

**S-38.041 Networking Business**

Each question is worth max 6 points. Answers are preferably written in English but Finnish and Swedish are also accepted. Answers must be short and concise. Please indicate if you have participated the voluntary mobile operator business game session to compensate one question.

1. Explain the following techno-economic terms briefly (max 5 sentences per term).
  - a. Nash equilibrium
  - b. Superdistribution
  - c. Long-run incremental cost
  - d. First-degree price discrimination
  - e. Tatonnement
  - f. Consumer surplus
2. Explain Porter's model for competition ("5 forces") and apply it for analyzing the market position of a virtual mobile network operator in Finland.
3. Describe schematically the GRX-based charging model for roaming traffic between GPRS operators.
4. Describe the EU regulatory process schematically.
5. The present value of a customer to an operator equals her switching cost. Assume that operator has a variable monthly cost of 20 EUR per customer. Further, it costs a customer 70 EUR to switch from one operator to another. Supposing a monthly interest rate of 2%, what is the equilibrium price setting for a monthly subscription. At equilibrium, operators are profitable and customers don't have incentive to switch operators.