ITU Sub-Regional Seminar on IMT-2000 (Warsaw, 2-4.10.01)

IMT-2000

Towards Global Implementation

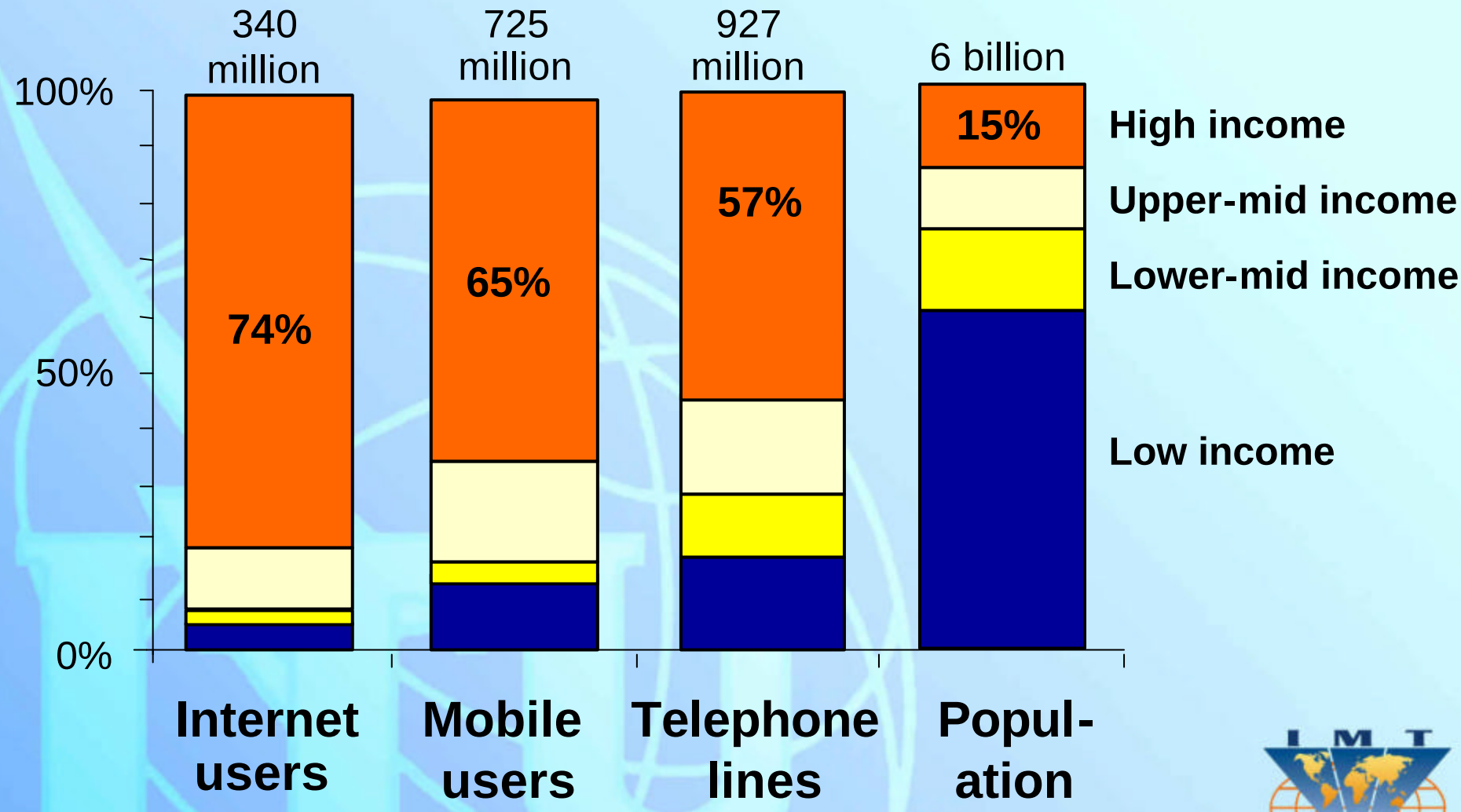
Fabio Leite, Project Manager, IMT-2000

The Information Society

The New World by 3G

Digital Divide = Telecoms Divide

User distribution, by income group



Source: ITU World Telecommunication Indicators Database (January 2001).

