## **Risk Communication** Rapporteur's report

E. van Deventer Radiation Programme World Health Organization



#### Organizer:

Federal Office for Radiation Protection P.O. Box 10 01 49 D-38201 Salzgitter Germany www.bfs.de

#### Venue:

National Research Center for Environment and Health" (GSF) Room Nr. 106 (big lecture room), building 33 Ingolstaedter Landstrasse 1 D-85764 Oberschleissheim Germany www.gsf.de

#### Contact:

Christiane Poelzl Phone: +49 (0)3018 333-2144 Fax: +49 (0)3018 333-2205 Email: <u>cpoelzl@bfs.de</u>

#### How to get there

#### From the airport:

Take the suburban railway S-Bahn (line S1) to Feldmoching, from there take the underground UBahn (line U2/U8) to "Am Hart" stop, then take bus 294 (Garching-Hochbrück, 20 minute service, between 10 a.m. und 3 p.m. hourly service) to stop "Neuherberg, Forschungszentrum".

<u>Or</u> take the suburban railway S-Bahn (line S8) to Central Station. <u>From Central Station</u> take the underground U-Bahn (line U2/U8 towards Feldmoching) to the stop "Am Hart", then take bus 294 (see above).

#### Location:

The Neuherberg research centre is located in the north of Munich, approximately 800 m beyond the city boundary.

Distance from city centre approximately 12km. Distance from airport approximately 30km.



German Mobile Telecommunication Research Programme

#### International Workshop on Final Results of Risk Communication Projects

#### Federal Office for Radiation Protection

Munich/Oberschleissheim

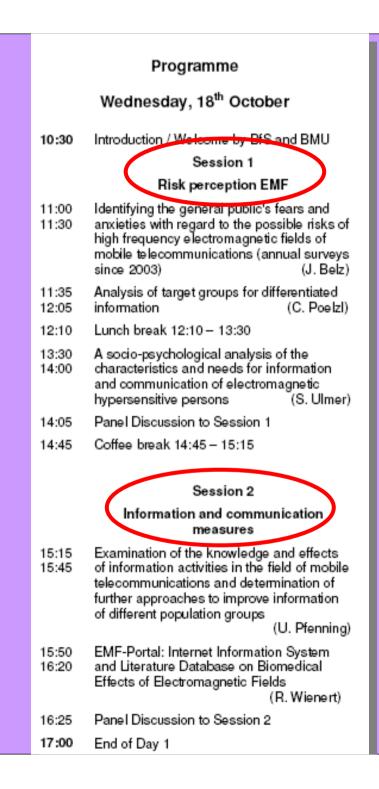
October 18-19 2006



## Objective

- The aim of this workshop was to discuss the results of the risk communication projects conducted within the research programme
- <u>http://www.emf-</u> forschungsprogramm.de/abschlussphase/KP intFG Risiko.html





Programme					
Thursday, 19 <sup>th</sup> October					
	Session 3				
	Site acquisition in Germany - Risk communication in local settings				
09:30 09:50	Introduction: <del>Site acquisition</del> process in Germany – Framework, Regulation, Practice (D. Gerhardt)				
09:55 10:25	Realisation of the self commitment (A. Seidel-Schulze)				
10:30	Discussion				
11:00	Coffee break 11:00 - 11:30				
11:30 12:10	Support of the co-operation between the mobile telecommunication actors by the local agenda 21 (A. Hoffmann)				
12:15	Lunch break 12:15 – 13:30				
13:30 14:00	Development of an online manual for successful siting processes and risk communication in the field of mobile phone conflicts (O. Renn)				
14:05 14:35	Mediation as a possible alternative dispute resolution method in the site acquisition process (K. Winkler)				
14:40	Panel Discussion to Session 3				
15:15	Final Discussion				
16:00	Close of Workshop				
Rappor	rteur: Emilie van Deventer				

## **Session 1: Risk Perception EMF**

 Identifying the general public's fears and anxieties with regard to the possible risks of high frequency electromagnetic fields of mobile telecommunications

