



# **INFORMATION AND COMMUNICATION TECHNOLOGIES AUTHORITY of TURKEY**

**800/2600 MHz Bands  
Does one-size fit all ?**



12 May 2011  
Bucharest, ANCOM

Radjo spectrum strategies – necessity, opportunity, involvement

# Outline



**ICT Market Overview  
in Turkey**

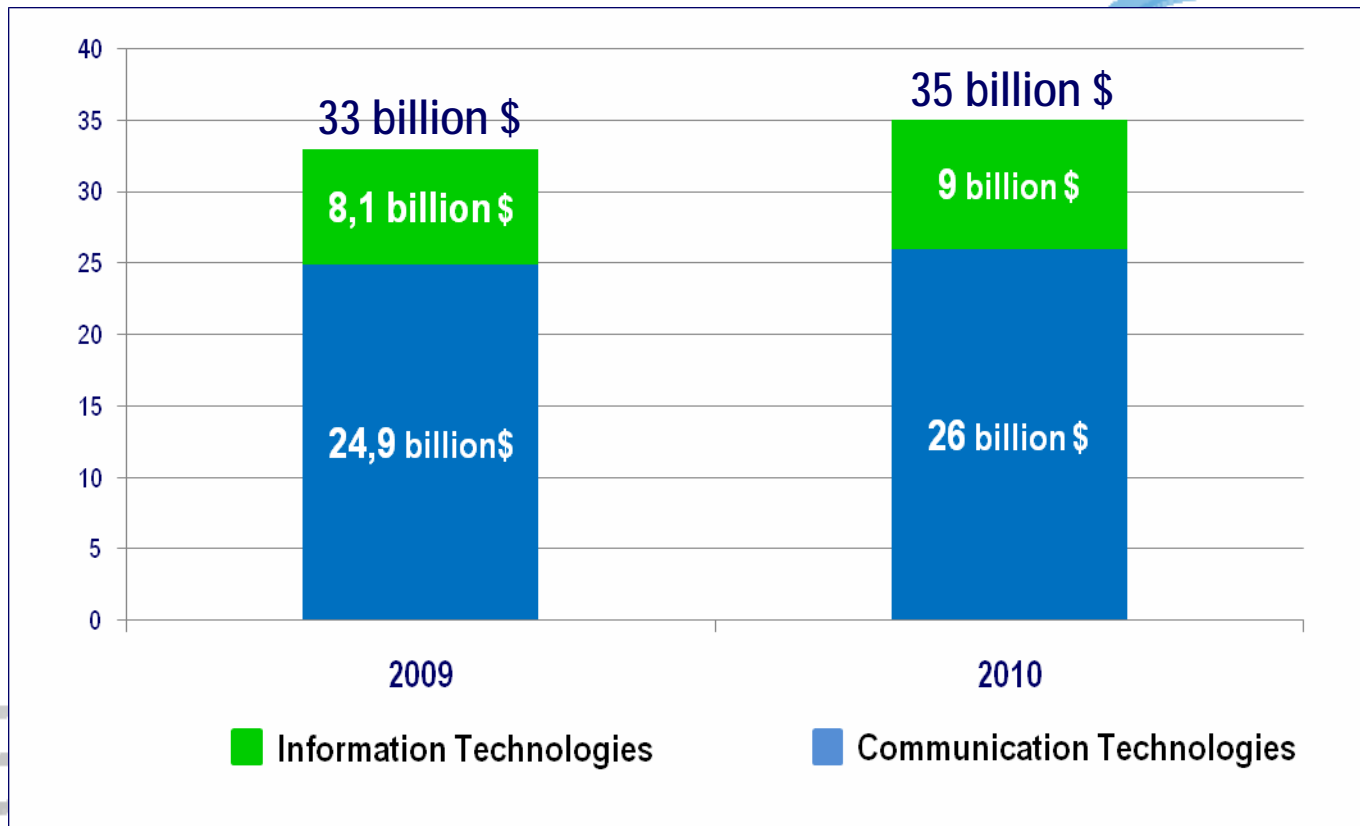
**Competition in Wireless Services**

**Auction: pros and cons**

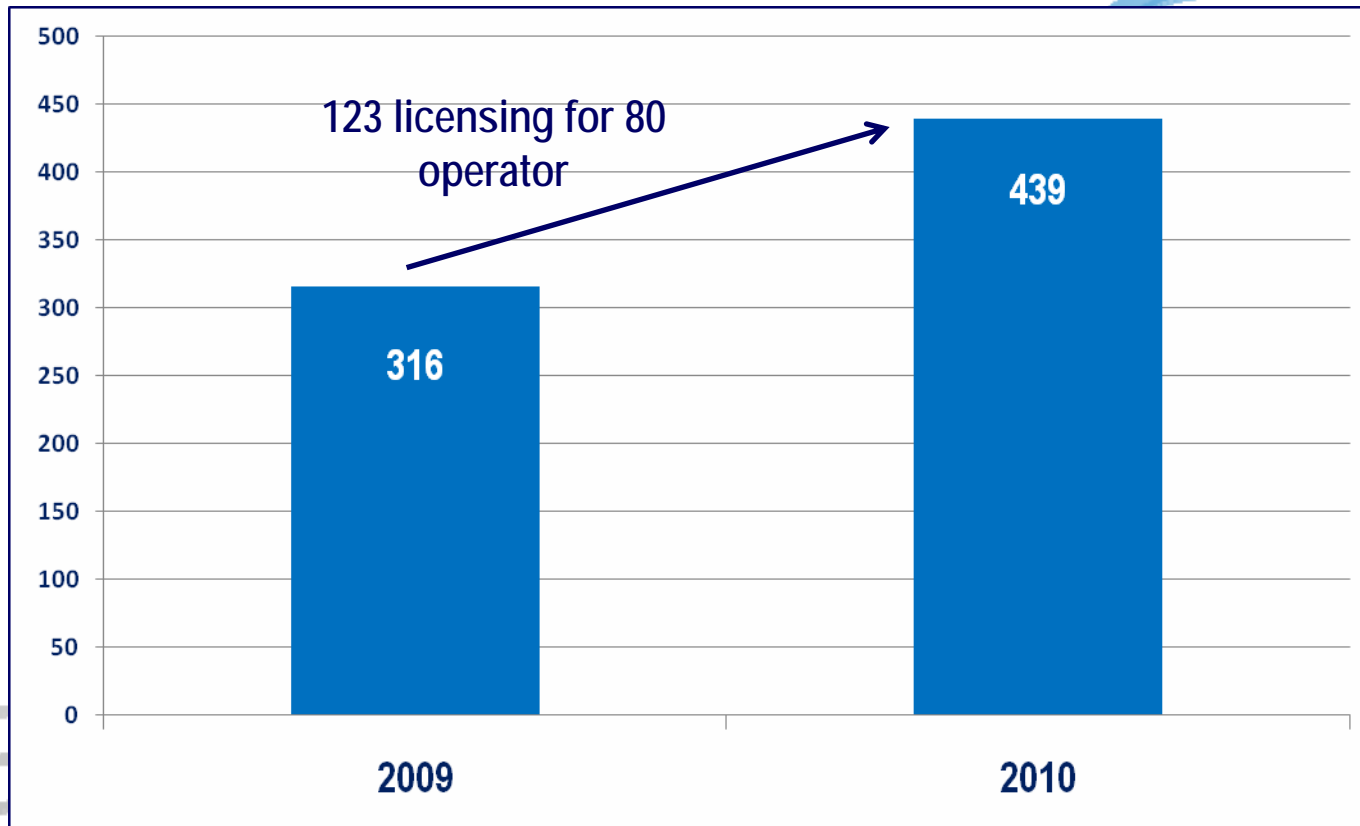
**800/2600 MHz Band in Turkey**

**Conclusion**

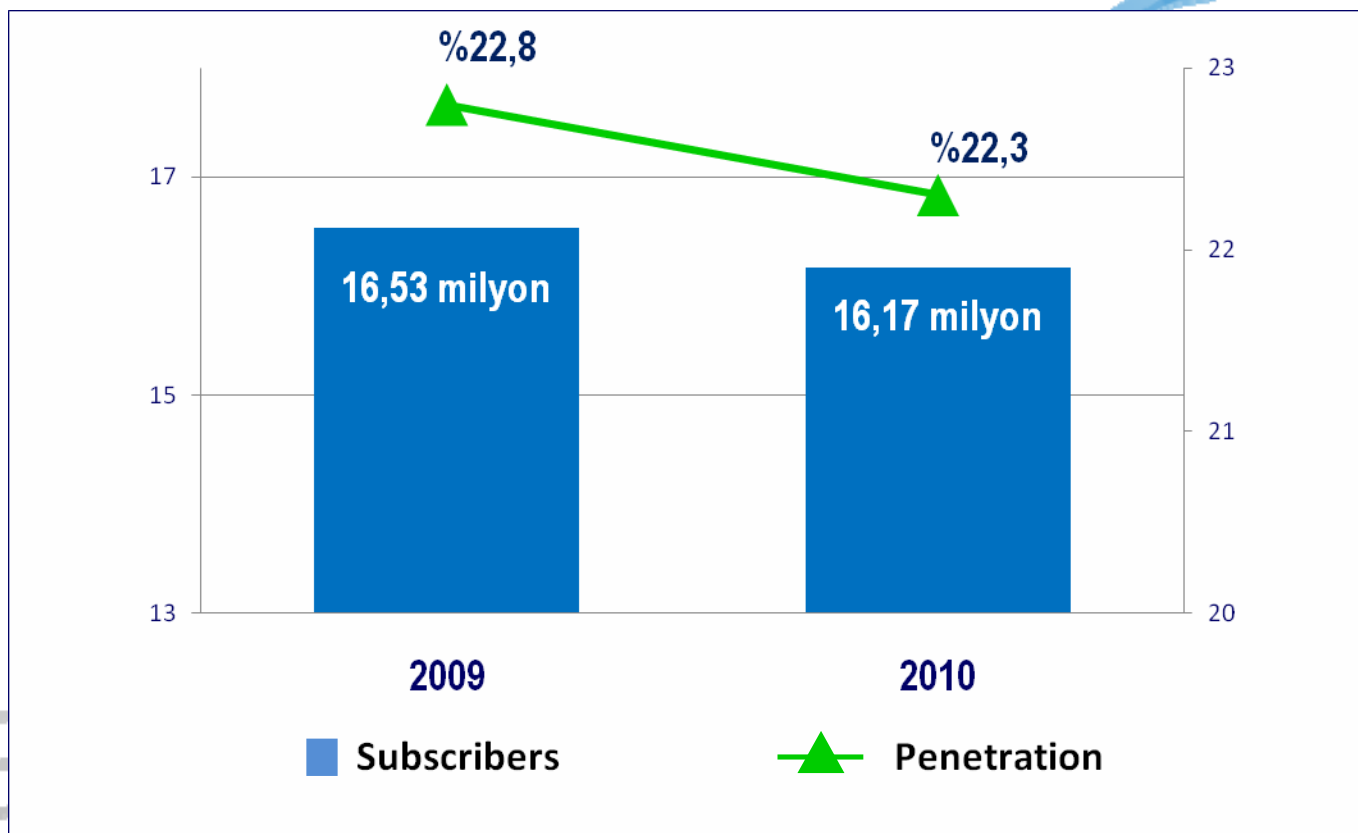
# Market Size of ICT Sector



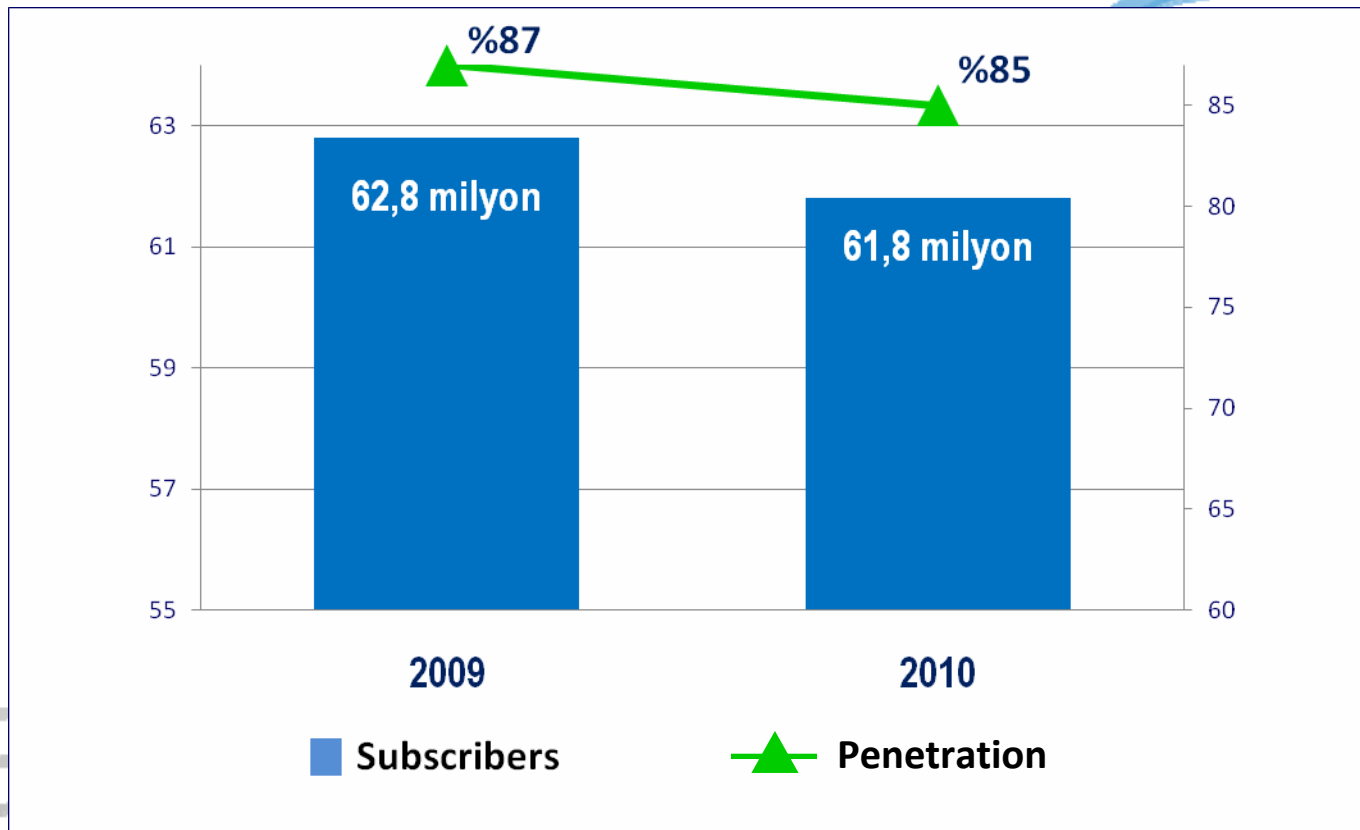
# Number of Licensed Operators



# Number of Fixed Telephone Subscribers



# Number of Mobile Subscribers



# Mobile Phone Average Usage

Comparison with EU Countries (2010 – 2Q)

