

The Wireless Planet

Moving Toward a Wireless Information Society

IMT-2000 Standardization in ITU

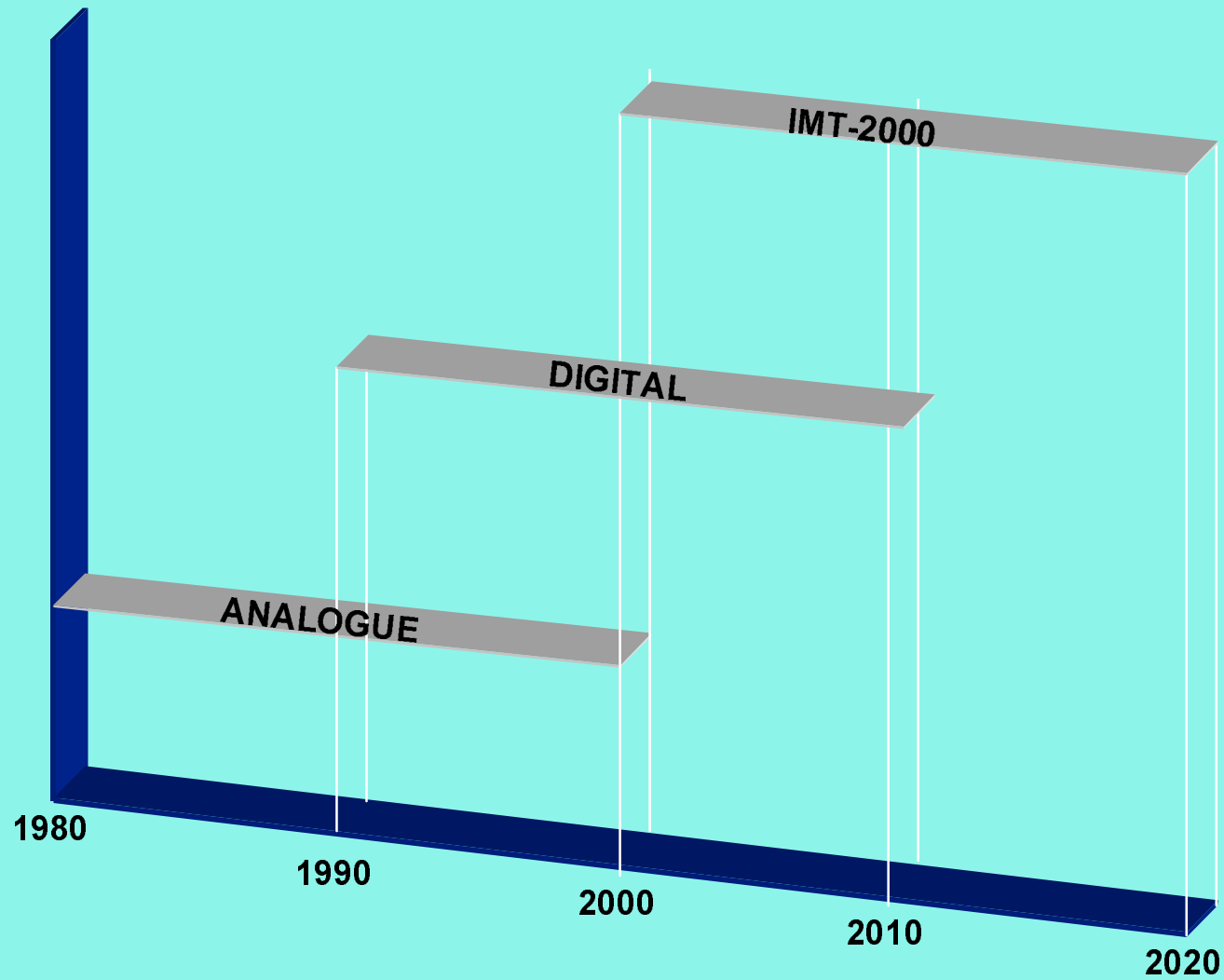


Fabio Leite

Radiocommunication Bureau




Evolution of Mobile Standards





IMT-2000

- *IMT-2000* is an initiative of the . It will provide wireless access to the global telecommunication infrastructure through both satellite and terrestrial systems, serving fixed and mobile users in public and private networks.
- The ITU vision of global wireless access in the 21st century, including mobile and fixed access, *IMT* is aimed at providing direction to the many related technological developments in this area to assist the convergence of these essentially competing wireless access technologies.