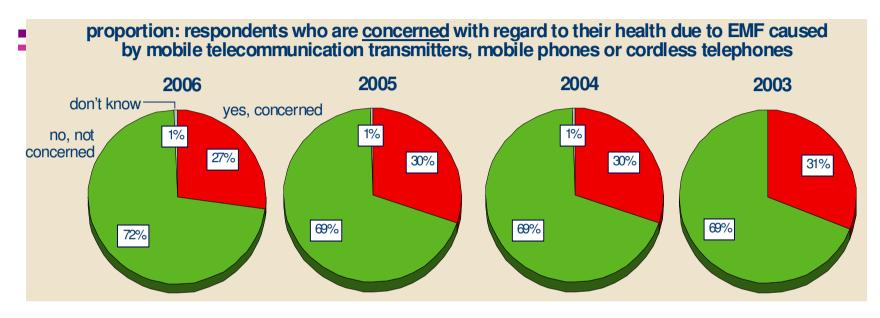
Janina Belz, Institute for Applied Social Sciences (Infas), Bonn



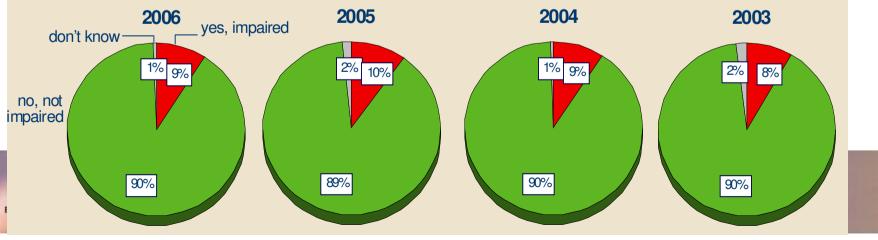
### Mobile Telecommunication Compared to Other Risk Factors

esults 2006	level of concern with	regard to possi	ble health effects	
ource/risk factor orted by proportion "quite strong/ oncerns")	strong no conce	erns a little concerned	quite strong concerns strong concerns	"does not apply", no contact with this factor
air pollution	119	33%	30%	5% -
consumption of meat of unknown origin	17%	29%	23% 30%	6 1%
genetically modified food	18%	32%	23% 28%	-
UV-radiation	17%	36%	25% 20%	-
side-effects of medication	23%	34%	22% 20%	1%
heavy cigarette smoking		36%	16% 26%	4%
participation in road traffic	29%	43%	17% 11%	-
mobile telecommunication transmitters	33%	40%	14% 12%	-
radiation of electrical equipment	30%	45%	16% 9%	-
traffic noise	35%	41%	14% 10%	-
immoderate consumption of alcohol	/6%	28%	9% 14%	3%
use of mobile phones	41%	40%	11% 6%	1%
high-voltage lines	41%	41%	8% 8%	1%
radio and television transmitters	40%	10%	004576	-
use of cordless landline telephones	45%	40%	99,4%	1%

#### Concern and Impairment Regarding Electromagnetic Fields of Mobile Telecommunication



proportion: respondents who feel <u>impaired</u> with regard to their health due to EMF caused by mobile telecommunication transmitters, mobile phones or cordless telephones

