Mobile Networks: Responding To Public Concern with Good Policy and Communications

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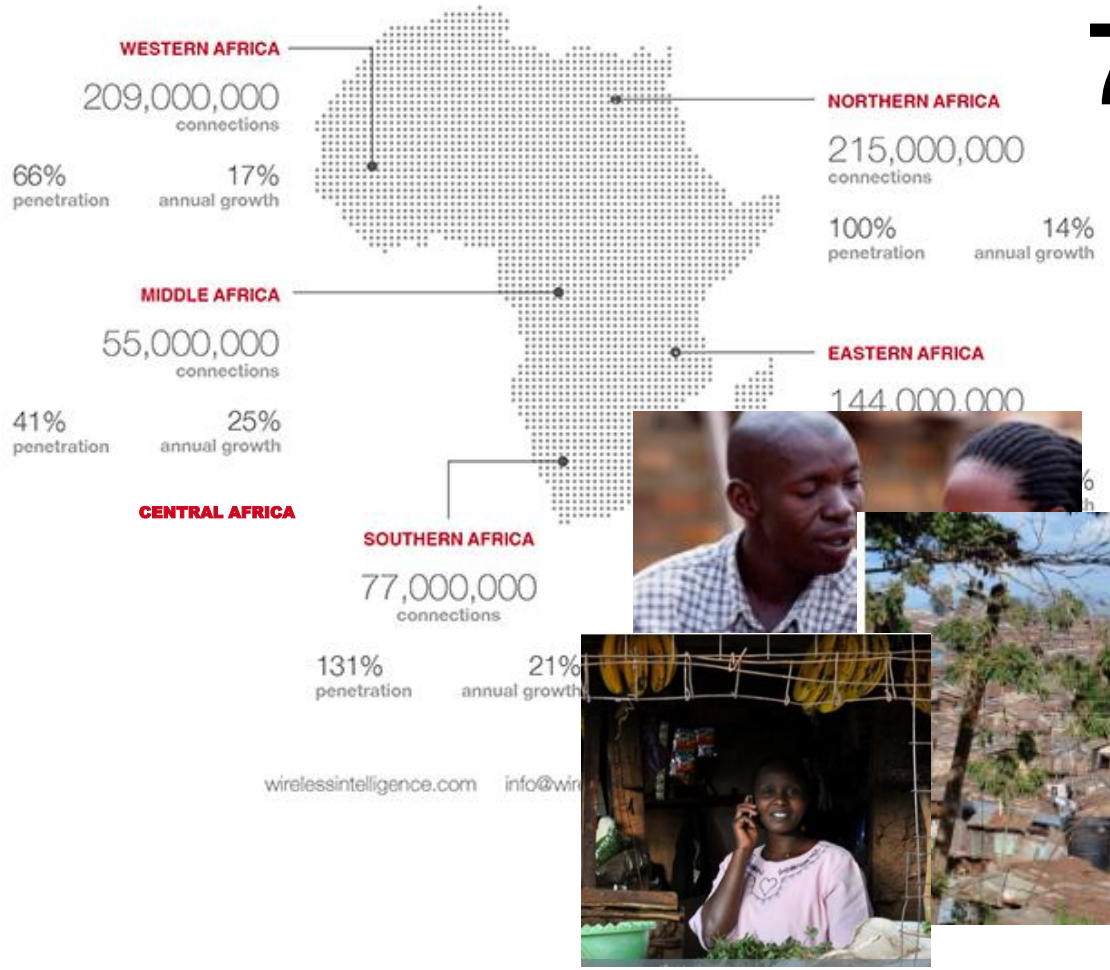
First West African Conference on EMF Exposure and Health:
"HARMONIZING EMF RISK COMMUNICATION AND EMF POLICY IN WEST AFRICA"

Victoria Crown Plaza Hotel, Victoria Island, Lagos, Nigeria
Wednesday, 27th and Thursday, 28th June 2012

