



# Radio spectrum strategies – necessity, opportunity, involvment

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Contest design for licensing the 800/2600 MHz bands – a regional approach

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- Regional approach important
- Timing and harmonisation crucial
- Croatia geographical position and shape in combination with propagation characteristics of lower bands – dependance on neighbours actions



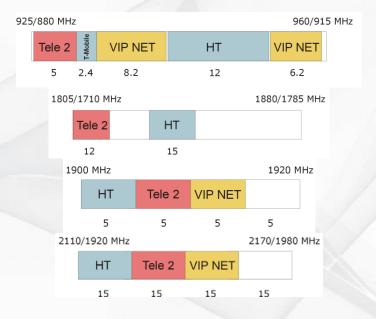


## 800/2600 MHz – current situtation

- ★ ASO finalized in October 2010 spectrum available on national level
- ► 2600 MHz available on national level
- National Table of Allocation IMT auction



#### Mobile operators – current situtation



★ Technology neutral licenses untill 2024 – 3G in use in 900/2100 MHz bands

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#### ► 800/2600 MHz – Auction

- Auction transparent and non discriminatory option
- Beauty contest not enough transparent, operators preference
- Parameters for auction still under consideration
- ➡ Spectrum packaging possible combination of 800/2600 MHz – aggregated license – also possibility to combine the unsed part of the 1800/2100 MHz band
- ★ 5 MHz blocks (paired or unpaired)



#### 800/2600 MHz – Auction - conditions

- Current market situtation no constraints on bidders
- ▶ Pre-selection conditions only administrative and financial
- No favorisation of existing operators or newcomers bids the only criteria
- No spectrum cap for existing operators
- ➡ Obligation to cover rural areas and areas that are not commercially interesting



#### **№** 800/2600 MHz – Auction - format

#### SMRA (Simultaneous Multiple Round Auction) variations

- Simple and understandable format, clear outcome
- Aggregation and fragmentation risk bidder can possibly get only a part of wanted spectrum which is not continuous

#### CCA (Combinatorial Clock Auction)

- Bids for wanted bandwidth, not specific blocks
- Problem different values of different frequency blocks



### 800/2600 MHz – Auction - organization

- ➡ Electronic auction web site
- ➡ Bidders allowed to bid from their premises
- ★ Timing possible 2012 dependant on policies of neighbouring countries in order to assign the spectrum on national level
- Harmonisation with neighbouring countries



# **Thank You!**