDE OTHER AGENTS WITH MAY SYNERGISTICALLY AFFECT HUMAN HEALTH
PP-MEASURES FOR BTS-SITING ....TO REACH CONSENSUS PROVIDERS-LOCAL AUTHORITIES-PUBLIC

1. EXPOSURE-MINIMISATION TO THE MINIMUM NEEDED BY THE INDUSTRY TO MAINTAIN THE QUALITY OF THE SERVICE – AS QUALITY CRITERION
2. PUBLIC- AND LOCAL-AUTHORITY-INVOLVEMENT IN SITING
3. INFORMATION ABOUT EXISTING AND EXPECTED EXPOSURE-VALUES / COMPUTER-SIMULATION, INCL.EXISTING HF-EMF SOURCES.
4. EXPOSURE-CONTROL - 24h-MONITORING
5. TAKING ACCOUNT OF THE LOCAL-HEALTH-SITUATION
6. CONSIDERATION OF DIFFERENT SITING-OPTIONS
7. OPEN-MINDED DISCUSSION ABOUT DIFFERENT TECHNICAL SOLUTIONS (MICROCELLS, FLAT-STRIPS, ....)
8. PUBLICATION OF EXPOSURE-DATAS VIA INTERNET
9. PUBLIC AND NATIONAL DATABASE
10. COLLECT CITIZENS-REPORTS ABOUT WELLBEING-PROBLEMS
11. SOLVE THE INSURANCE-PROBLEM
THANK YOU!

eva.marsalek@utanet.at