



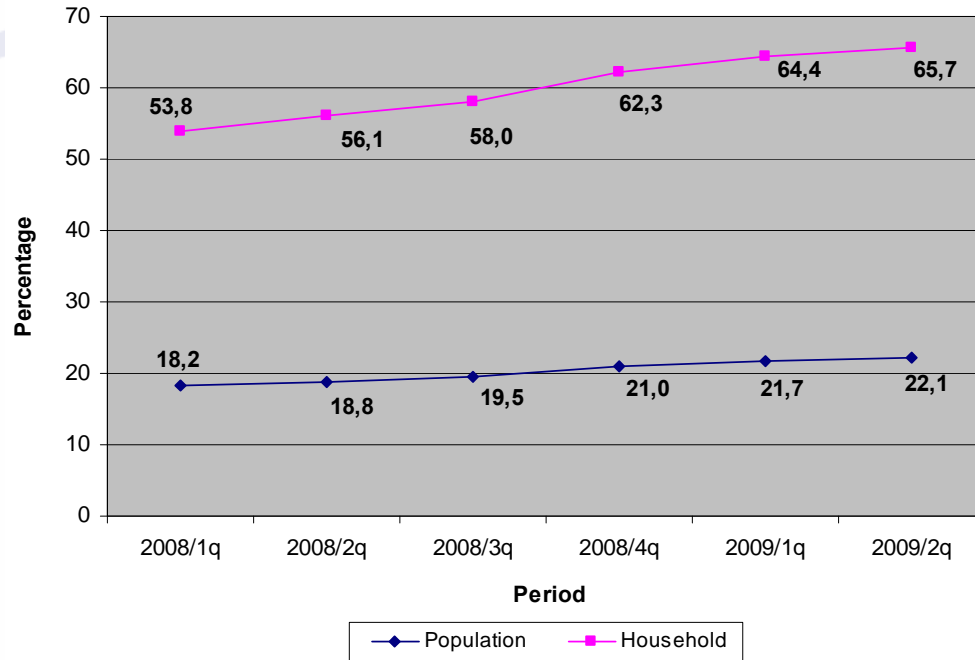
**APEK**

Post and Electronic Communications  
Agency of the Republic of Slovenia

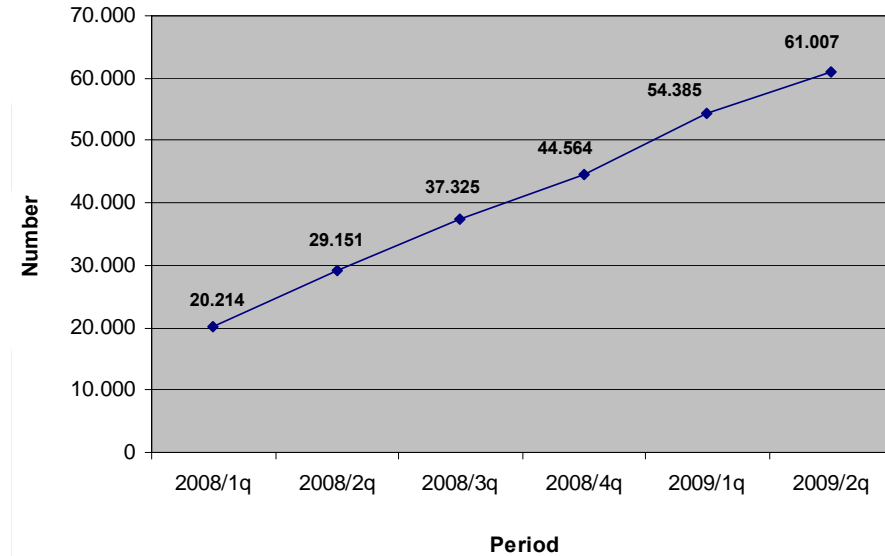
# The future of telecommunications regulation