Mobile Services Need Mobile Networks



700,000,000

total cellular connections across Africa in Q2/2012

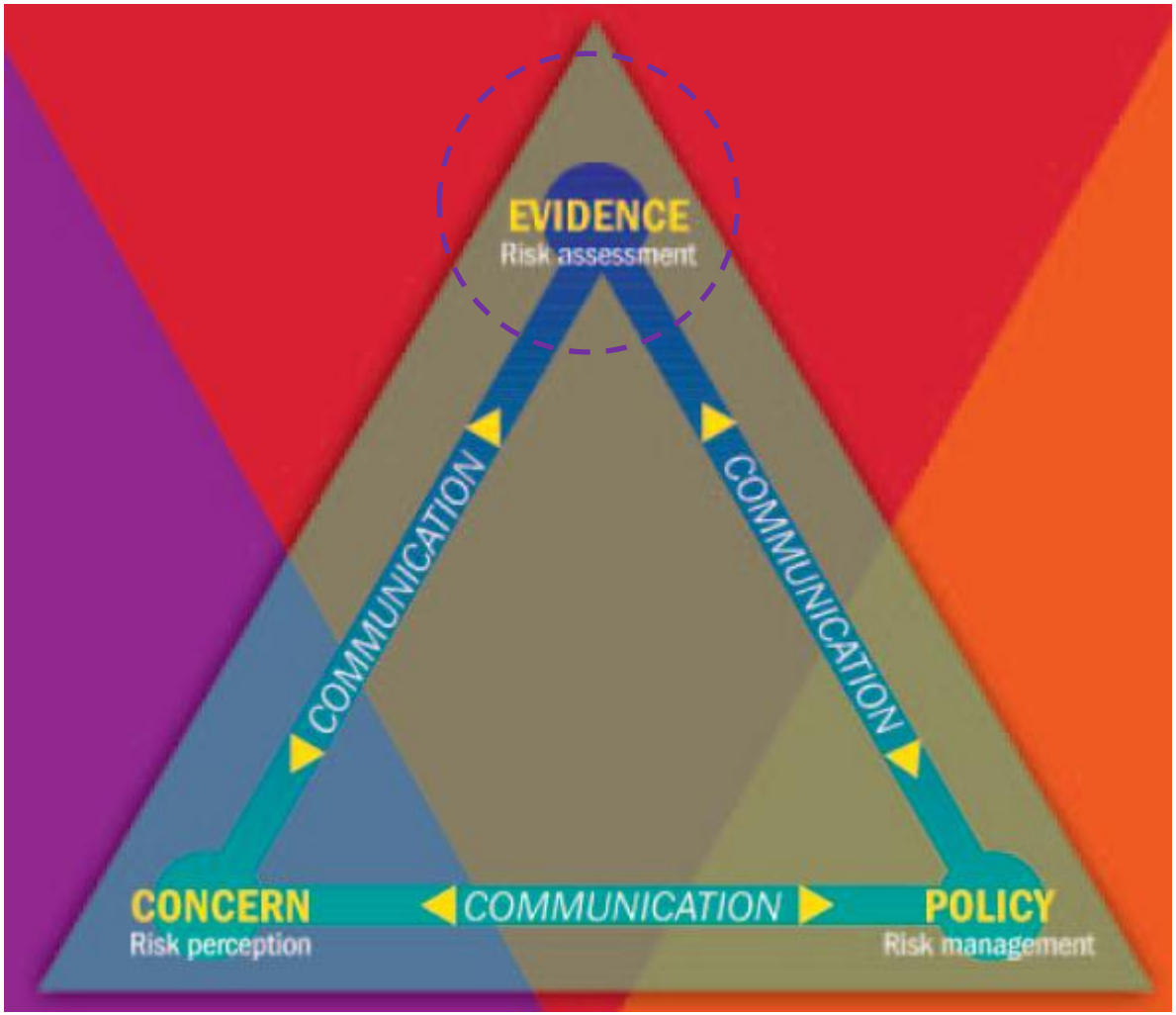
2G – 88%

National infrastructure deployed locally.

