

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

Jack Rowley, PhD,  
Senior Director Research & Sustainability  
GSM Association

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

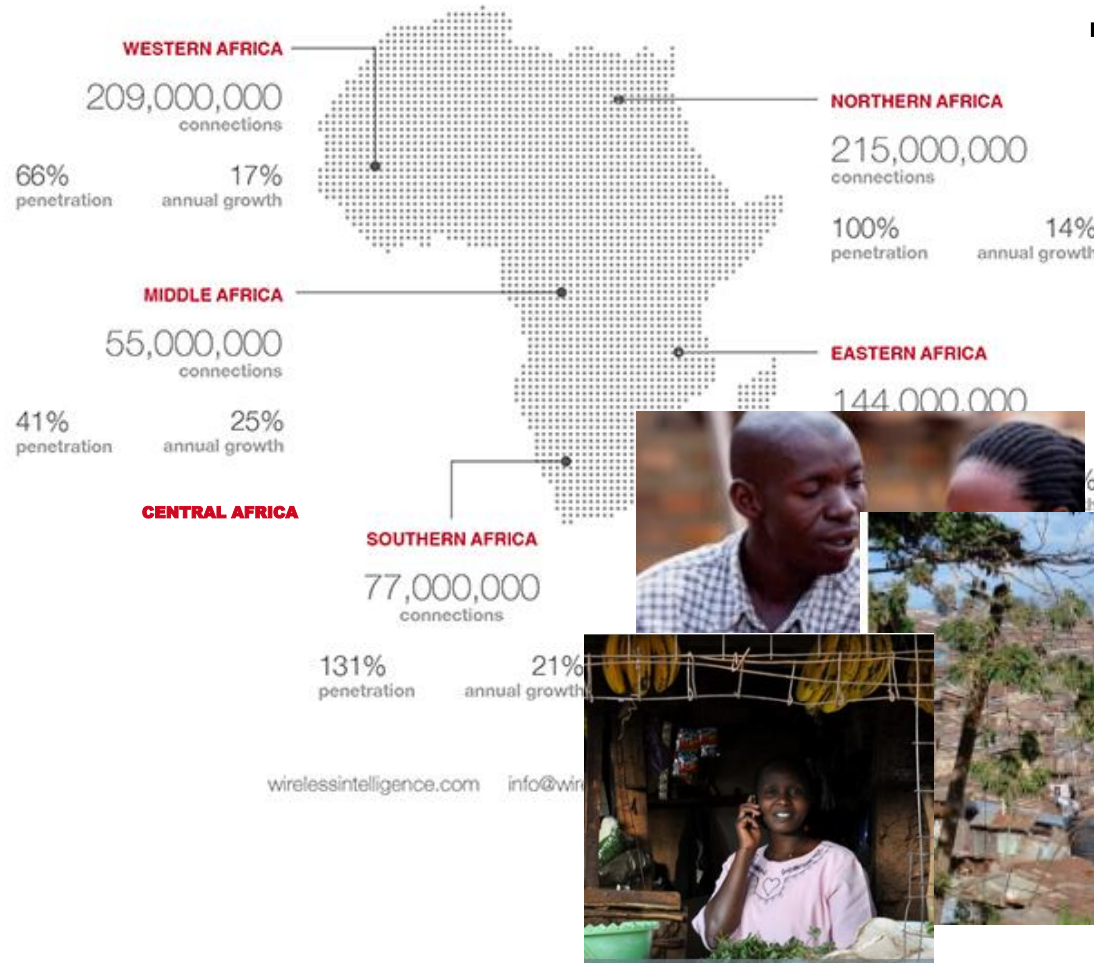
---

# Mobile Services Need Mobile Networks

# 700,000,000

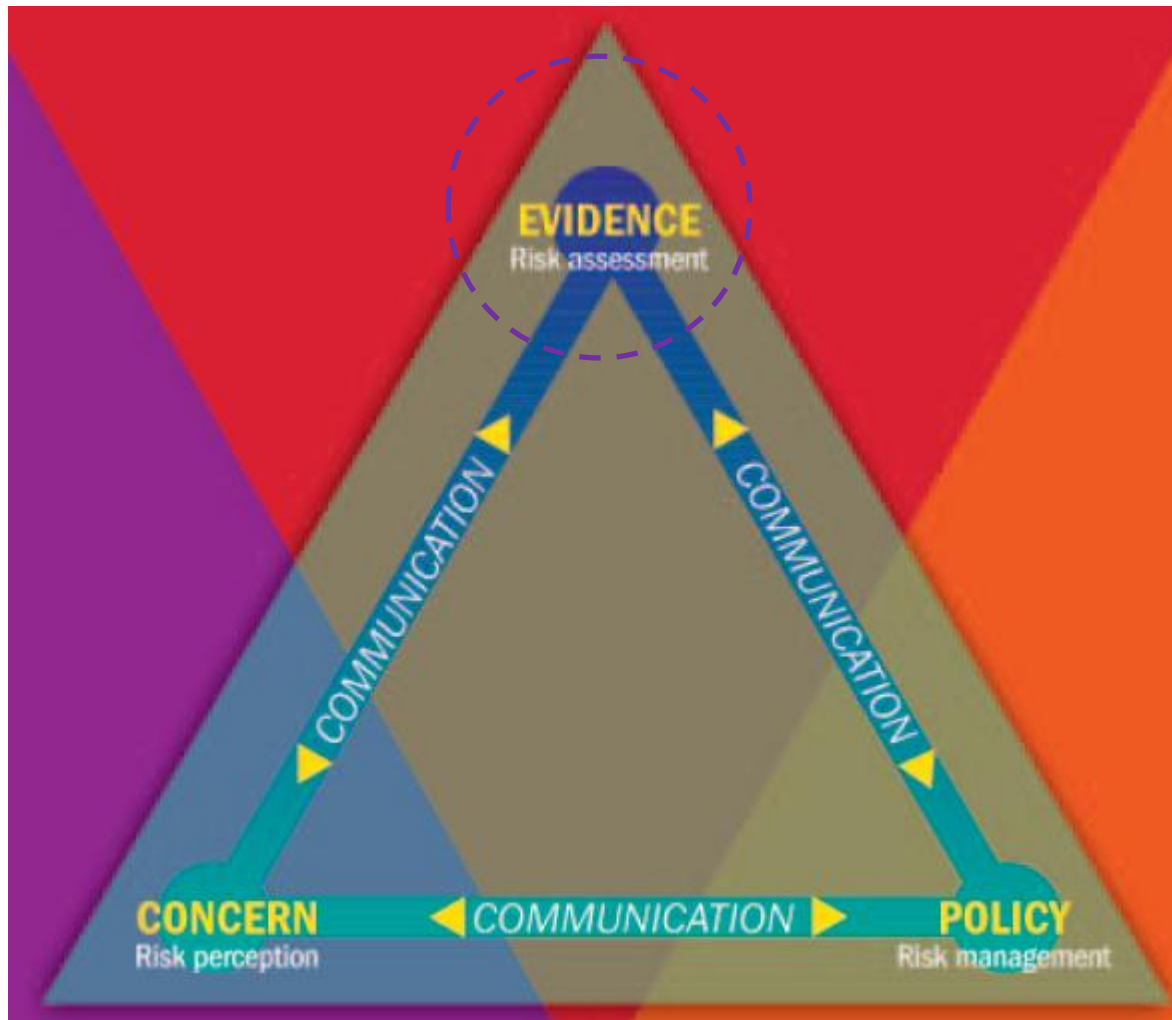
total cellular connections  
across Africa in Q2/2012

# 2G – 88%



**National infrastructure deployed locally.**

# Responding to EMF Issues



# Evidence Subject to Regular Expert Review

GSMA - Public Policy - Mobile and Health - Science Overview - Reports and Statements Index

**Public Policy**

- Mobile and Health
  - Overview
  - GSMA research
  - Health FAQs
  - Health policy
  - Mobile devices
  - Mobile networks
  - Science overview
  - Independent reviews
  - Reports and statements index**
  - Science milestones
  - Research programs
- Resources
  - Risk communications
  - Meet the team
  - Contact us

**www.gsma.com/health**

**Reports and Statements Index**

|      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|
| 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 |
| 2003 | 2002 | 2001 | 2000 | 1999 | 1998 | 1997 | 1996 | 1995 |
| 1994 | 1993 | 1992 | 1990 | 1986 | 1984 | 1981 | 1979 | 1978 |

**Health Effects from Radiofrequency Electromagnetic Fields**  
Report of the independent Advisory Group on Non-ionising Radiation