Industrial Challenge of the 21st Century

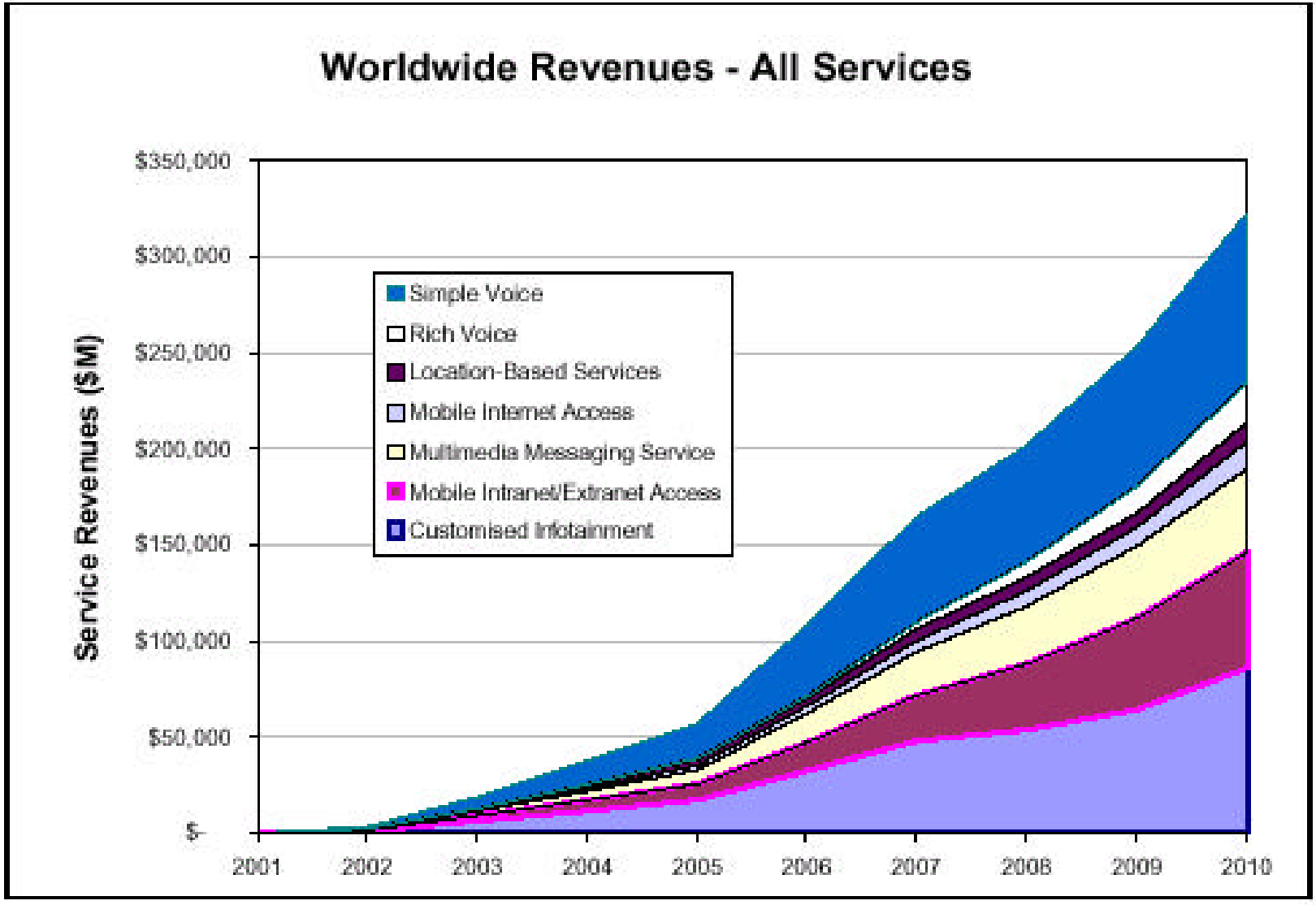
COMMERCIAL → Is there a market?

FINANCIAL → Are the investments going to be made?

TECHNOLOGICAL → Are the standards set and equipment available?

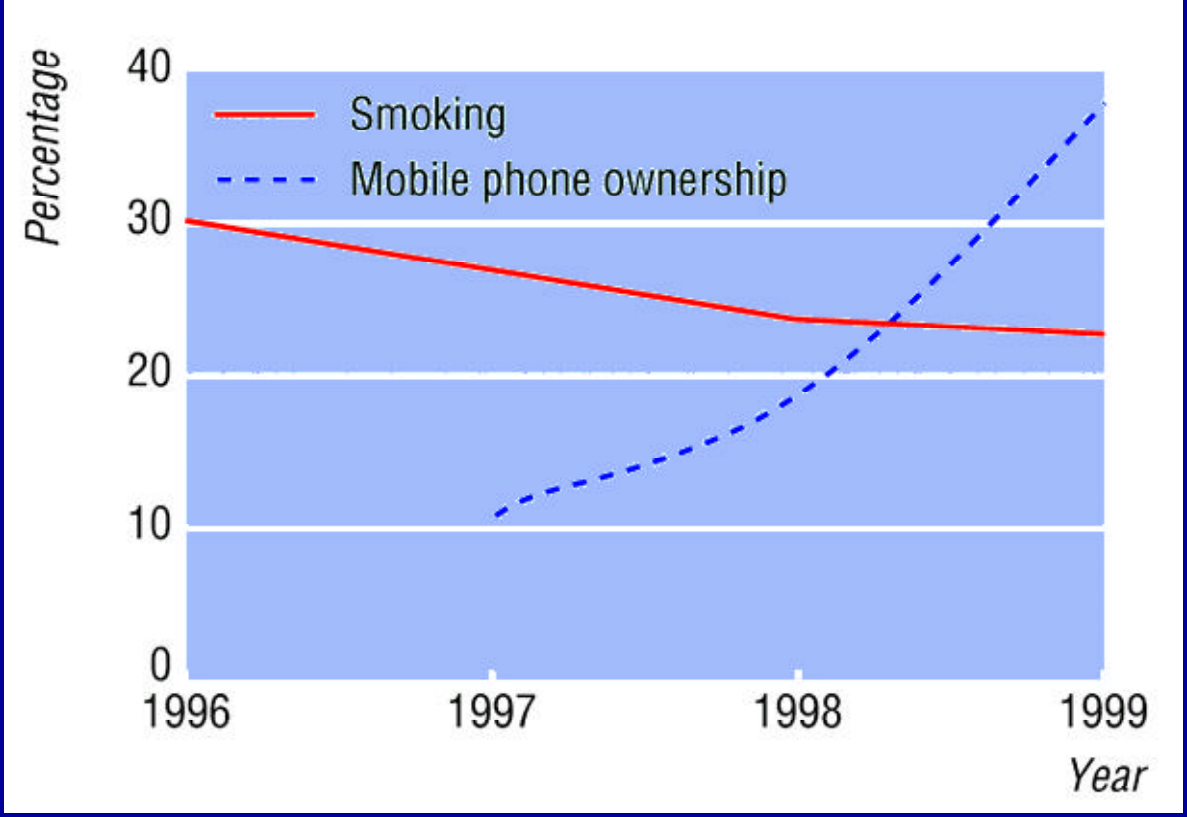
Operator's investment: US$ 0.5 trillion (licence + infrastructure + marketing)

Cumulative Revenue: US$ 1 trillion!