Wireless Intelligence, 2012

J. Rowley, June 2012

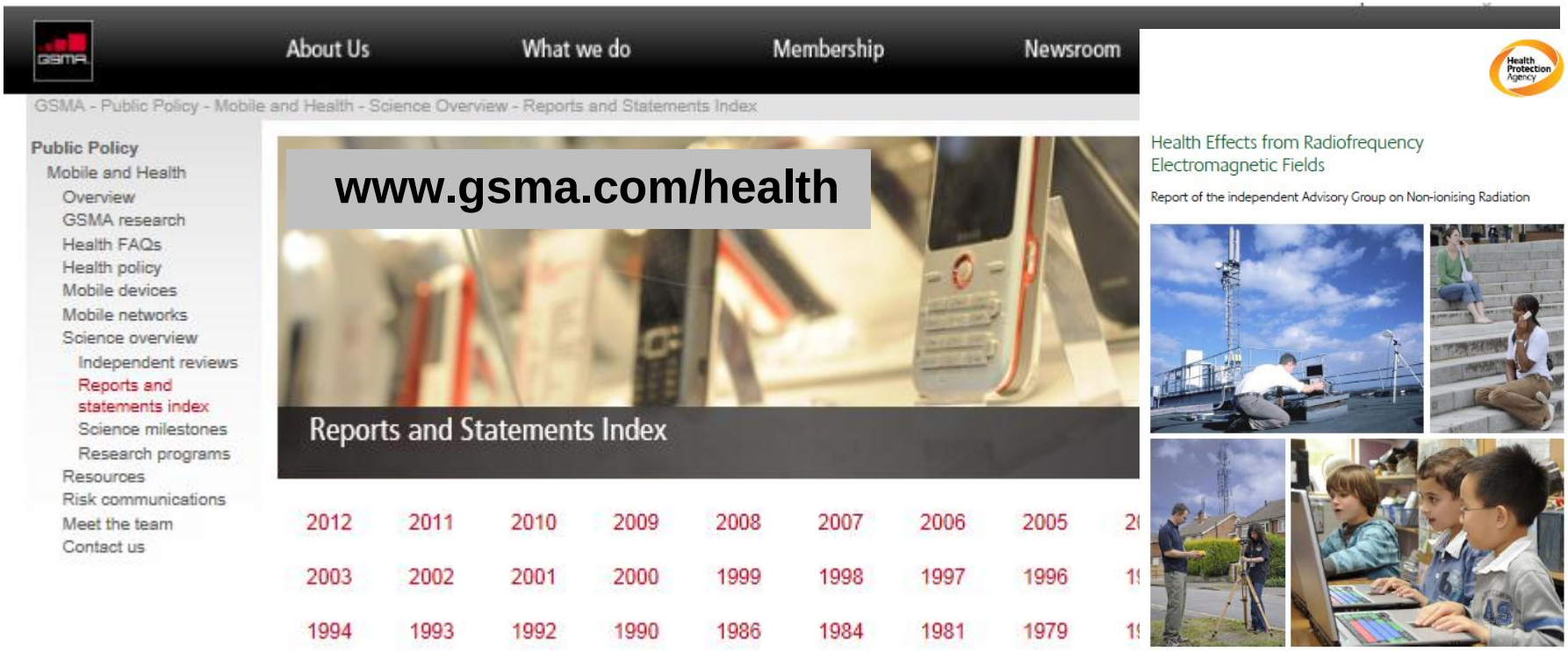
Responding to EMF Issues



World Health Organization, 2002

J. Rowley, June 2012

Evidence Subject to Regular Expert Review



'In summary, although a substantial amount of research has been conducted in this area, there is no convincing evidence that RF field exposure below guideline levels causes health effects in adults or children.'

Health Protection Agency (UK), 2012

J. Rowley, June 2012

Mobile Networks Are Low Power

- More base stations provide:
  - More coverage.
  - More capacity.
  - Higher data rates.

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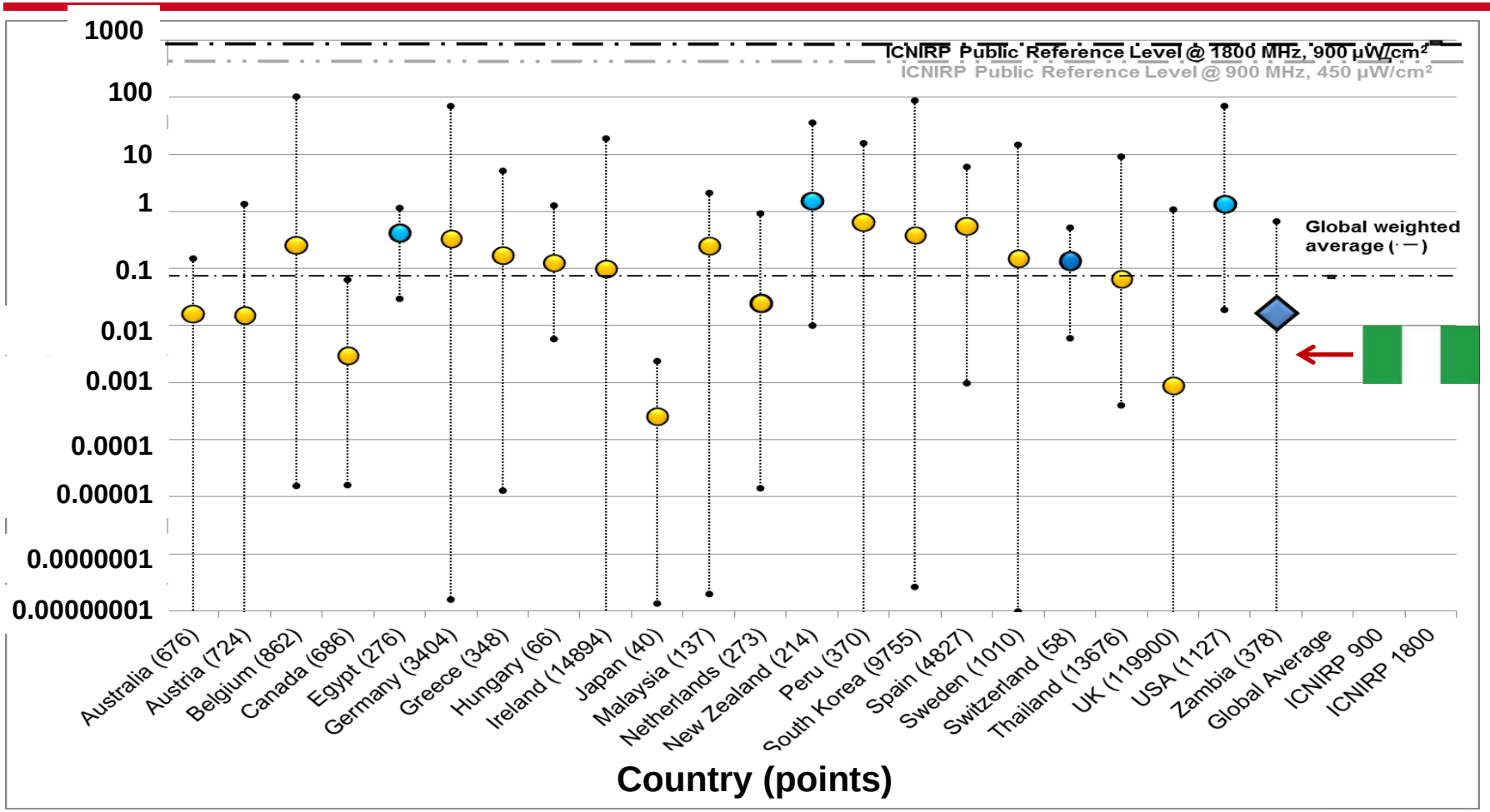
Exposure Similar Between Countries



RF exposure levels similar in all countries.

