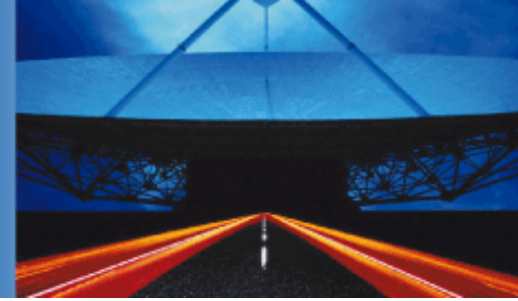




Workshop on  
Market Mechanisms  
for Spectrum Management



# Seeking the right blend of spectrum management approaches

ITU/Ugo Bordoni Foundation Workshop  
Market Mechanisms for Spectrum Management  
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# Approaches to spectrum management

- Command and control
- Open spectrum commons (unlicensed)
- Exclusive usage rights
- Exclusive use with easements

## Allocation toolkit

- First come, first served
- Beauty contests
- Market mechanisms (primary and secondary allocation)

# Limitations of Command and Control Approach

- Does not guarantee efficiency in spectrum use, and reuse
- Too slow and inflexible
- Limits change of use to reflect technological change or market trends
- Slows adoption of new technologies and/or low powered devices

# Examples of market mechanisms

## Primary allocation

- Auctions (e.g., 3G)
- Spectrum fees
- Competitive tendering
- Auctions combined with beauty contest

## Secondary allocation

- Spectrum trading (e.g, by geography or bandwidth)
- Refarming based on financial incentives to move
- Leasing of spectrum (e.g., for MVNOs)

# Arguments for and against market mechanisms

## Advantages

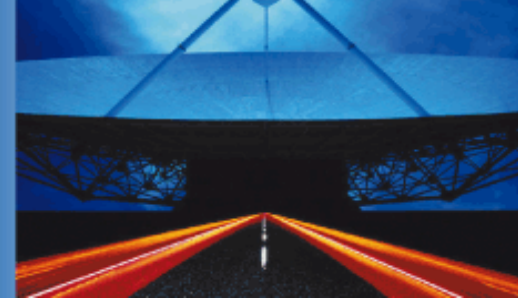
- Appropriate where scarcity is high and transaction costs low
- Should ensure efficient usage
- Encourages competition and innovation
- Raises cash for govts.

## Risks

- “Winners curse” may impose burden on spectrum users
- May lead to hoarding or speculation
- Long licenses may slow innovation but short licenses deter investment



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