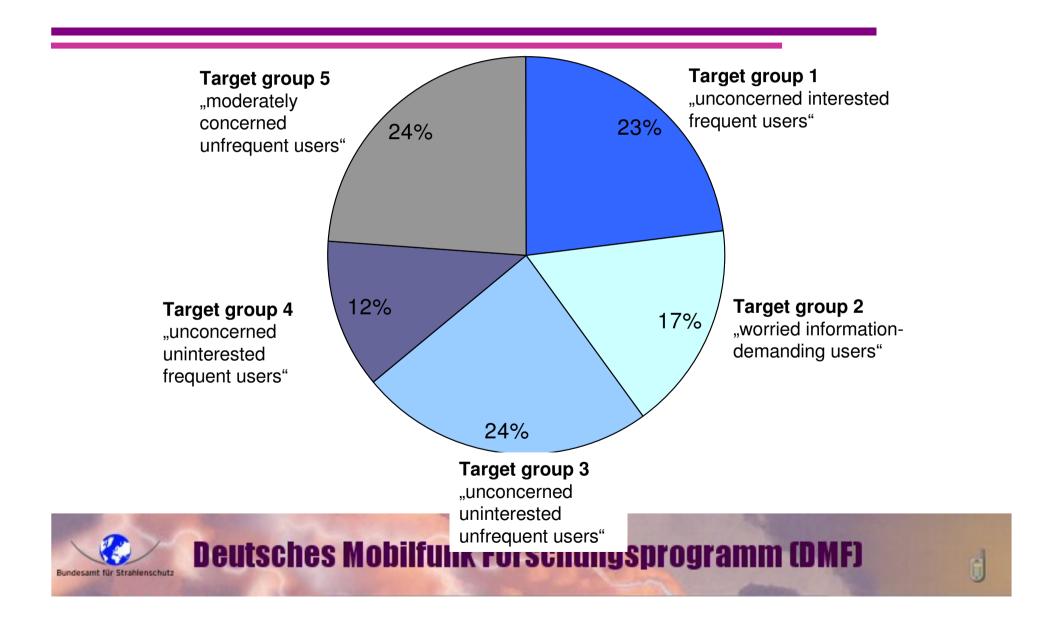


## **Session 1: Risk Perception EMF**

- Identifying the general public's fears and anxieties with regard to the possible risks of high frequency electromagnetic fields of mobile telecommunications Janina Belz, Institute for Applied Social Sciences (Infas), Bonn
- Analysis of target groups for differentiated information C. Pölzl, BfS
- A socio-psychological analysis of the characteristics and needs for information and communication of electromagnetic hypersensitive persons Svend Ulmer, Katalyse e.V., Institute for applied environmental research



### **5 Target groups - proportion in population**



## Session 2: Information and Communication Measures

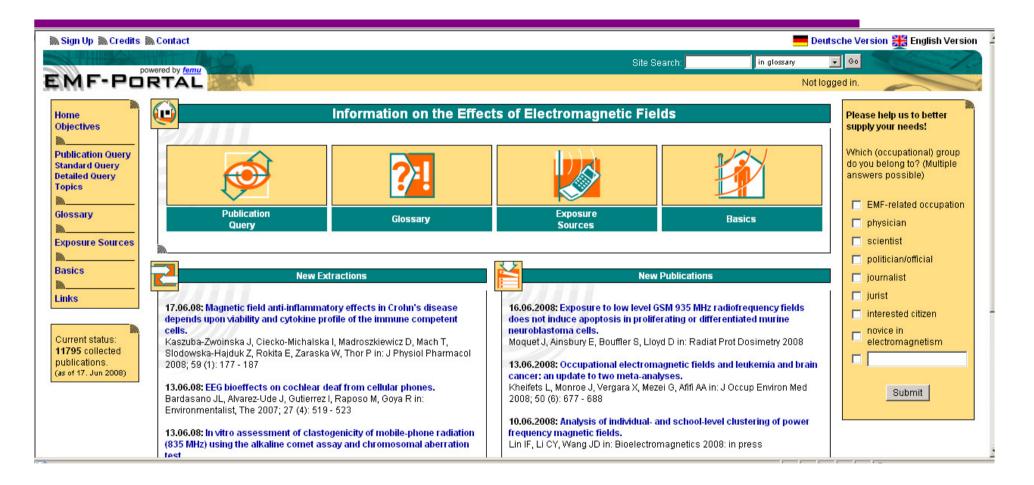
 Examination of the knowledge and effects of information activities in the field of mobile telecommunications and determination of further approaches to improve information of different population groups

Uwe Pfenning, Dialogik gGmbH

• EMF-Portal: Internet Information System and Literature Database on Biomedical Effects of Electromagnetic Fields Roman Wienert, Aachen University