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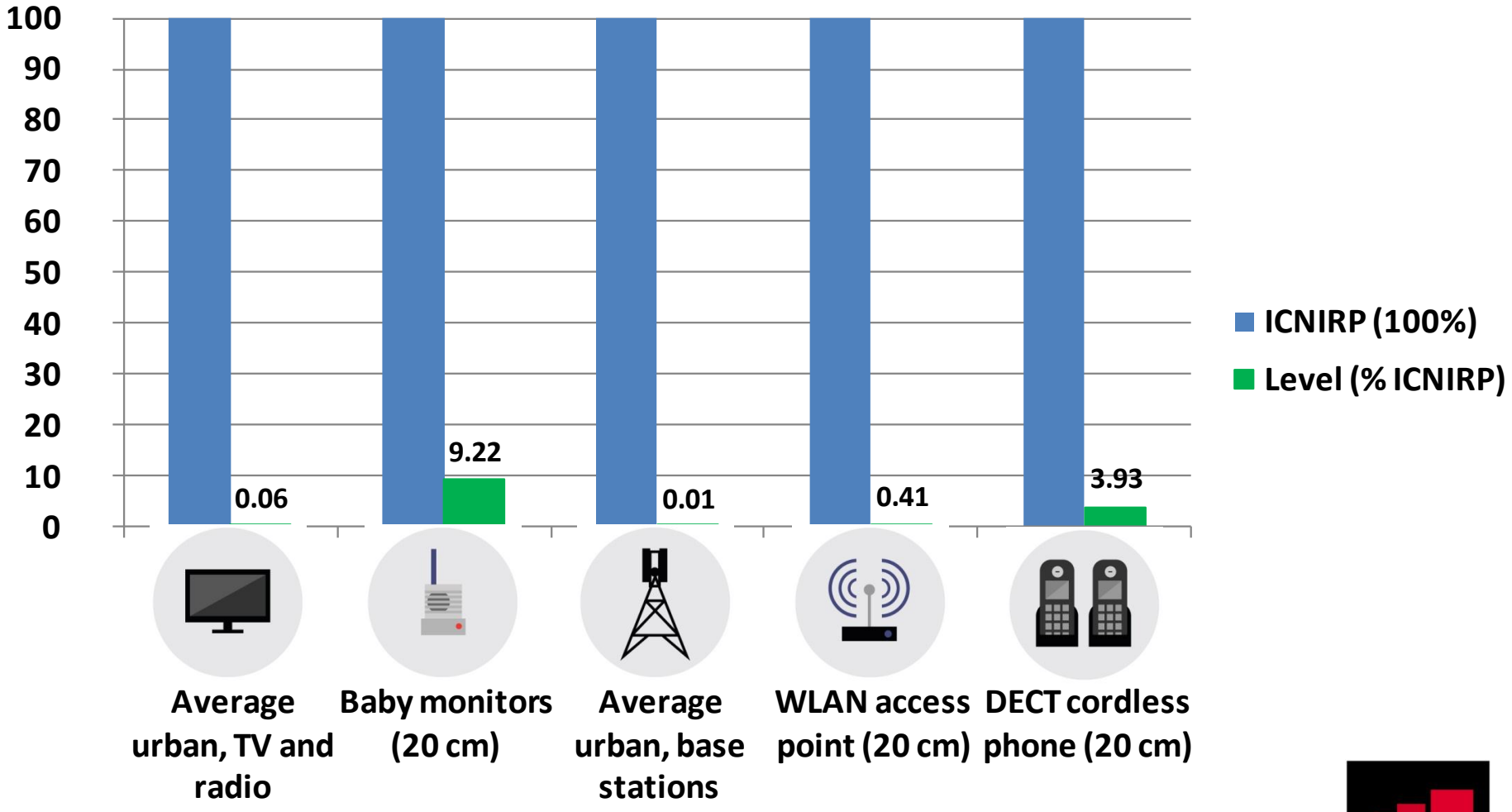
Based on Rowley et al., 2012
Okonigene et al. (2006)

Exposures Similar to Other Wireless Services



Based on Valberg et al., 2007.

WHO - Wireless Networks (May 2006)

Media centre

Electromagnetic fields and public health

Base stations and wireless technologies

Fact sheet N°304
May 2006

- *'…RF exposures from base stations…lower or comparable to RF exposures from radio or television broadcast transmitters.'*