*'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.'*

# Mobile Networks Are Low Power

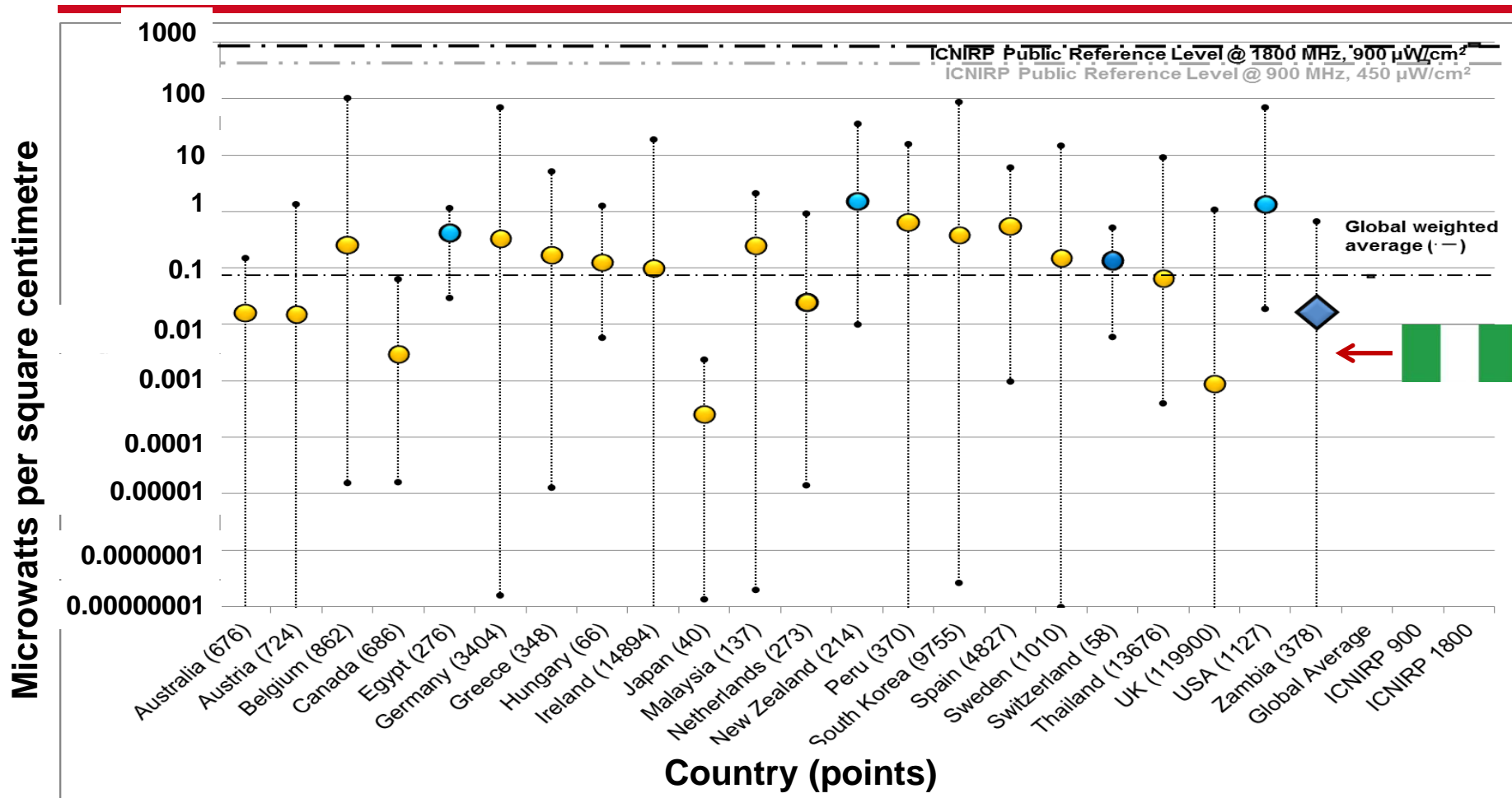
- More base stations provide:

- More coverage.
- More capacity.
- Higher data rates.



