

Fachbereich Wirtschaftswissenschaften
Institut für Wirtschaftsinformatik
Lehrstuhl für M-Business & Multilateral Security

**Mobile Business II
SoSe 2015
Exercise Sheet 3**

***Regulation of Mobile
Telecommunications
+
Regulation by Licensing***

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Exercise 1 (Regulation of Telco): Provide a short definition (in your own words), of what regulation means for a mobile communication market.

Exercise 2 (Regulation of Telco): What are the types of market failures that make regulation necessary? Give a short description of their impacts on the market.

Exercise 3 (Regulation of Telco): Give an example for regulation in the (mobile) telecommunication market in the last (five) years (in any country).

- What was the scope of regulation?
- Which factors led to regulation in that case?
- How can this regulation be justified and what is it based on (law, basic principle, directive, regulation)?
- Name the regulating body.
- Did the regulation have any impact on the mobile telecommunication market?

Exercise 4 (Regulation by Licensing): German Mobile Network Operators (MNOs) currently use frequency spectrum / licenses from three different auctions: 2000, 2010 and 2015. The outcome of each one of these auctions needs to be looked at and interpreted in its respective context.

- In the 2000 UMTS auction, what was the reason for the excessive prices and willingness to pay of the network operators involved?
- Fifteen years after the German UMTS license auction: What is the current market situation? Is 3G/UMTS successful? Why (not)?
- What is the difference between paired and unpaired frequency spectrum? Which of the two types is more relevant in practice?
- What is meant by “digital dividend”?
- How does the broadband strategy laid down in the German economic stimulus package (Konjunkturpaket II) relate to the auctioning of frequency spectrum? Which auction did it affect?
- The Digital Agenda (2014 – 2017) of the Federal Government has led to stricter coverage and bandwidth obligations for operators in the 2015 auction (when compared to the 2010 auction) – why?
- In the auctions of 2000, 2010 and 2015, which frequency spectra were in the centre of interest of the network operators in each case and why?
- In total, after completion of the 2015 auction process, which (or: how much) frequency spectrum will Telekom, Vodafone and Telefónica each have available on 01.01.2017? Name the frequency bands and available bandwidth per operator.