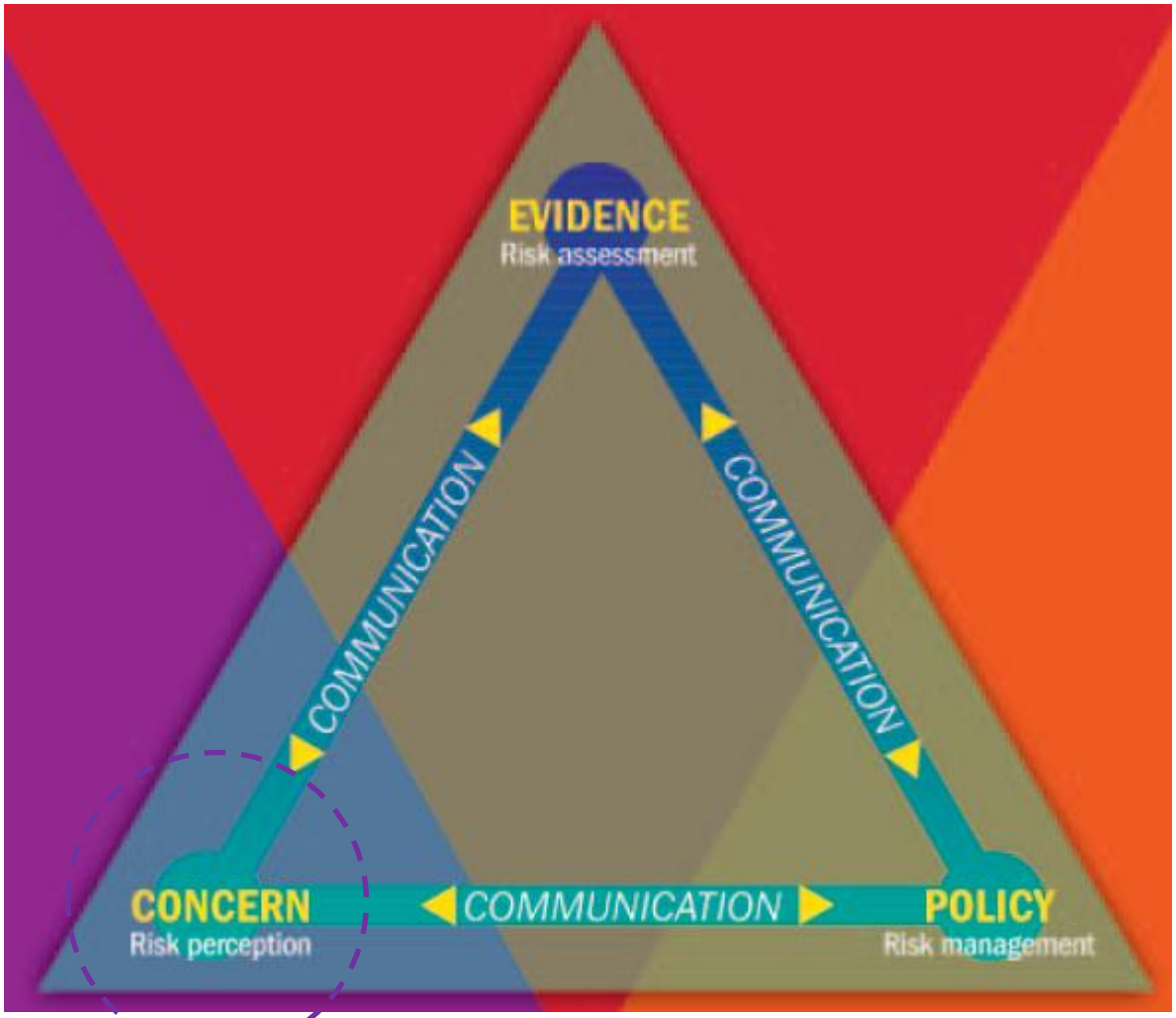
- *'…no adverse short- or long-term health effects have been shown to occur from the RF signals produced by base stations...'*

- *'Considering the very low exposure levels and research results collected to date, there is no convincing scientific evidence that the weak RF signals from base stations and wireless networks cause adverse health effects.'*

www.who.int/emf

J. Rowley, June 2012

Responding to EMF Issues



World Health Organization, 2002

Public Concern About Mobile Communications

- Risk perception factors:
  - Perceived uncertainty and lack of knowledge.
  - Personal control versus imposed exposure.
  - Direct versus indirect benefits.
- Outrage.
- Science necessary not sufficient.

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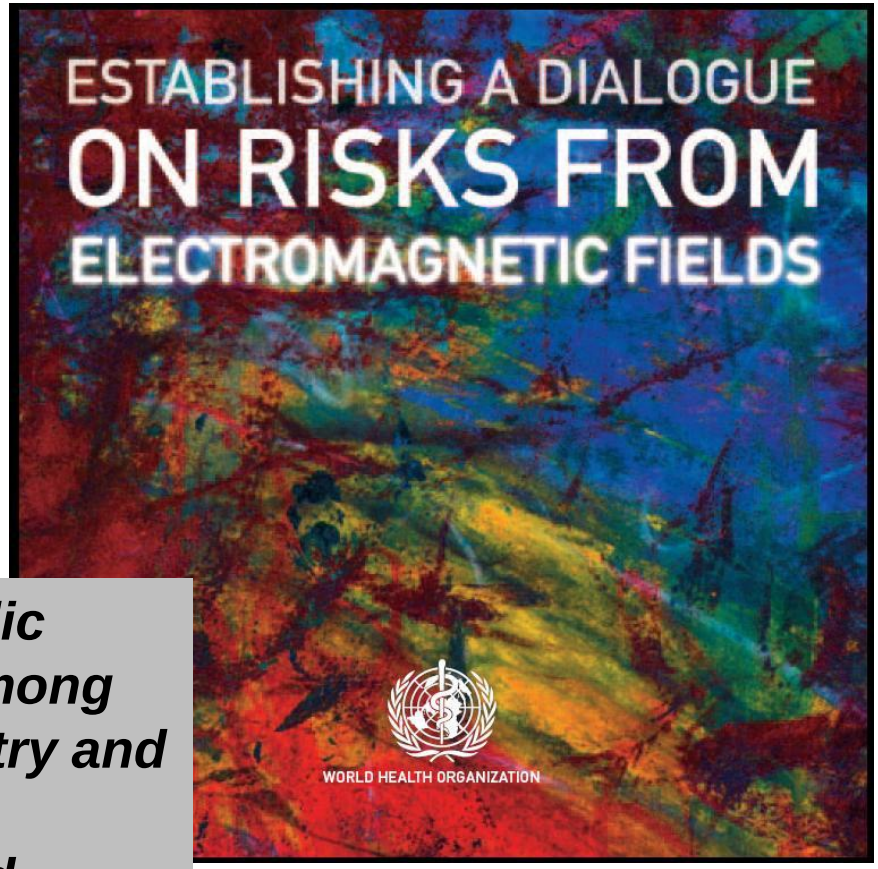
Importance of Risk Communication