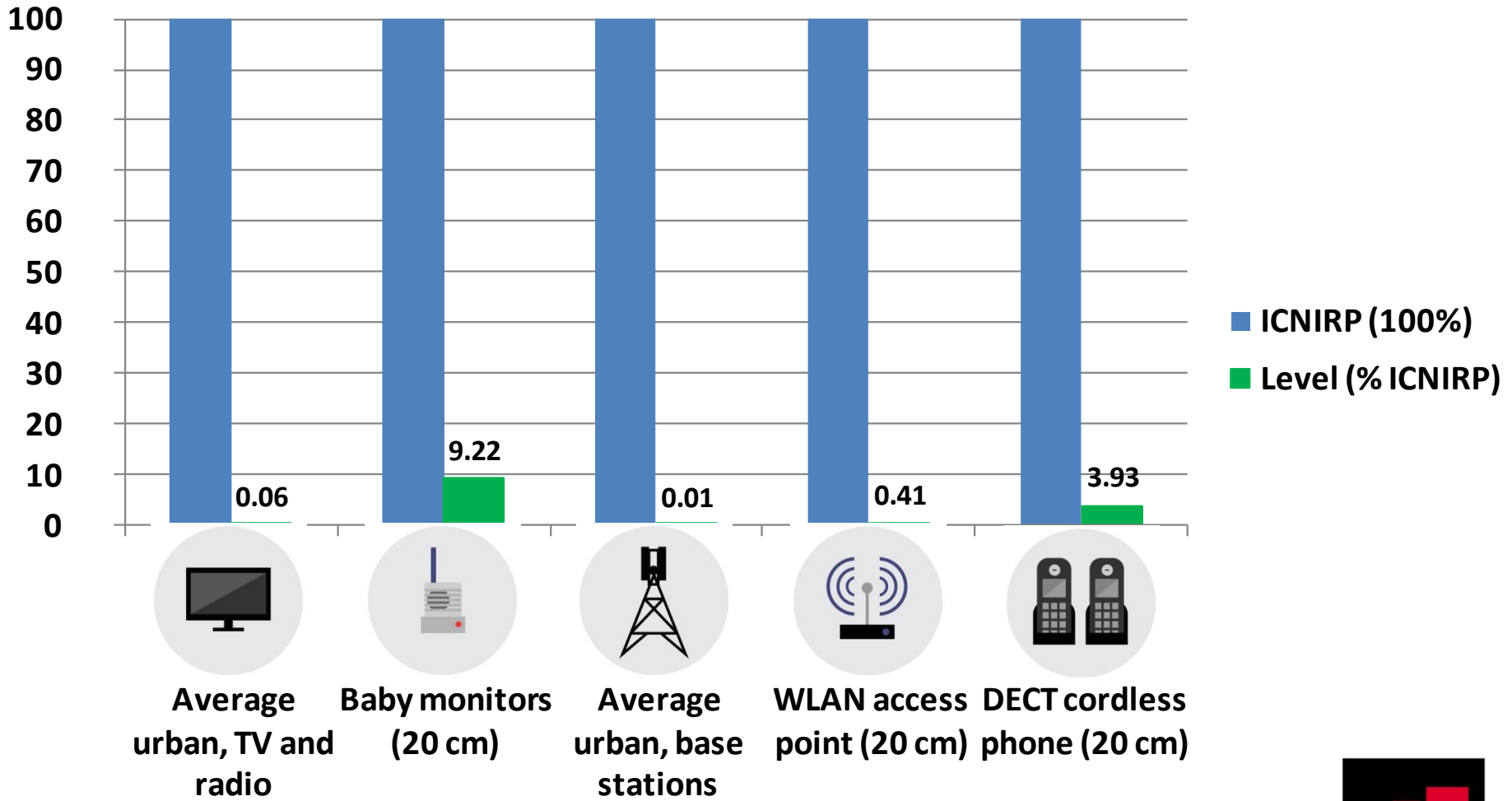


# Exposure Similar Between Countries



**RF exposure levels similar in all countries.**

# Exposures Similar to Other Wireless Services



# WHO - Wireless Networks (May 2006)



## Media centre

### Electromagnetic fields and public health

Base stations and wireless technologies

Fact sheet N°304

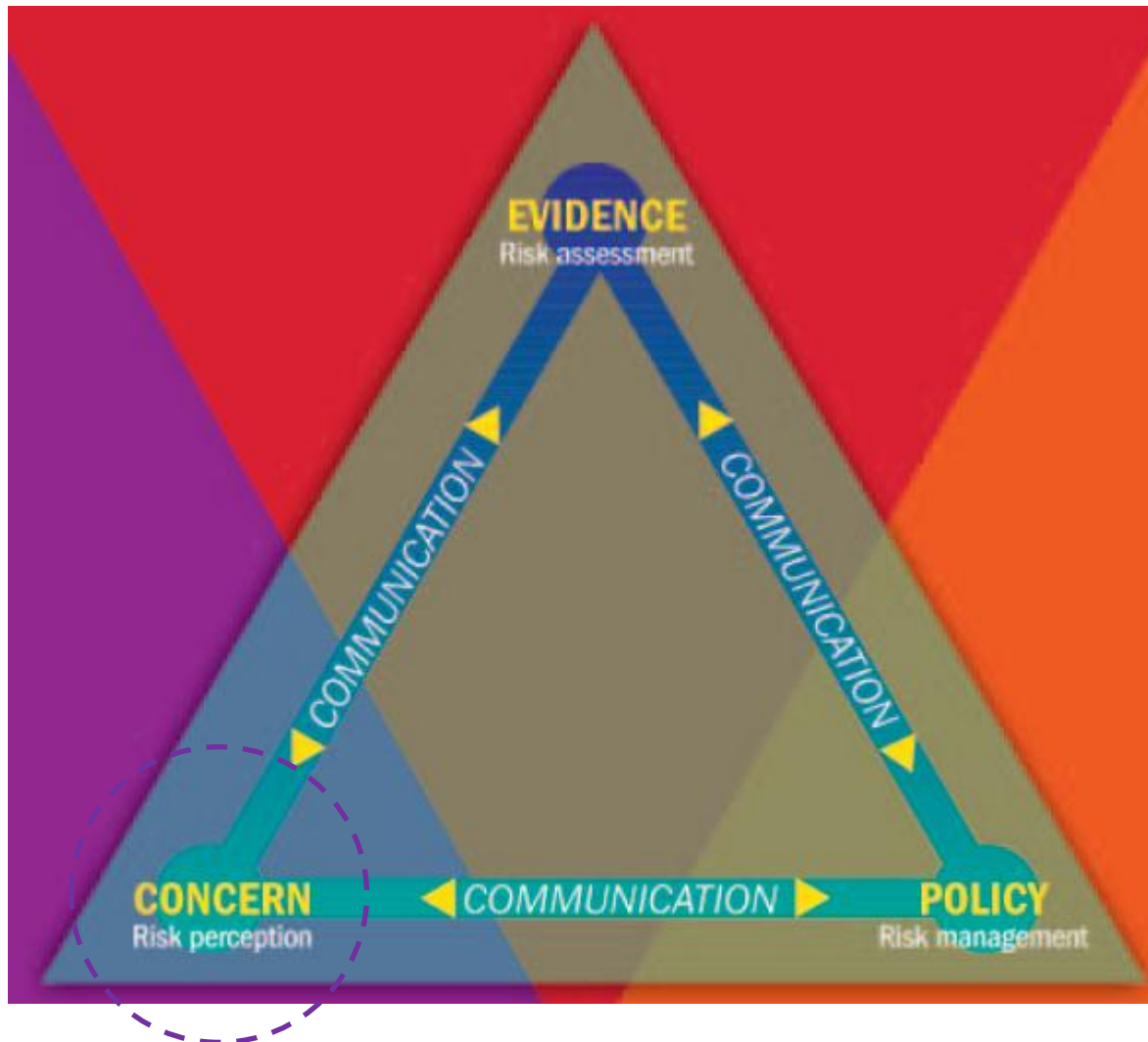
May 2006

- *'...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](http://www.who.int/emf)



# Responding to EMF Issues



# 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.



The screenshot shows the BBC News Africa website. The header includes the BBC logo, 'Mobile' text, and navigation links for News, Sport, Weather, Travel, and TV. Below the header is a red banner with 'NEWS AFRICA' and a navigation bar with links for Home, UK, Africa, Asia-Pac, Europe, Latin America, Mid-East, South Asia, US & Canada, Business, and Health. The date '15 September 2011' and time 'Last updated at 18:42 GMT' are displayed. A green 'Share' button with a count of '962' and social media icons for Facebook, Twitter, and Email are visible. The main headline is 'Nigerians reassured over 'killer phone number' fears'. Below the headline is a sub-headline 'Nigeria: When Mast Siting Caused Uproar' and a byline 'BY TOSIN OMONIYI, 21 MAY 2012'. The article text discusses the presence of telecoms masts around the capital city and the resulting crisis between two government agencies. It mentions that the confrontation was resolved through the intervention of a government minister and that operatives of the National Environmental Standards and Regulations Enforcement Agency (NESREA) had stormed an MTN mast located in Jabi and sealed it within minutes. The reason for the action was that the location was not in conformity with a law which stipulates that such structures must be located at least 10 meters away from the nearest residential abode.

