



THE CHANGING REGULATORY ENVIRONMENT AND ITS POSSIBLE EFFECT ON THE ICT INDUSTRY AND THE ECONOMY

9 June 2006

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Overview

- Reduction of unemployment and poverty
- ICT as the key economic driver
- Current regulatory environment
- Facts about PTNs and self-provisioning
- Frequency spectrum and wireless issues
- The Electronic Communications Act
- Conclusion

Reduction of unemployment and poverty.

- Telkom supports the government's mandate to reduce unemployment to below 15% and halving poverty to less than one-sixth of household by 2014.
- Sharing of the fruits of a growing economy.
- Reduction and elimination of severe inequalities.
- Strategic partnership from government, business and labour is critical.

ICT as the key economic driver

- ICT is a key input into economic growth and social development.
- A more liberalised ICT sector will allow more players.
- Penetration, teledensity, universal access/service will be increased.
- Reduced ICT costs will lead to the reduction of production and distribution costs.

Current Regulatory environment

- Telecommunications, Broadcasting and Signal Distribution regulated under different Acts
- Current operator licences are based on vertical platforms, e.g. fixed, mobile, broadcasting, signal distribution, multimedia
- Licensees are not permitted to “play” in each other’s markets

Facts about PTNs and self-provisioning

- Provisions of the Telecommunications Act, 103 of 1996
 - Licence requirements for PTNs
 - Provision of telecommunication facilities for PTNs
- The Ministerial determinations of 2004
 - PTNs may resell spare capacity on their facilities
 - VANS may obtain their facilities other than from a PSTS operator
 - VANS may sublet their facilities

Spectrum – *why the importance*

- Radio communication is a **critical element** of our daily lives (cell phones, TV, radio, emergency services, travel, science, utilities, personal radio, etc.) – many *users might be ignorant to the fact!*
- Radio frequency spectrum is the most fundamental, yet **scarce and limited**, national resource essential for the development of radio communication services

Crucial to protect the integrity of the radio frequency spectrum!