- Communication:
  - When?
  - Who?
  - What?
  - How?



'Unless an effective system of public information and communication among scientists, governments, the industry and the public is established, new EMF technologies will be mistrusted and feared.'

World Health Organization, 2002

J. Rowley, June 2012

Risk Communication Principles

- Trust.
- Perception.
- Listen.
- Culture..
- Information.

http://www.gsma.com/health

J. Rowley, June 2012

Good Practice Risk Communication

- Use 3 key messages, for example:
  - *Complies with limits.*
  - *Levels are very low relative to limits.*
  - *No established health risks.*
- Use simple language.
  - Minimise technical terms.
- Use relevant images.

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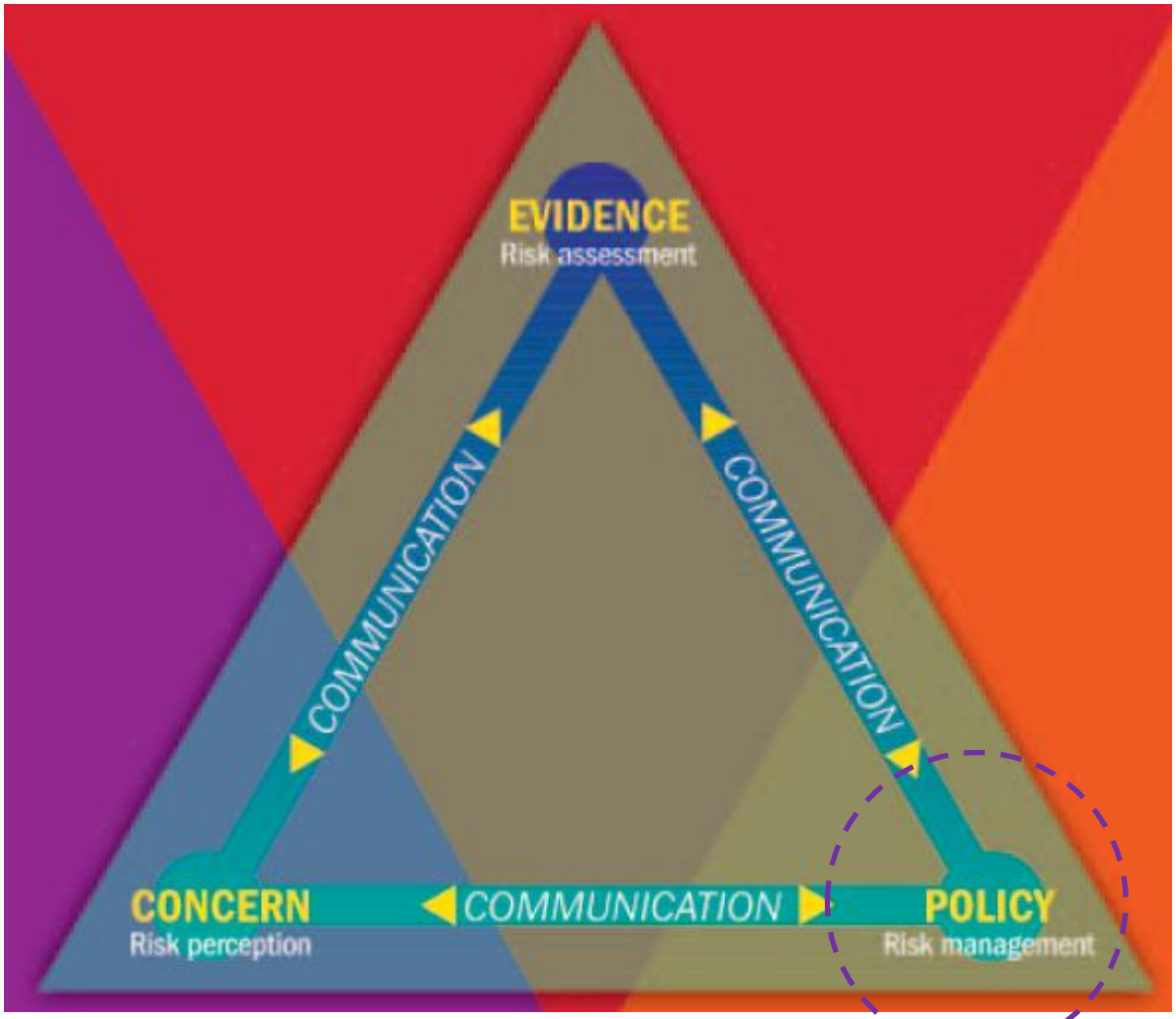
Responding to EMF Issues