### http://www.emf-portal.org





**Deutsches Mobilfunk Forschungsprogramm (DMF)** 

### Session 3: Site Acquisition in Germany -Risk Communication in Local Settings

 Introduction: Site acquisition process in Germany – Framework, Regulation, Practice

Dietmar Gerhardt, E-Plus Mobilfunk GmbH & co. KG

Realization of the self commitment of mobile network operators

A. Seidel-Schulze, German Institute of Urban Affairs (Difu), Berlin



### Session 3: Site Acquisition in Germany -Risk Communication in Local Settings

- Introduction: Site acquisition process in Germany Framework, Regulation, Practice
   Dietmar Gerhardt, E-Plus Mobilfunk GmbH & co. KG
- Realization of the self commitment of mobile network operators A. Seidel-Schulze, German Institute of Urban Affairs (Difu), Berlin
- Support of the co-operation between the mobile telecommunication actors by the local agenda 21

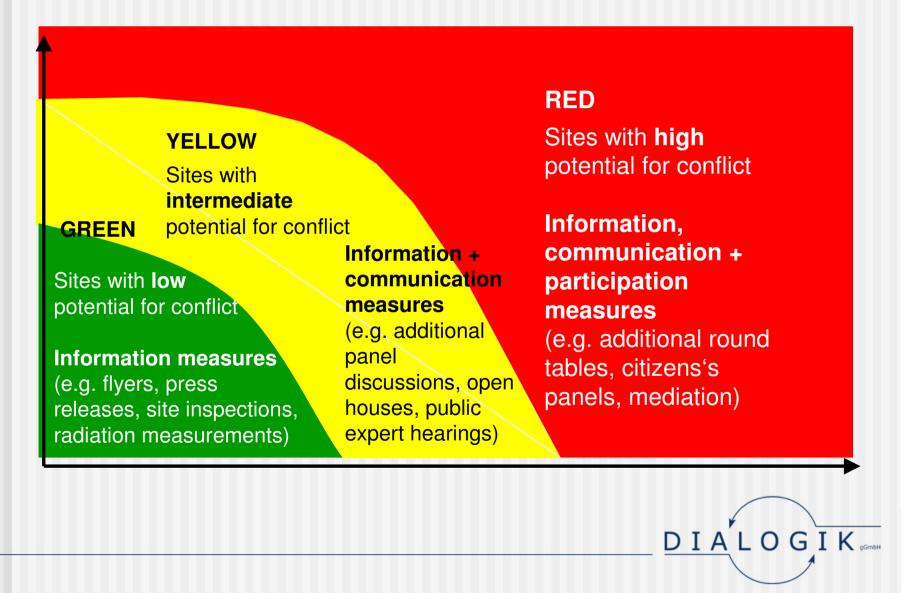
A. Hoffmann, agenda-transfer Agency for Sustainability, Bonn

 Development of an online manual for successful siting processes and risk communication in the field of mobile phone conflicts