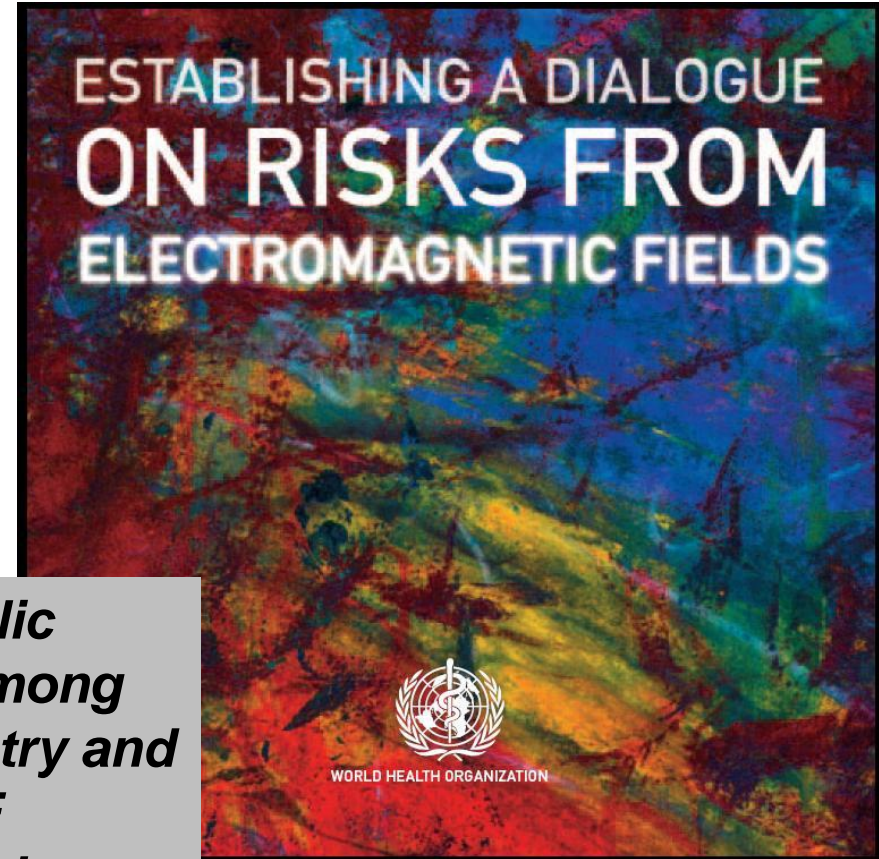
# Importance of Risk Communication

---

## ■ 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.’***



# Risk Communication Principles

---

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



## Risk Communication Guide for Mobile Phones and Base Stations

Practical guidance and support on good risk communications practice  
for the mobile industry