World Health Organization, 2002

Harmonise with International EMF Policy

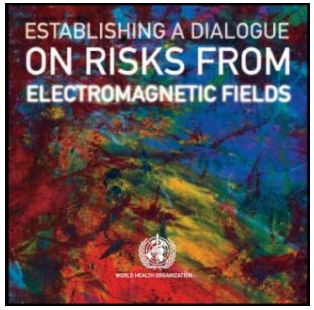
ITU International Telecommunication Union

IEC

www.itu.int
www.iec.ch

World Health Organization

MODEL LEGISLATION FOR ELECTROMAGNETIC FIELDS PROTECTION



www.who.int/emf

INTERNATIONAL COMMISSION ON NON-IONIZING RADIATION PROTECTION
IC N P
I
R

www.icnirp.org

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GSMA

National Policy for Mobile Networks

- Mobile networks are national infrastructure deployed locally.
- Consistent policy protects public and supports rollout.
- Comply with national RF exposure limits to address public concerns.

USA: *'No State or local government or instrumentality thereof may regulate the placement, construction, or modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.'*

J. Rowley, June 2012

National Planning Policy for Networks

- Mobile networks are national infrastructure deployed locally.
- Consistent policy protects public and supports rollout.
- Comply with national RF exposure limits to address public concerns.

UK: *'if a proposed mobile phone base station meets the…ICNIRP guidelines…it should not be necessary for a local planning authority…to consider further the health aspects and concerns about them.'*

National Planning Policy for Networks

- Mobile networks are national infrastructure deployed locally.
- Consistent policy protects public and supports rollout.
- Comply with national RF exposure limits to address public concerns.
- Mandatory decision period for site applications.

USA: 'shot clock' specifies 90 days for collocation applications and 150 days for other siting applications.

UK: 56 days for masts below 15 metres and some rooftop developments.

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National Planning Policy for Networks

- Mobile networks are national infrastructure deployed locally.
- Consistent policy protects public and supports rollout.
- Comply with national RF exposure limits to address public concerns.
- Mandatory decision period for site applications.
- Simplify procedures for small antennas, low power and modifications.

Ireland – antennas smaller than 2 m on rooftops do not require permits.
Italy – sites less than 20 W transmit power do not require permits.
Netherlands – most upgrades are permit free.

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National Planning Policy for Networks

- Mobile networks are national infrastructure deployed locally.
- Consistent policy protects public and supports rollout.
- Comply with national RF exposure limits to address public concerns.
- Mandatory decision period for site applications.
- Simplify procedures for small antennas, low power and modifications.
- Allow site sharing where technically and commercially feasible.

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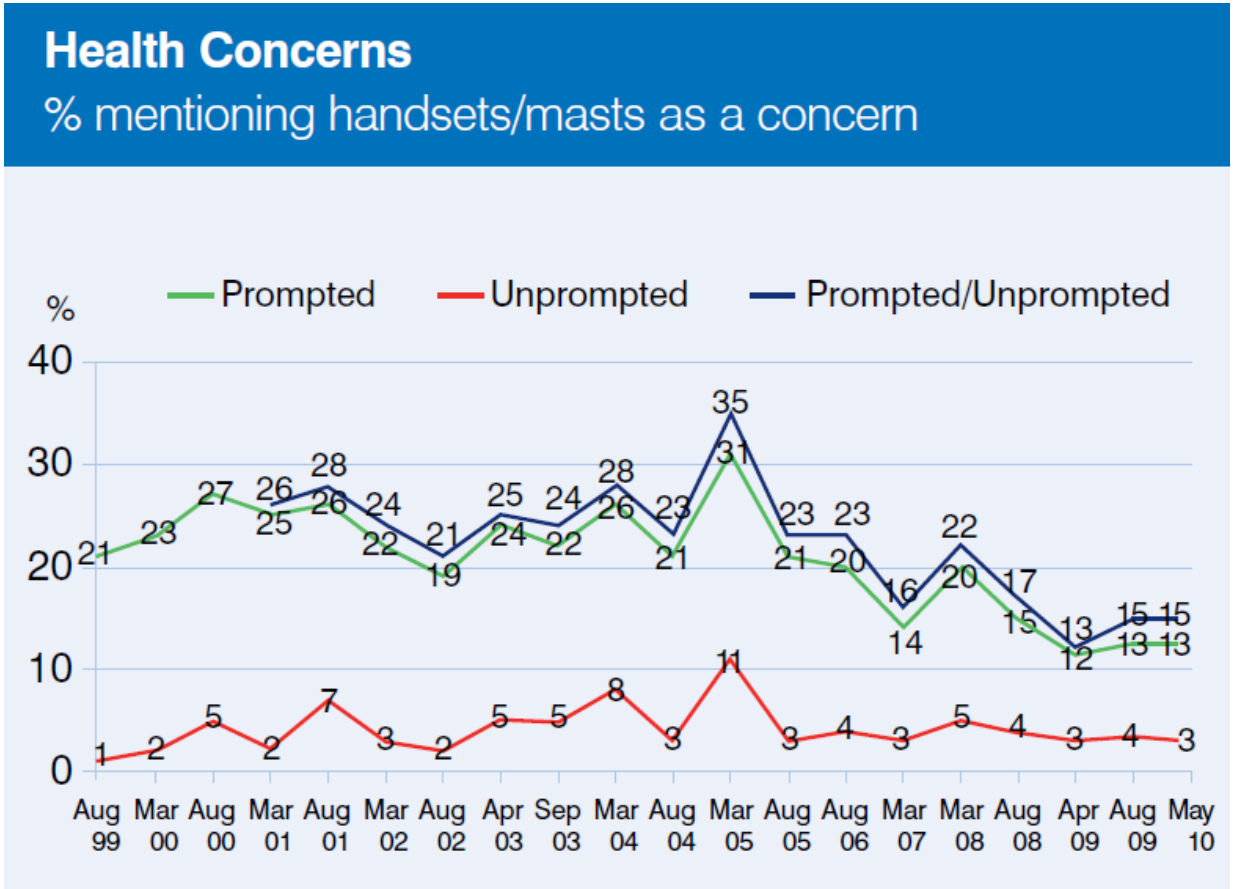
Good Policy Reduces Public Concern