IMT-2000 Objectives

- **GLOBAL** SERVICE CAPABILITIES IN 2000s
- **TERRESTRIAL & SATELLITE** COMPONENTS
- **FLEXIBLE/SEAMLESS** SERVICE PROVISION
- WIDER RANGE OF **SERVICES**/TERMINALS
- FIXED/MOBILE & PUBLIC/PRIVATE
CONVERGENCE
- IMPROVED OPERATIONAL **EFFICIENCY**
> **REDUCE THE TELECOMMUNICATIONS GAP** <

Need for IMT-2000

**Demand for
Global Service**

**Demand for
Multimedia Services
(N-ISDN, Internet)**

**Demand for
Additional Capacity
(Spectrum)**



Industry & Society

Mobility

Convergence

**Wireless
Access**

Internet

GII

Personalization

Globalization

INDUSTRY CONVERGENCE

BROADCASTING

INFORMATION

IT INDUSTRY

- Internet access
- Electronic mail
- Real-time image transfer
- Multimedia document transfer
- Mobile computing

Multimedia
Interoperability

BROADCASTING INDUSTRY

- Video on demand
- Interactive video services
- Infotainment
- Value-added Internet services
- TV & radio contribution

TELECOMMUNICATION
INDUSTRY

COMMUNICATION

3G Roles

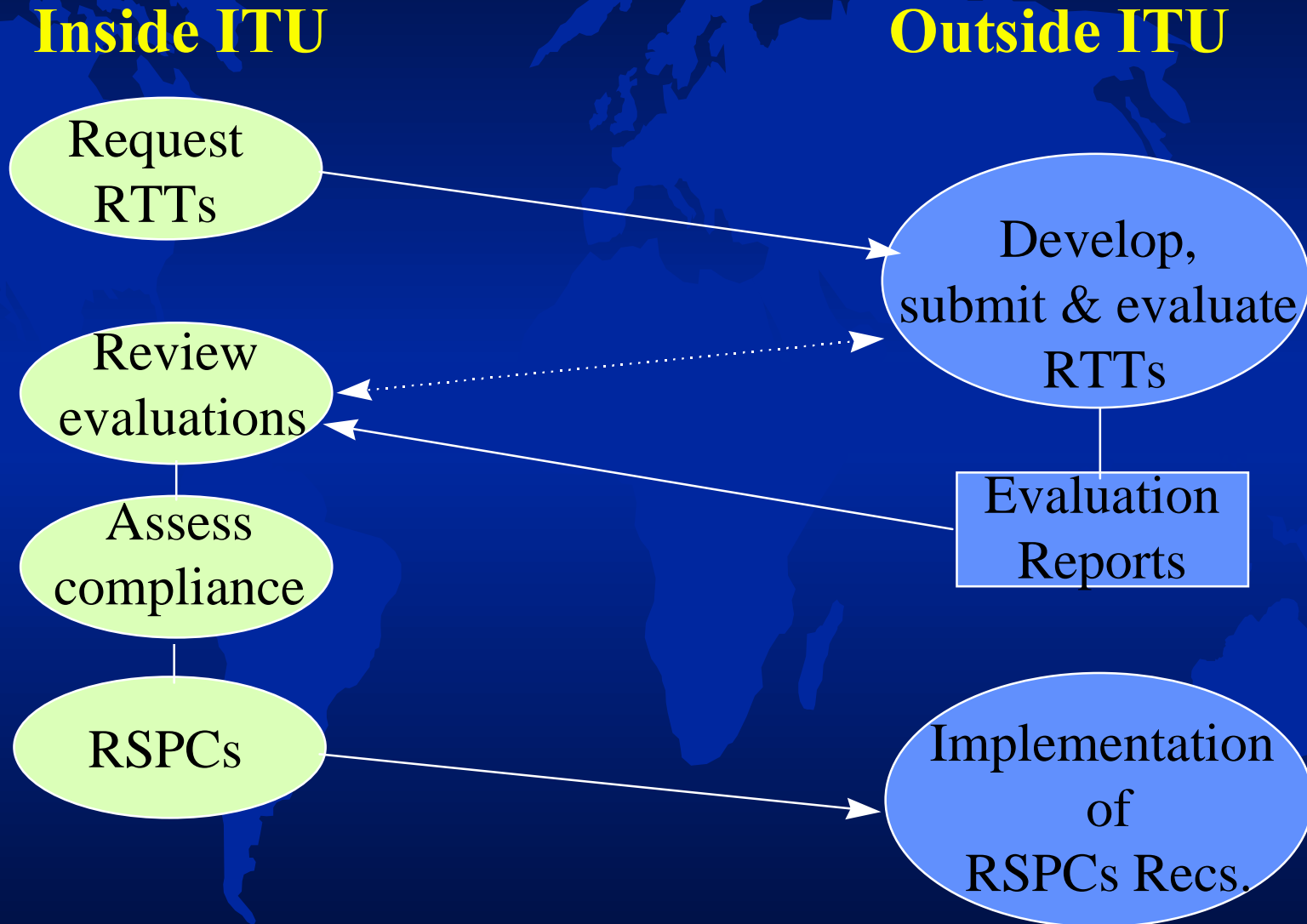


Regional Standards Bodies

- ◆ World-wide spectrum coordination
- ◆ Policy/regulatory harmonization
- ◆ International standards for IMT-2000, including key access and network interfaces
- ◆ Provide foundation, framework and catalyst for 3G convergence across Regions and technologies

- ◆ Teamwork with the ITU in development of IMT-2000 standards
- ◆ Harmonize regional input contributions to the ITU
- ◆ Develop specific regional requirements within the IMT-2000 Family of Systems
- ◆ Evolve regional pre-IMT-2000 standards towards IMT-2000 capabilities