Source: UMTS Forum (April 2001)

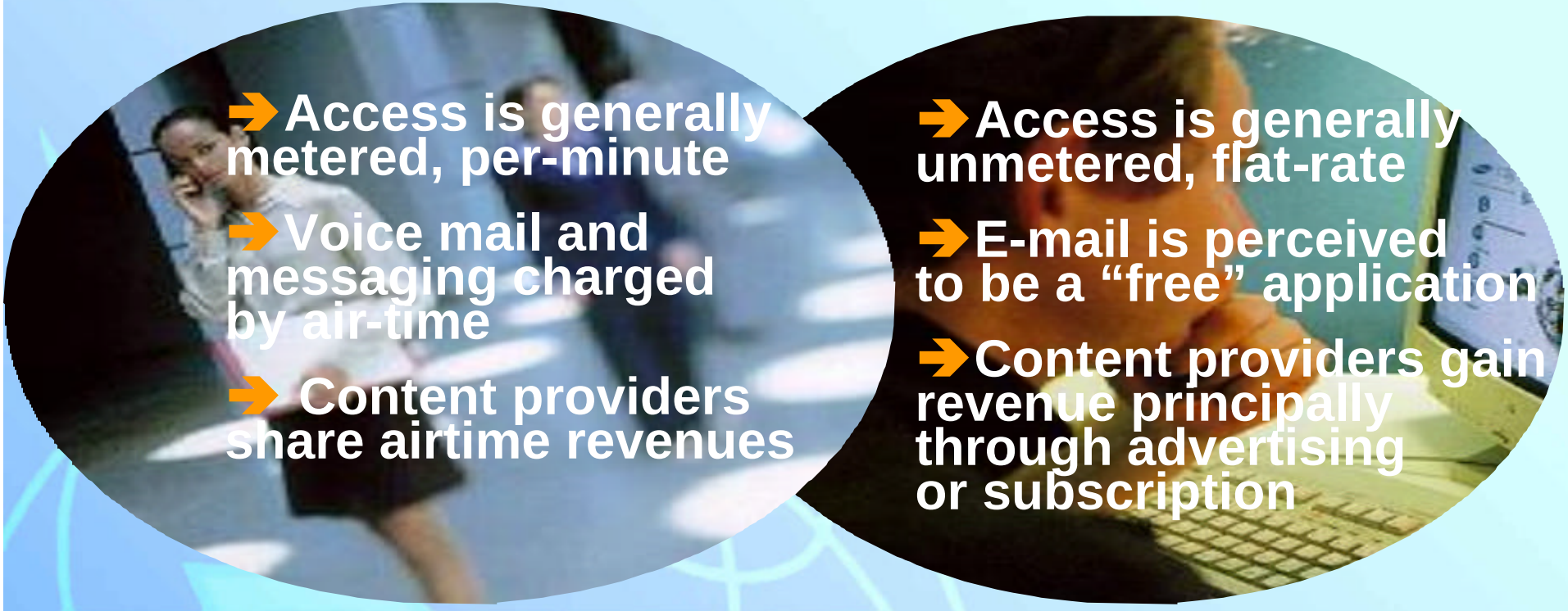
Mobile Market



Smoking among boys and girls and ownership of mobile phones among those aged 15-24 (UK).

"Teenagers are giving up cigarettes in preference to fashionable mobile phones. ... The mobile phone is an effective competitor to cigarettes in the market for products that offer teenagers adult style, individuality, sociability, rebellion, peer group bonding and adult aspiration." , *British Medical Journal*, Nov.2000

Mobile Internet Dilemmas



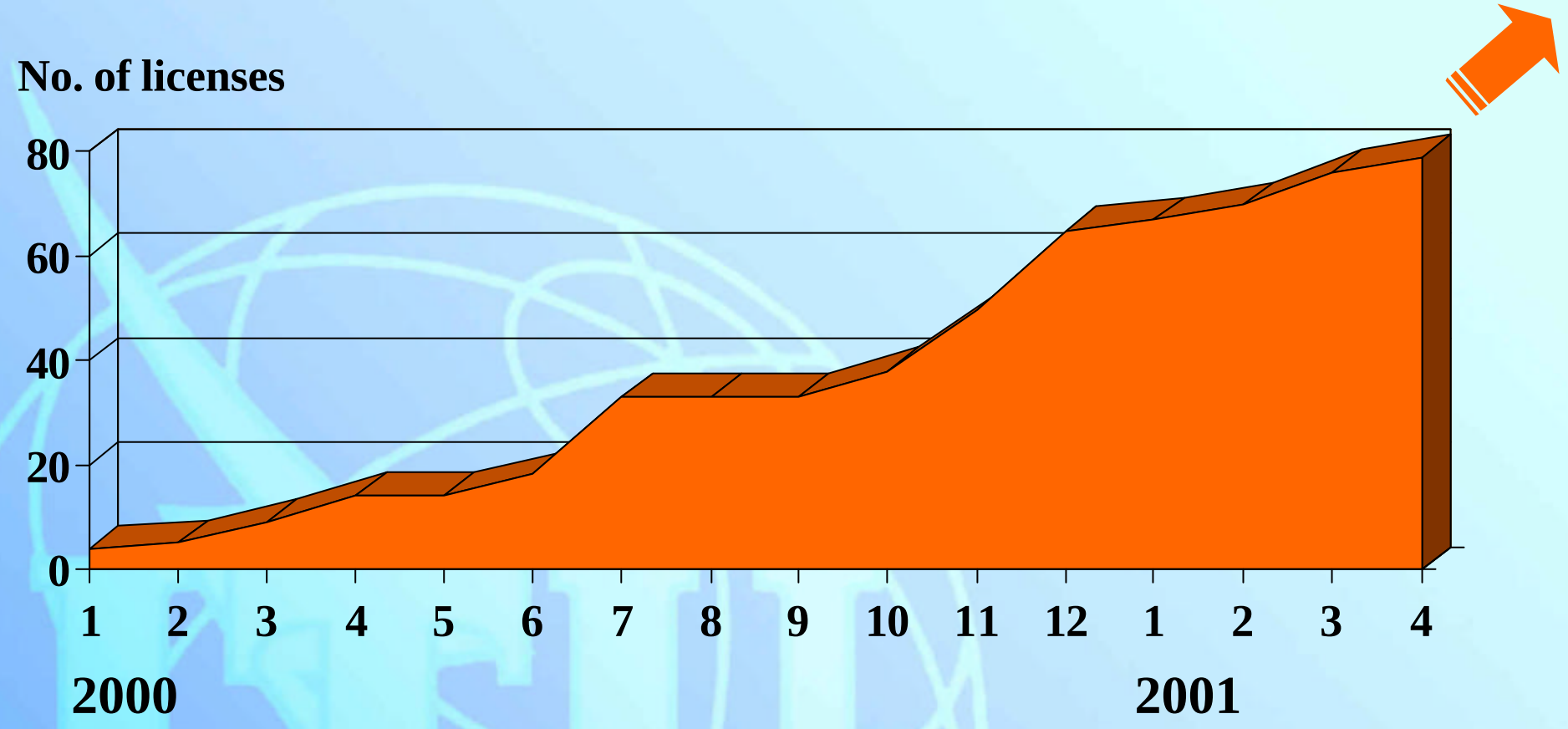
- Access is generally metered, per-minute
- Voice mail and messaging charged by air-time
- Content providers share airtime revenues