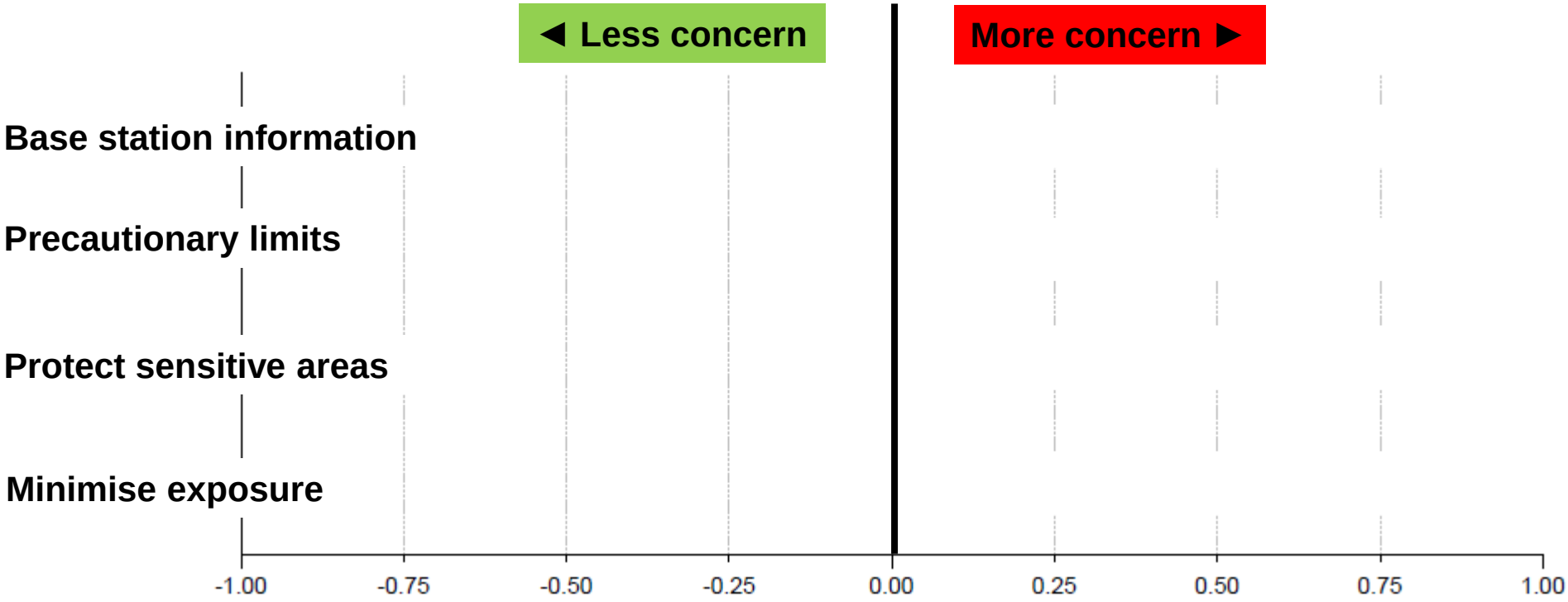


- **International limits.**
- **National mast policy.**
- **Code of practice.**
- **Sample audits.**
- **Information.**
- **Research support.**

[Mobile Operators Association (UK), 2010](#).

Precautionary Measures = Increased Concern

- Study conducted in Australia, Brazil, India, Japan, Germany, The Netherlands, South Africa, UK and USA.
  - *ICNIRP recommends limits, however, in some countries debate continues.*



All precautionary measures increased concern.

Wiedemann, 2011

Established Risk

Obey the law.

Be responsible.

Don’t text.

http://www.michellehenry.fr/tel.htm

Summary

- Adopt evidence based RF policy harmonised with international recommendations to address concerns.
- Adopt a national policy for deployment of mobile network infrastructure that protects public and supports services.
- Communicate using trusted agencies and avoid policies that increase concern.

Thank You

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