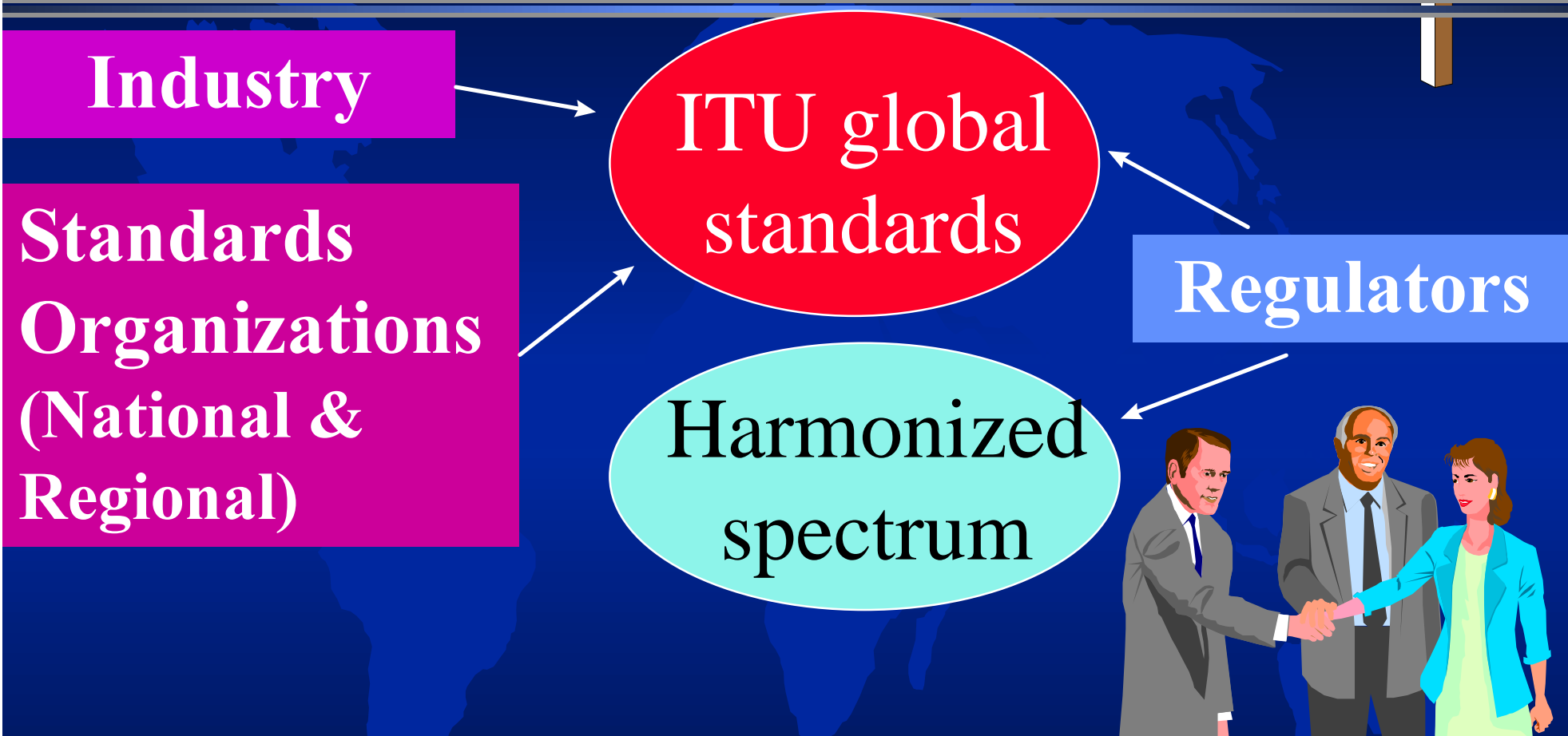
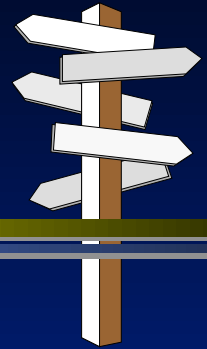
IMT-2000 RADIO INTERFACE DEVELOPMENT PROCESS



CHALLENGES & OPPORTUNITIES

- ◆ **Coexistence with 2G systems**
- ◆ **Vendors' desire for IPR advantage**
- ◆ **Negotiating agreements between Regional/technology-based “camps”**
- ◆ **Intensity/diversity of 3G standards activities is stretching scarce resources**
- ◆ **ITU consensus building can be a catalyst for win/win convergence**
- ◆ **Operators' agreement on value of convergence is key to success**

Road to IMT-2000



Interactive consensus building

TEAM EFFORT

CONCLUSION

- ◆ ITU/SDOs 'Team'
- ◆ Radio convergence: key to realizing cost reduction/3G market growth
- ◆ Significant challenges remain to be overcome but a "window of opportunity" exists
- ◆ Operators' commitment to convergence needed: to ensure "window" is not missed

Follow IMT-2000 standards progress on :

<http://www.itu.int/imt/>

Biography

FABIO LEITE holds a Masters degree from the Catholic University of Rio de Janeiro in Electrical Engineering. He is counsellor in the Radiocommunication Bureau of the International Telecommunication Union (ITU), heading the technical secretariat of ITU which is responsible for the development of international radio standards and frequency sharing studies for mobile radio-communication systems. Before joining the ITU, he worked for EMBRATEL, Brazil, responsible for the communications system engineering unit of the BRAZILSAT project for about 10 years.

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