“Unlicensed” – *what does it really mean?*

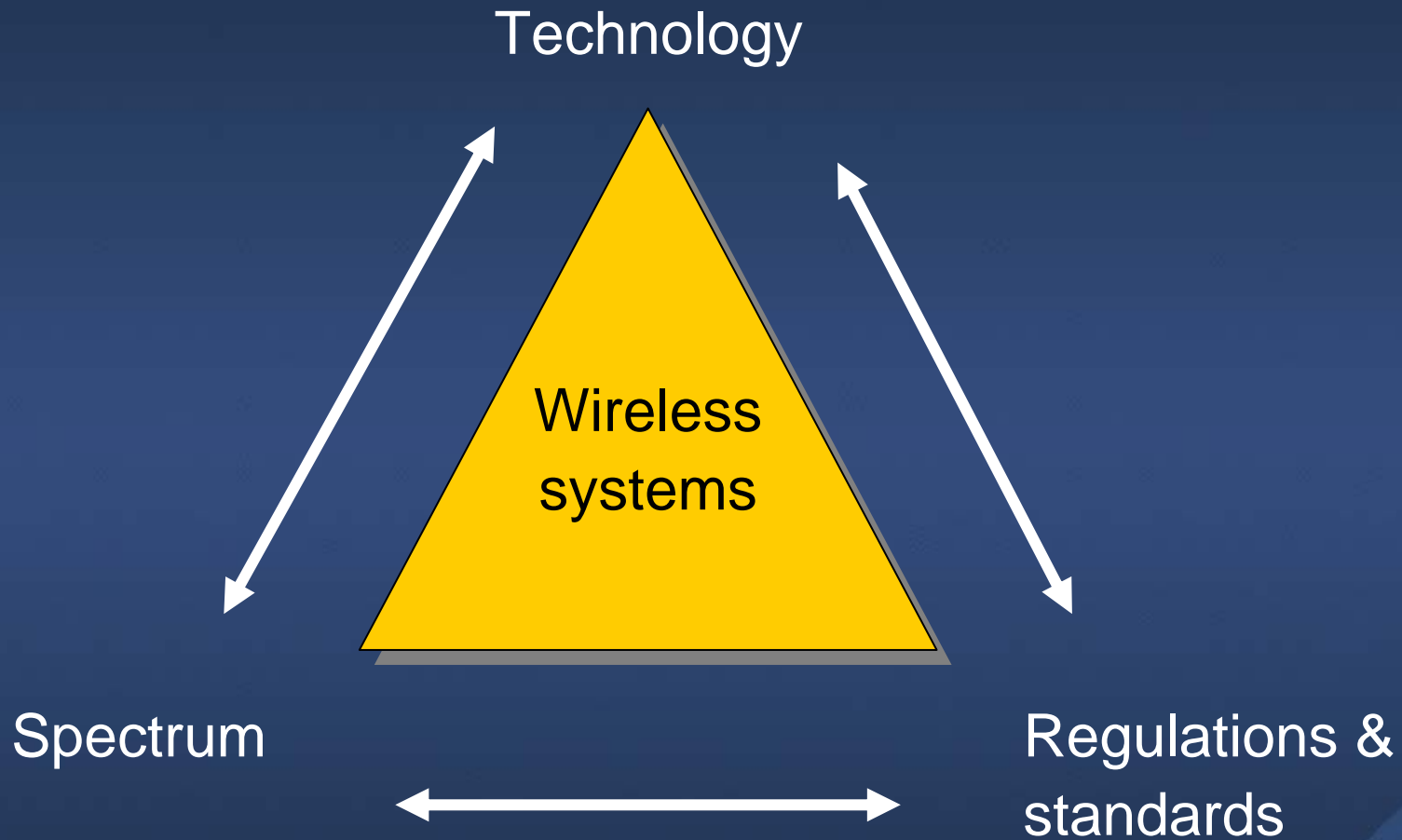
- Certain **categories** of **radio devices** are declared “**unlicensed**” because generally the **probability of interference is very low** (low power):
 - E.g. baby monitors, low power radios (walkie talkie), Cordless Telephones, Wireless Microphones, WLAN, etc.
- These radio devices may only be used in certain circumstances:
 - Operate **within certain technical parameters** (frequency band, maximum radiated power (**EIRP**), relevant standard, etc.)
 - Apparatus must be **type approved**
 - **Frequencies, transmit power and antenna may not be altered**
 - Radio apparatus **may not cause interference** to licensed telecommunication services

WLAN in 2.4 GHz – *conditions for “unlicensed”*

- WLAN only “unlicensed” when used for **short distances on single sites** e.g. in office complex, airport terminal building provided:
 - ETSI 300 328 standard is applicable
 - **Maximum e.i.r.p. = 100 mW (NOT output power from transmitter!)**
 - Equipment must be **type approved**
 - **LAN’s shall be confined to same premises or buildings**

Note on ISM: Industrial, scientific and medical apparatus (E.g. microwave ovens, RF devices for treatment of cancer, etc. and does **NOT include telecommunication systems** (WLAN, WiFi, etc.)

Wireless systems – *the dependency triangle*



COST OF COMPLIANCE

- Spectrum fees.
- Licence fees.
- Non-compliance with Act may be fined with up-to 10% per day of annual turn-over

Electronic Communications Act - *objectives*

- to promote convergence in the broadcasting, broadcasting signal distribution and telecom's sectors and to provide the legal framework for convergence of these sectors
- to make new provision for the regulation of communications and network services
- to provide for the granting of new licences and for new social obligations

Convergence - *SERVICES*

- Broadcasting services
- Information services
- Voice
- Data

Communication Services

Convergence - *NETWORKS*

- Signal distribution
- Packet switched
- Circuit switched
- Fixed
- Mobile

Communication Networks

New licensing regime

- Class Licences
- Individual Licences
- Spectrum Licences
- Exemption

Observations

- The ECA to advance market liberalisation
- Enormous regulatory load stemming from converged legislation
- Raised expectations (VANS, Sentech, etc.) may cause further disputes in the market
- Premature opportunistic market behaviour
- ICASA may prescribe additional terms and conditions where licensee has SMP, control over essential facilities or vertically integrated
- Communications network services licensees must interconnect and lease facilities

Conclusions

- New Licence regime
- Introduce more players
- Acceleration of market liberalisation
- Clear regulatory framework required
- Protection of licensees
- Sufficient enforcement
- Reduction of ICT costs due to economies of scale