Ortwin Renn, Dialogik gGmbH



### "Traffic Light Model"



e Edit View Favorites Tool	soft Internet Explorer provided by WHO s Help					
		_ ≝4 - ∞				
Back + 🕥 - 💌 😰 🏠 🔎 Search 🤆 Favorites 🧭 🔗 - 🦕 🗷 + 🗔 🤮 🐔 - 🎉 🦄						
	obiifunk.de/ 🚽 Go 🌢 🍏 🍒 👻 💌 🛨 ₨ 🕶 🥩 👻   🏠 Bookmarks+ 🔊 57 t	slaaked   🔤 Chack - 🍣 Autoliak - 😒 Autoliill 🕒 Saad te				
		arks- 🔄 Mail - 🥸 My Yahoo! - 🛛 🐯 Answers -				
	Add Tab	arks• 🗠 Mail • 🥨 My Yahoo! •   🔯 Answers •				
Mobilfunk Ratgeber						
Mobilfunk	Ratgeber für Kommunen	Relation				
		[druckversi				
<ul> <li>Startseite</li> </ul>	Startseite					
<ul> <li>Selbstdiagnose</li> <li>Standortplanung</li> <li>Kommunikation</li> </ul>	Ratgeber: Planung von Mobilfunksendeanlagen Abstimmungs- und Kommunikationsprozesse mit Netzber Dieser Ratgeber verfolgt das Ziel, Ihnen schnell und dire Informationen bereitzustellen.					
<ul> <li>Rechtliche Grundlagen</li> <li>Technik</li> </ul>	-> Konkrete Hilfestellungen:					
- Gesundheit	-> [Selbstdiagnose] Nach dem Ausfüllen eines Fragebogens erhalten Sie konkrete	e Hinweise zu Maßnahmen und Kommunikationsstrategien				
<ul> <li>Linksammlung</li> </ul>	-> Allgemeine Informationen:					
-> Suche	-> [Standortplanung] Messverfahren / Konzepte / Verträge / Vereinbarungen mit Betreibern / Intra- und interkommunale Abstimmung	-> [Gesundheit] Wirkungsweise elektromagnetischer Felder / Risikoeinschätzung / Öffentliche Debatte / Beratungseinrichtungen				
	-> [Kommunikation] Adressatengerechte Kommunikation / Risikokommunikation / Konfliktschlichtung	-> [Technik] Funkwellen und elektromagnetische Felder / GSM und UMTS Netze				
	-> [Rechtliche Grundlagen] Gesetzlich festgeschriebene Vorgehensweisen					

### Session 3: Site Acquisition in Germany -Risk Communication in Local Settings

- Introduction: Site acquisition process in Germany Framework, Regulation, Practice
   Dietmar Gerhardt, E-Plus Mobilfunk GmbH & co. KG
- Realization of the self commitment of mobile network operators A. Seidel-Schulze, German Institute of Urban Affairs (Difu), Berlin
- Support of the co-operation between the mobile telecommunication actors by the local agenda 21

A. Hoffmann, agenda-transfer Agency for Sustainability, Bonn

 Development of an online manual for successful siting processes and risk communication in the field of mobile phone conflicts

Ortwin Renn, Dialogik gGmbH

Mediation as a possible alternative dispute resolution in the site acquisition process

Klaus Winkler, Sumbiosis GmbH

**Deutsches Mobilfunk Forschungsprogramm (DMF)** 

## Discussion

- 1. What has been achieved by the projects? What are the lessons learned?
- 2. Where do we still have knowledge gaps?
- 3. What practical impact do the findings have in the filed of information and risk communication?
- 4. Are there lessons learned that could be transferred to similar situations in the future?



## **Lessons learned**

- Rich database on risk perception within the general public and certain sub-groups
- Magnitude of public concern in the general public rather stable over the years.
- Strong stability in the comparative risk perception
- Need to target information to specific groups
- Municipalities can provide a valuable contribution to solve local conflicts during site acquisition process



## Gaps in knowledge

- Communication measures specific to different target groups
- Development of concern and the role of emotions in risk perception
- Importance of trust, credibility and acceptance
- Communicating scientific uncertainties
- Need to involve the medical professionals
- Use has to be made of knowledge acquired so far
- Develop international collaboration on risk communication and risk perception



# Practical impact for information and risk communication

- Information requirements have to be met in a more differentiated fashion (content, format and medium)
- Inherent evaluation of risk communication measures
- Municipalities face the need to practice risk communication at the local level and to solve local conflicts emerging during the site acquisition process.
  - assistance for smaller and rural municipalities respective
  - not the municipalities' task to deal with the risk/health issue
  - Monitoring of field levels
- Use of the media for information about EMF





http://ec.europa.eu/public\_opinion/archives/ebs/ebs\_272a\_en.pdf



## Acute vs. chronic...

11 May 2006 media reports of a 'cancer cluster' on the top two floors of RMIT University's building caused widespread concern ٠