- Access is generally unmetered, flat-rate
- E-mail is perceived to be a “free” application
- Content providers gain revenue principally through advertising or subscription

✓ **In a mobile-Internet world:**

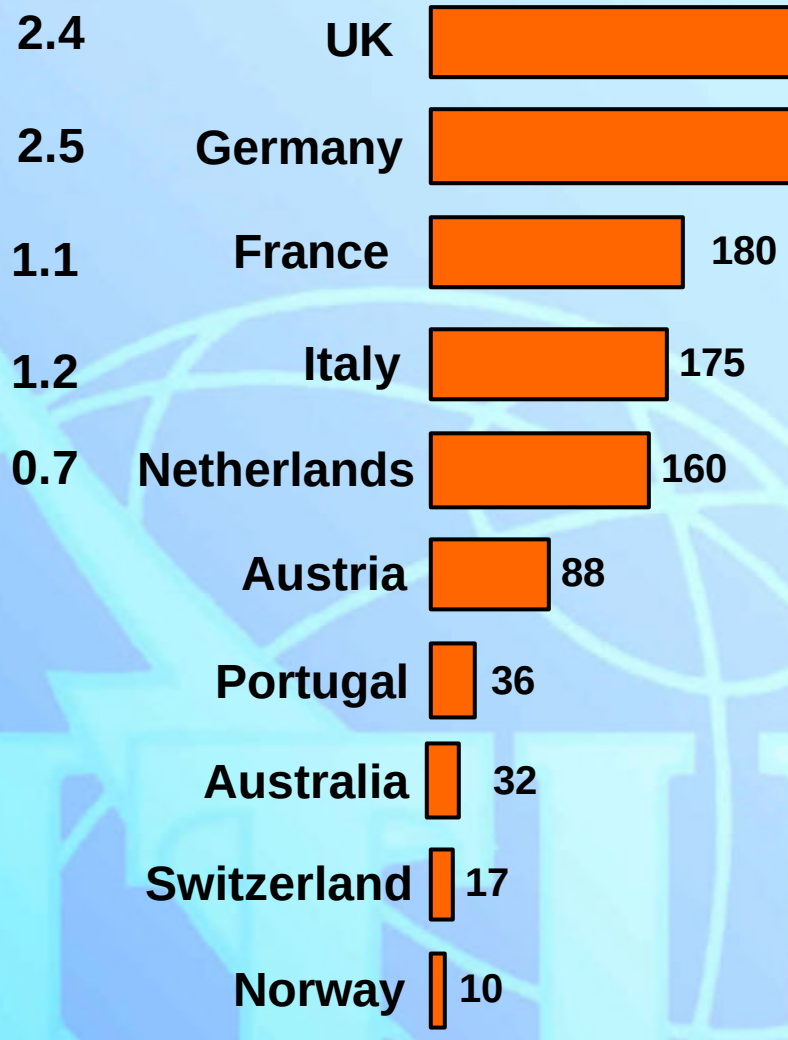
- Which business model takes precedence?
- Who does the billing?
- How are revenues shared between content provider, service provider and portal?

IMT-2000 Licenses

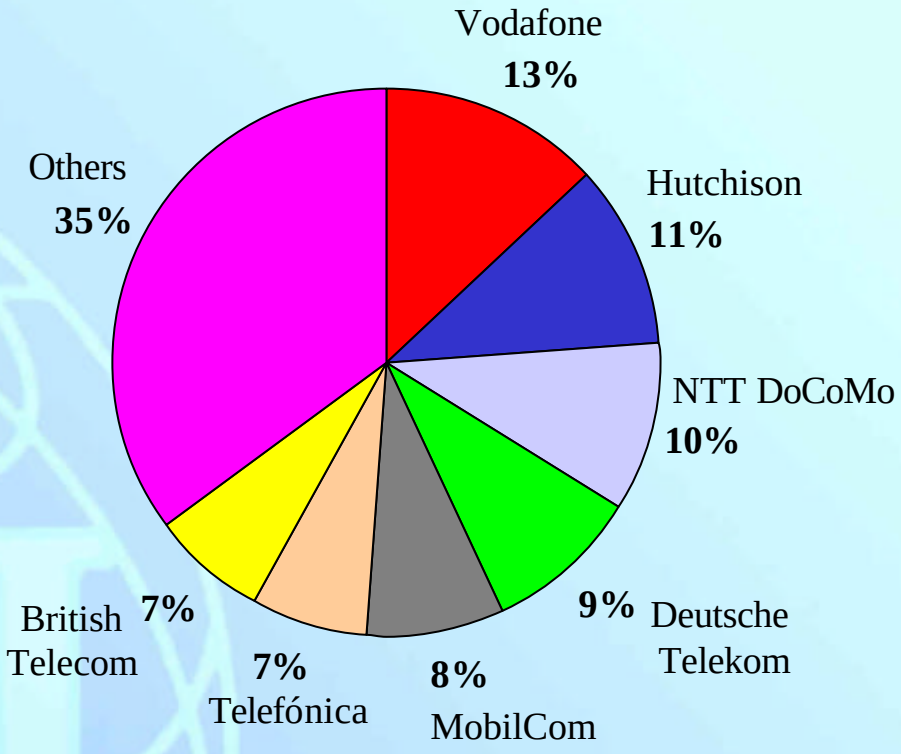


3G License Prices

Revenue as % GNP:



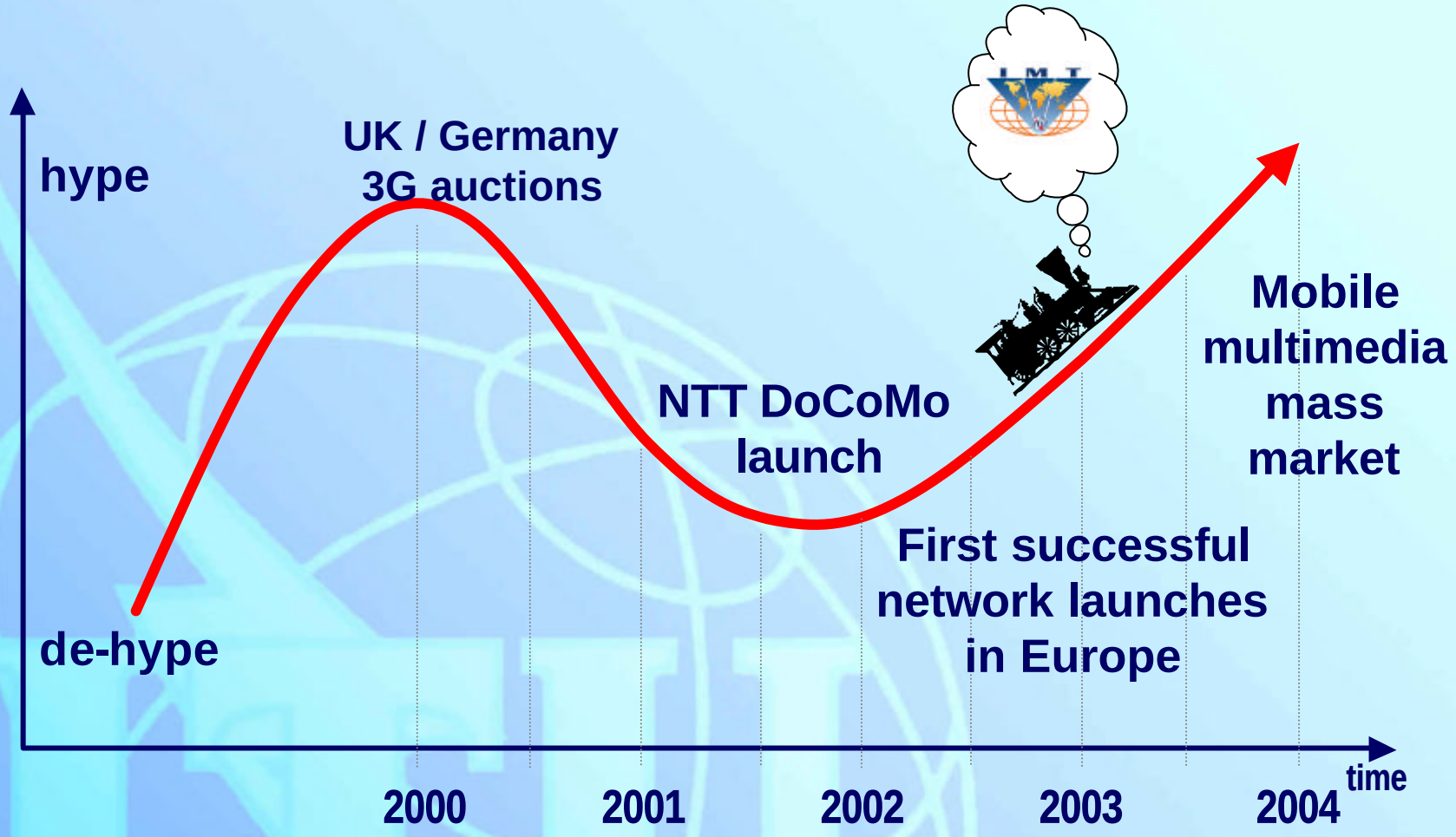
Average price per pop.:



Source: 3gnewsroom (4.01)

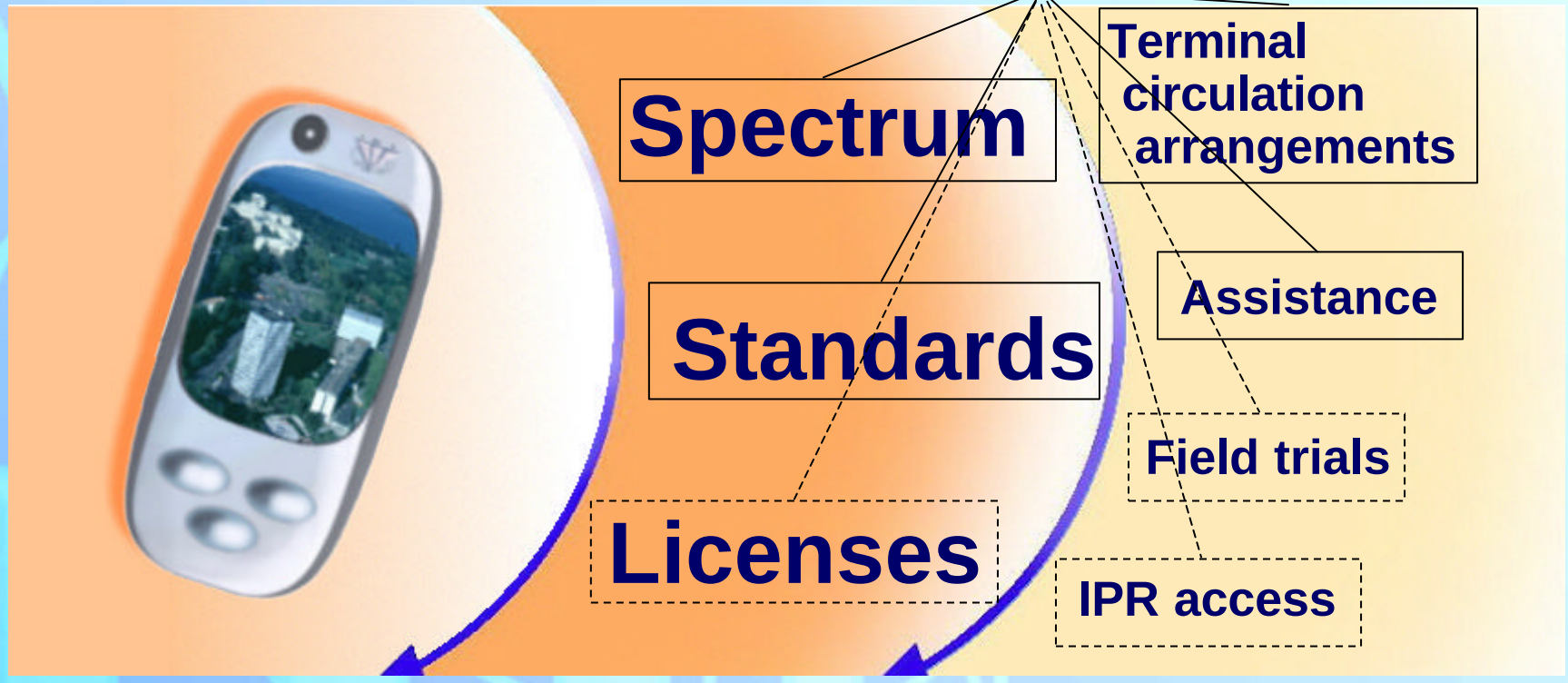
Source: ITU, http://www.itu.int/ti/industryoverview/at_glance/UMTS2001.htm