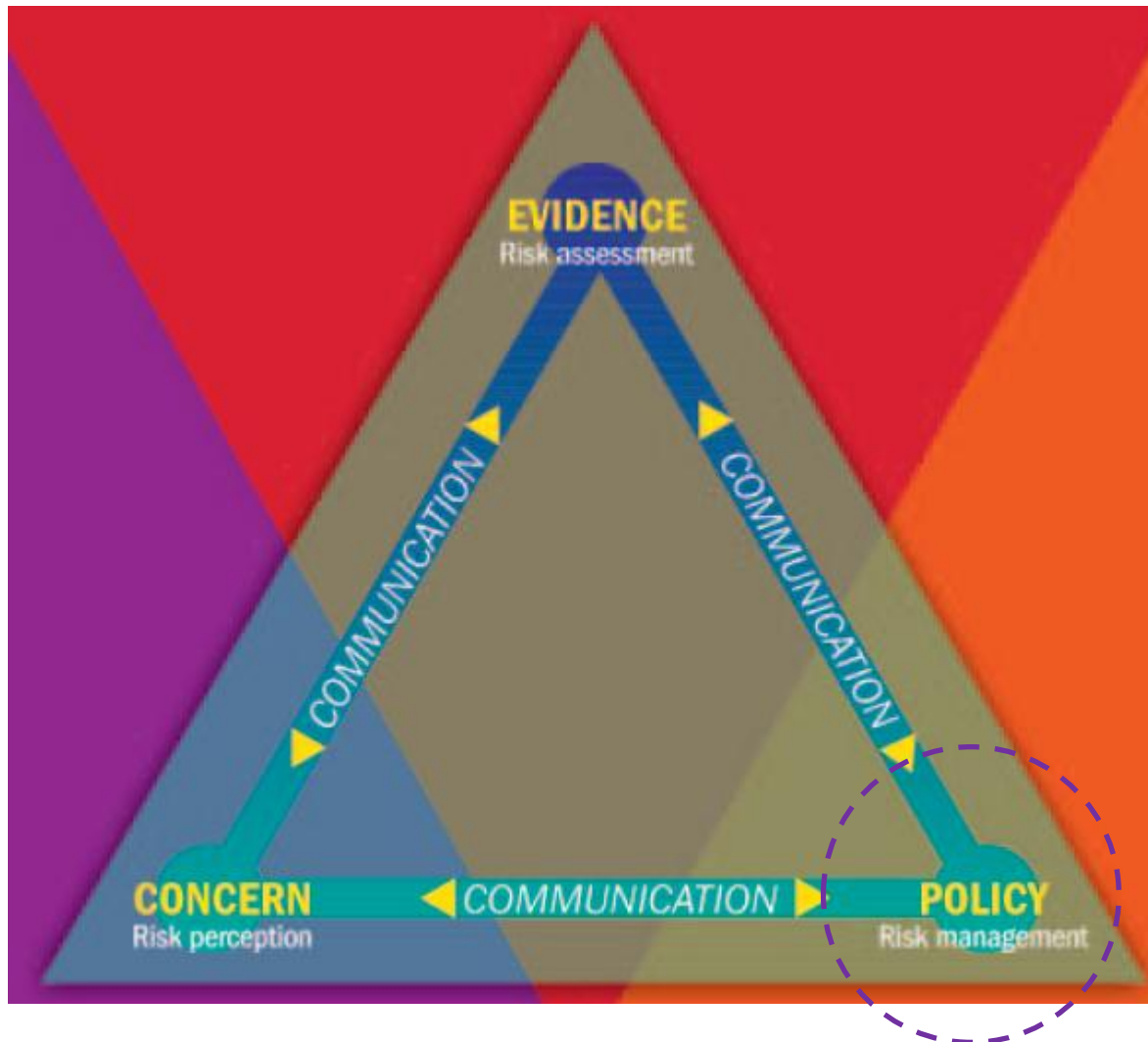


# Good Practice Risk Communication

---

- 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.

# Responding to EMF Issues

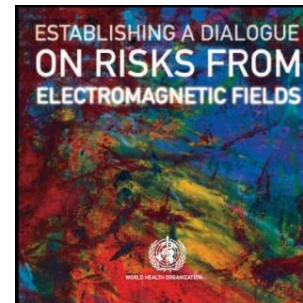




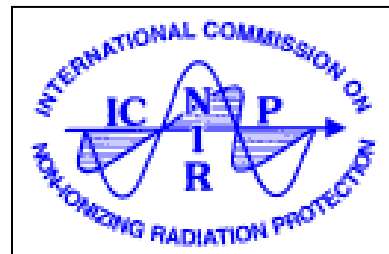
# Harmonise with International EMF Policy



[www.itu.int](http://www.itu.int)  
[www.iec.ch](http://www.iec.ch)



[www.who.int/emf](http://www.who.int/emf)



[www.icnirp.org](http://www.icnirp.org)

# 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.’*

# 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.

# 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.

# National Planning Policy for Networks

---

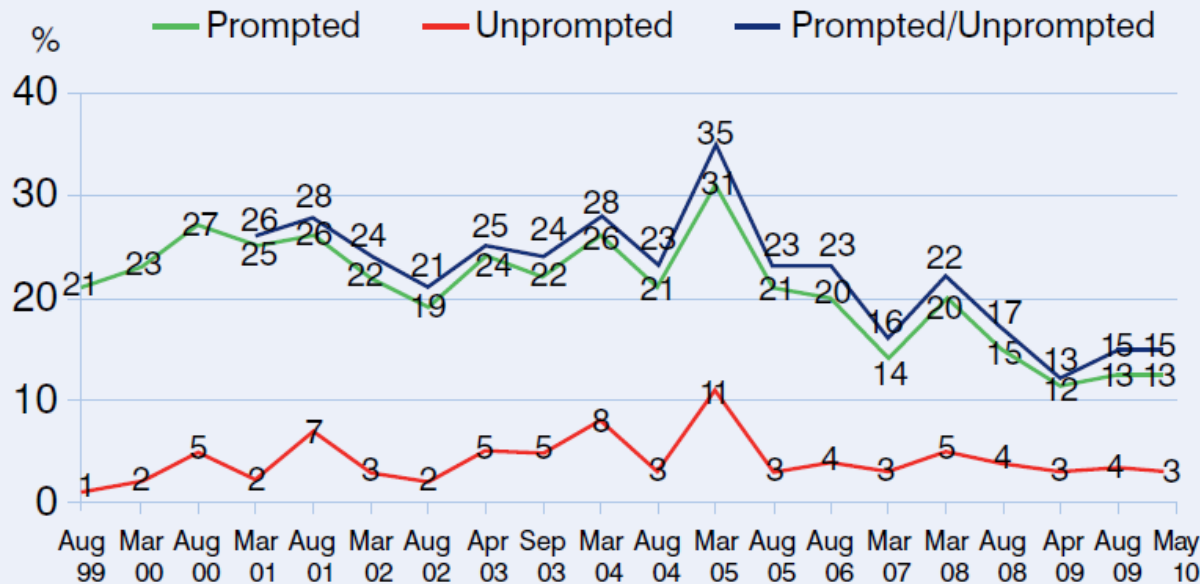
- Mobile networks are national infrastructure deployed locally.
- Consistent policy protects public and supports rollout.
- Comply with national RF exposure limits to address public concerns.
- Mandatory decision period for site applications.
- Simplify procedures for small antennas, low power and modifications.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