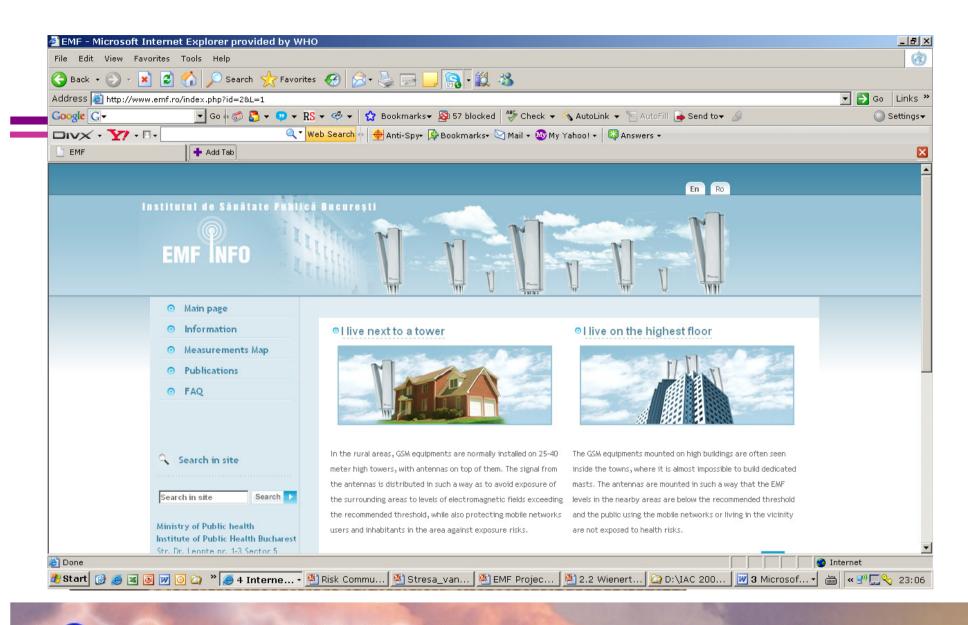


SEVEN RMIT staff work- Kate Jones, Kate Rose ing just metres underneath two mobile phone towers in a CBD building the 17-storey building that have been diagnosed with are used to route mobile brain tumours.

#### and Ellen Whinnett

phone calls. ----





**Deutsches Mobilfunk Forschungsprogramm (DMF)** 

Bundesamt für Strahlenschutz

Ноп	me	Electromagnetic fields (EM	● All WHO ● This site only F)			
Abo	out WHO	About us   Publications   <u>Contact us</u>				
Cou	untries	WHO > Programmes and projects > Electromagnetic fields (EMF) > Publications and information				
Hea	alth topics	resources				
Pub	olications	printable version				
Dat	ta and statistics	German version				
	grammes and jects	Download the whole handbook				
EMF	F Home					
Abo elec fiel	ctromagnetic	ESTABLISHING A DIALOGUE	Herstellen eines Dialogs über die Risiken elektromagnetischer Felder [pdf 254kb] Note regarding the translation			
EMF	F Project	ELECTROMAGNETIC FIELDS				
Res	search		This work was originally published by the World Health Organization in English as Establishing a Dialogue on Risks			
Sta	ndards		from Electromagnetic Fields in 2002. This German translatio was arranged by the German Federal Ministry for the			
info	F publications & prmation cources		Environment, Nature Conservation and Nuclear Safety, who responsible for the accuracy of the translation. In case of a discrepancies, the original language will govern. The WHO E Project would like to thank Dr Axel Böttger for this translati			
Mee	etings					
			Deutsch - Information zur Uebersetzung			
		Electromagnetic Fields" von der Welt Übersetzung wurde vom Ministerium für die Qualität der Übersetzung verv	i Jahr 2000 unter dem Titel "Establishing a Dialogue on Risks fr tgesundheitsorganisation (WHO) herausgegeben. Die deutsche i für Umwelt, Naturschutz und Reaktorsicherheit durchgeführt, o antwortlich ist. Im Fall von Abweichungen ist das Original gültig Axel Böttger für diese Übersetzung.			