IMT-2000: Towards Global Implementation



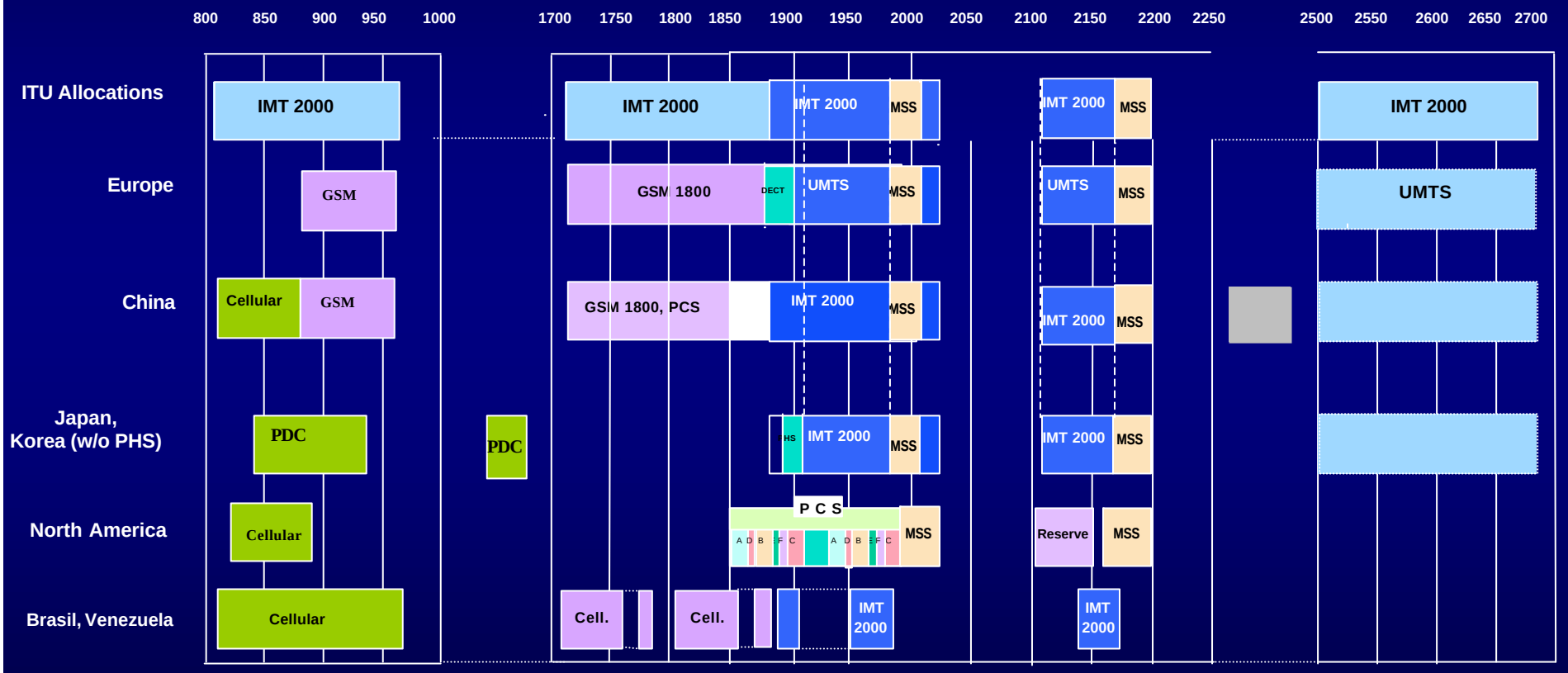
Source: Bosco Fernandes, Siemens AG

IMT-2000: ITU's Role



Spectrum: the starting point