Country	Average Usage (min/p. month)
France	248,8
Ireland	248,7
<b>Turkey</b>	<b>239,4</b>
England	179,7
Espagne	158,2
Italy	137,8
Portugal	129,8
Germany	110,4

Source: ComReg, Revised Quarterly Key Data Report, 10/73R

# Policy Instruments to Enhance Competition\*

## Set-asides

- reserving spectrum for new entrants

## Spectrum caps

- limiting the quantity of spectrum that can be held by an operator

## Bidding credits

- favored bidders get a percentage discount

## Band plan

- how the spectrum will be used – spectrum packaging

## Auction design

- basically 10 different types and more is still possible

## Antitrust enforcement

- Monitoring competition



\* Using spectrum auctions to enhance competition in wireless services, P. Cramton, E. Kwerel, G. Rosston, A. Skrzypacz, Journal of Law and Economics, 54, forthcoming, 2011.



# Auction: Advantages vs Disadvantages

## Advantages

revelation of information

best use of scarce spectrum resources

equity and transparency

lesser time to award licenses

easy to conduct

combination of spectrum blocks and geographic areas

proven effectiveness

## Disadvantages

overbidding

concentration

higher consumer prices

targeting profitable regions

ignoring public policy goals

# State of the 800 MHz and 2600 MHz

	800 MHz	2600 MHz
Policy decision	taken	ongoing
Timing	after 2015	to be decided
Service	mobile communications	mobile communications

Policy Instruments	800 MHz	2600 MHz
Set-asides	demand based	
Spectrum caps	embedded in auction design	
Bidding credits	not used	
Band plan	packaging possible	
Auction design	pre-selection	
Antitrust enforcement	encouraging competition	

# Conclusion

- ❑ Auction is the best way to allocate
- ❑ Set-asides are dependent on market demand
- ❑ Spectrum caps may be needed
- ❑ Bidding credits depend on the goals (revenue or competition)
- ❑ Spectrum packaging should be made possible but be left to market
- ❑ Best format for auction depends on the timing and market condition in each country
- ❑ Finally, it is difficult to realize “one-size fits all”.

**Thank you very much**