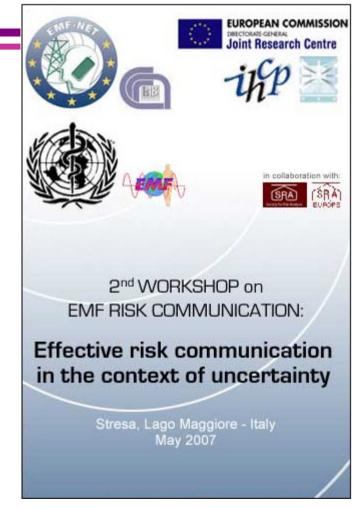
**Deutsches Mobilfunk Forschungsprogramm (DMF)** 

Ē

 2nd Workshop on EMF risk communication on "Effective Risk Communication in the context of uncertainty" (Stresa, Italy, May 2-4 2007)

http://www.jrc.ec.europa.eu/eisemf/stresa2007.cfm

ndesamt für Strahlenschutz



**Deutsches Mobilfunk Forschungsprogramm (DMF)** 



#### 2006 WHO Research Agenda for Radio Frequency Fields

#### Introduction

In 1997, the WHO International EMF Project developed a Research Agenda in order to facilitate and coordinate research world the possible adverse health effects of electromagnetic fields (EMF). In such agenda has undergone periodic review and refinement.

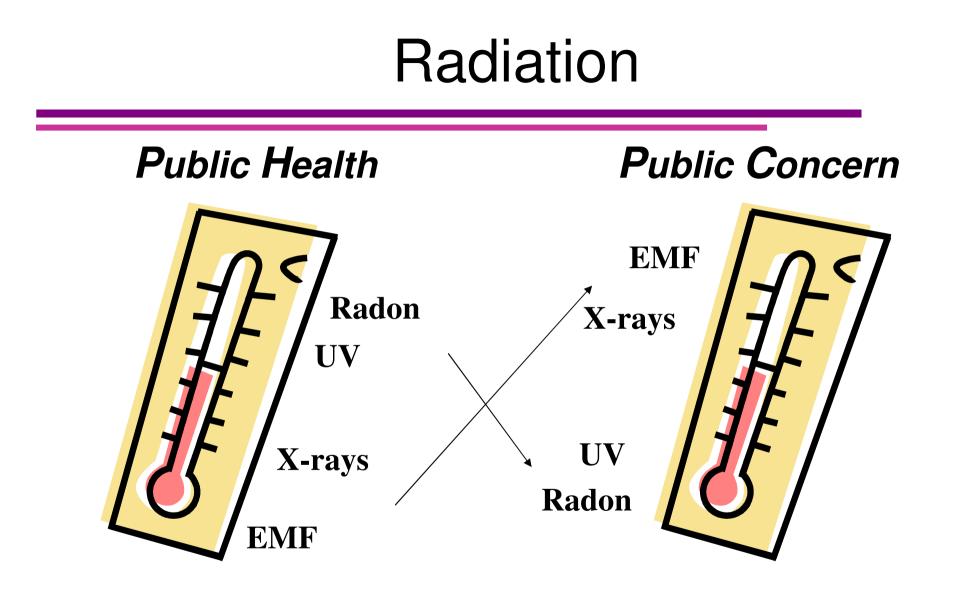
In June 2003, a major update to the reundertaken with the input of an ad h several of the research needs have b necessary. Also, three specialized work in of the Research Agenda was ccientific experts. Since then, revision was therefore deemed eld since 2003, where research

#### Social Issues

There are public concerns about possible adverse health effects of RF fields from mobile communications technology. These concerns influence risk management and public acceptance of scientific health risk assessments. Rational risk management should build on evidence stemming from both scientific risk assessments and insights from social studies that investigate this concern through well formulated research.

Relatively few studies exist on RF risk perception and risk communication. The published studies have investigated impacts of risk management and risk communication strategies on







## Thank you !!