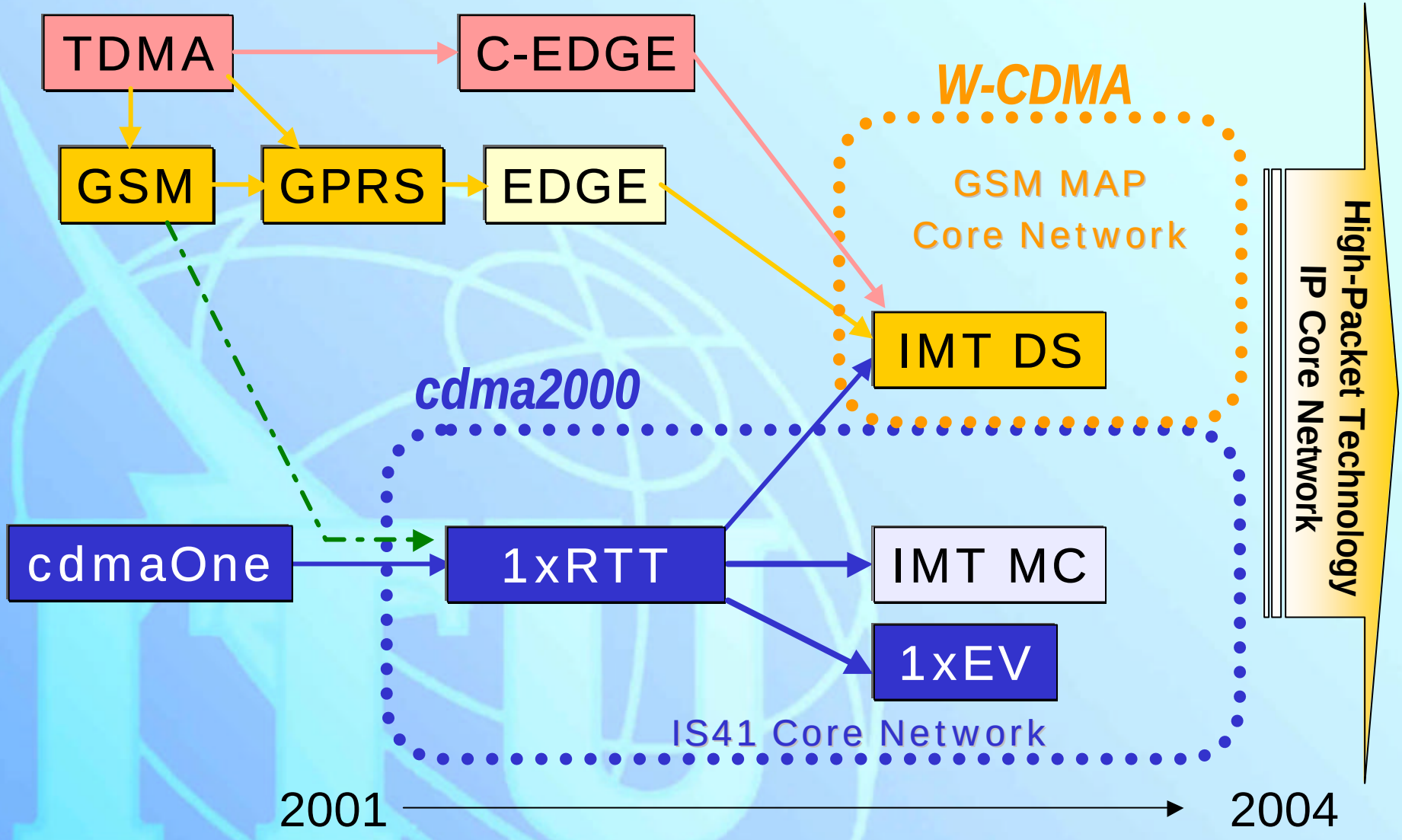
IMT-2000 Frequency Spectrum after WRC-2000



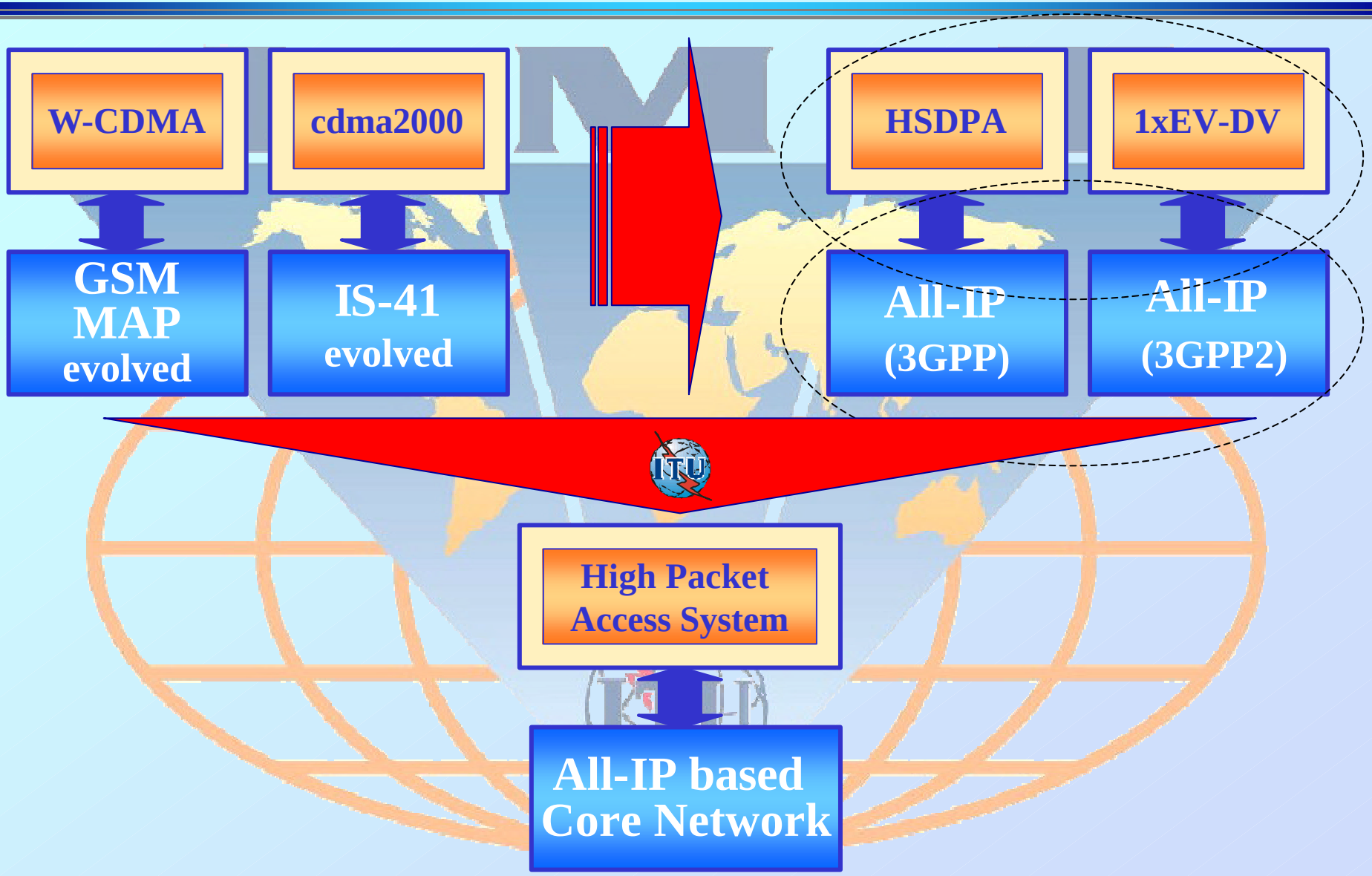
ITU Radio Regulations: 750 MHz of spectrum identified for IMT-2000