# Good Policy Reduces Public Concern

## Health Concerns

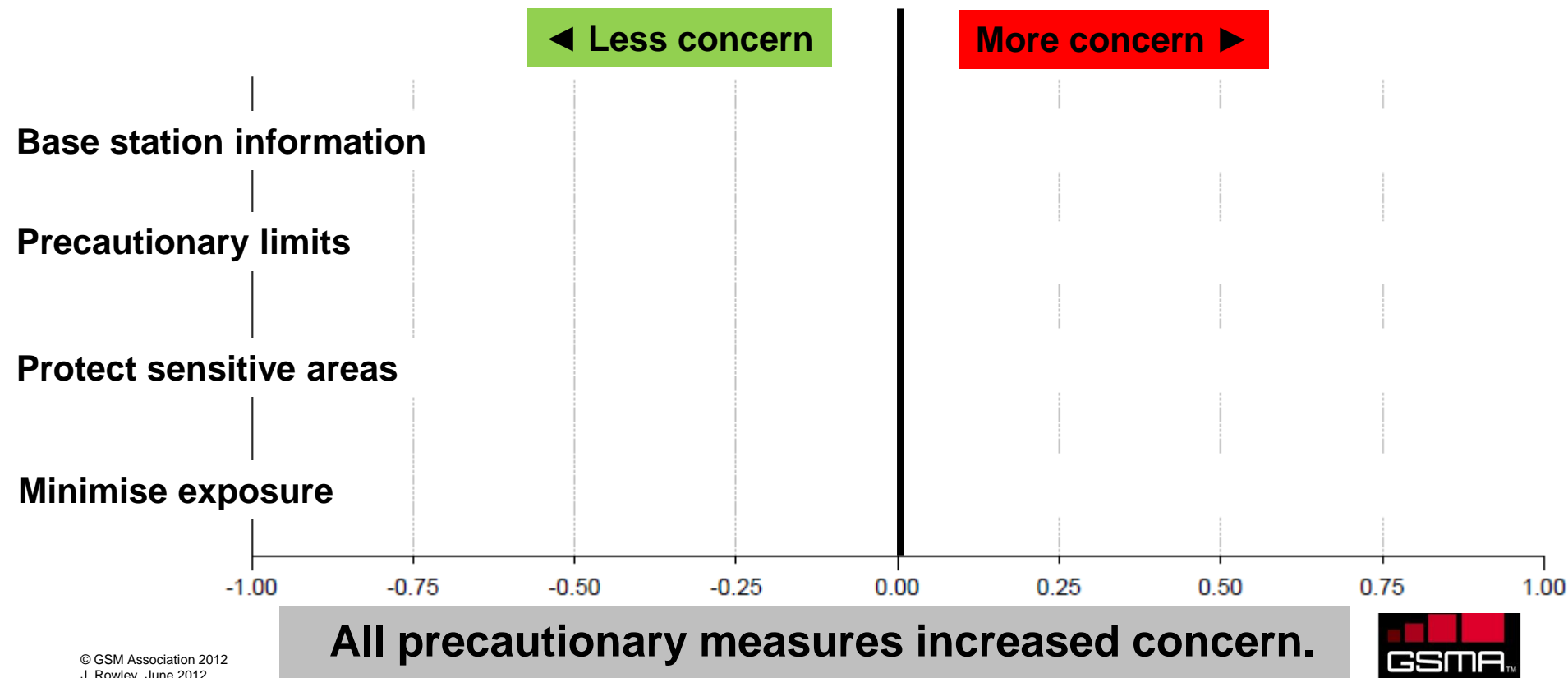
% mentioning handsets/masts as a concern



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

# 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.*



Wiedemann, 2011



# Established Risk



**Obey the law.**

**Be responsible.**

**Don't text.**

# 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

- **Contact: Dr Jack Rowley**
- **Job title: Senior Director**  
**Research & Sustainability**
- **email address:**  
[jrowley@gsm.org](mailto:jrowley@gsm.org)
- **Tel: +353 86 806 0849**
- **Website:**  
[www.gsma.com/health](http://www.gsma.com/health)

## January 12 - GSMA Health & Environment Newsletter



January 2012

Welcome to the GSMA Health & Environment Newsletter. This e-newsletter provides regular updates on developments on science and policy issues and GSMA activities related to mobile communications health and environmental issues.

We welcome feedback on the content.



GSMA - Public Policy - Mobile

Public Policy

Mobile and Health

Campaign Overview

GSMA Research

Health FAQs

Health Policy

Mobile Devices

Mobile Networks

Science Overview

Resources

Meet the Team

Contact Us

## Mobile and Health