Standards-setting will never be the same again

2G ? 3G Evolution & Convergence



Towards a Fully Harmonized 3G System



“Let’s not do ‘2G’ all over again!”

Benefits of Globally Harmonized 3G Networks

- Increased 3G penetration and usage
- Manufacturers' development costs spread out across a larger installed base
- Ability for customers to roam with their services across regions, countries and systems
- Increased ability of the Information Technology, Internet and Personal Computer industries to provide mobile applications, solutions and subscriber devices
- Smooth and compatible evolution path from existing 2G infrastructures

Regulating for implementation

Global Circulation
of IMT-2000 Terminals

*"**Right of users to carry their personal terminals into a visited country, and the ability to use them wherever possible":***

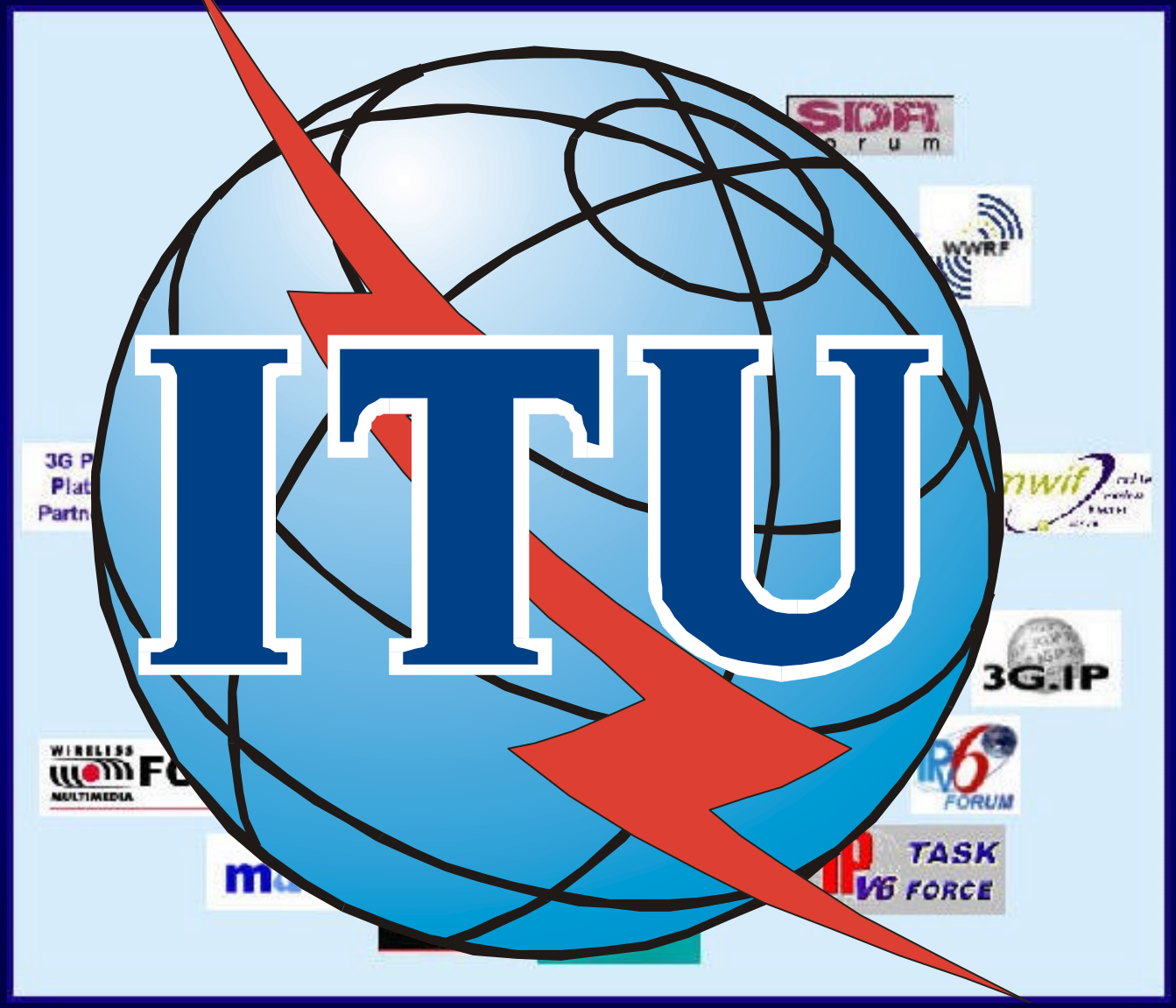
- ***without causing unacceptable interference;***
- ***considering health and safety requirements.***

Actions towards an **agreed international framework** to facilitate global circulation:

- ITU-R WP8F: Recs. IMT.RCIRC & UNWANT (technical basis)
- Consultation by ITU-SG: on basic principles of no individual license; no additional terminal certification or type approval; and customs arrangements.
- Informal consultation meetings: ITU & EC/CITEL/APT.
- IMTEM = IMT "Electronic Mark" (terminal identifier w/ regulatory data to be used only where legally required)

IMT-2000: ITU's Role

Coordinator



Facilitator

Guarantor

For more information:

Fabio Leite, **Project Manager, IMT-2000**
International Telecommunication Union
E-mail: Fabio.Leite@itu.int
Web: http://www.itu.int/osg/imt-project