**Boštjan Makarovič**  
Head of telecommunications division

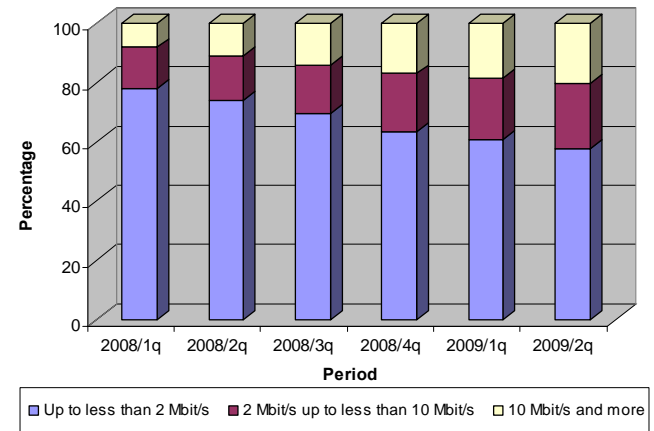
## Fixed broadband penetration



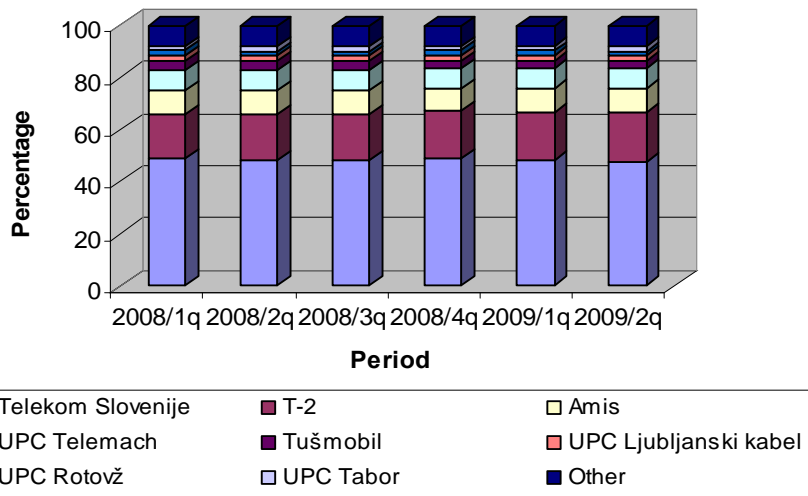
## FTTH broadband growth



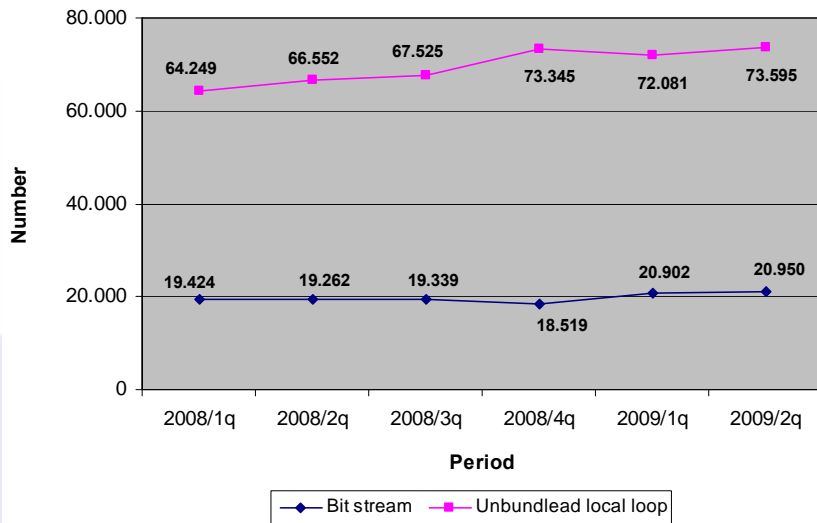
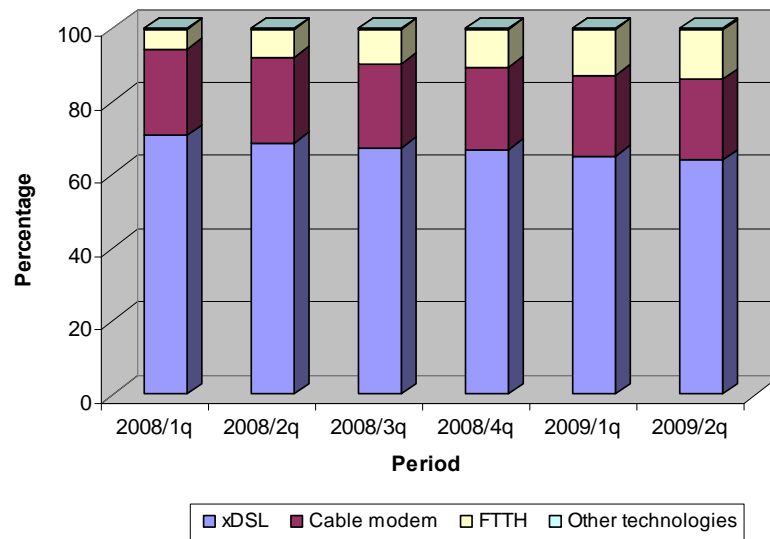
## Broadband shares based on broadband speed



## Market shares of fixed broadband access operators based on number of connections



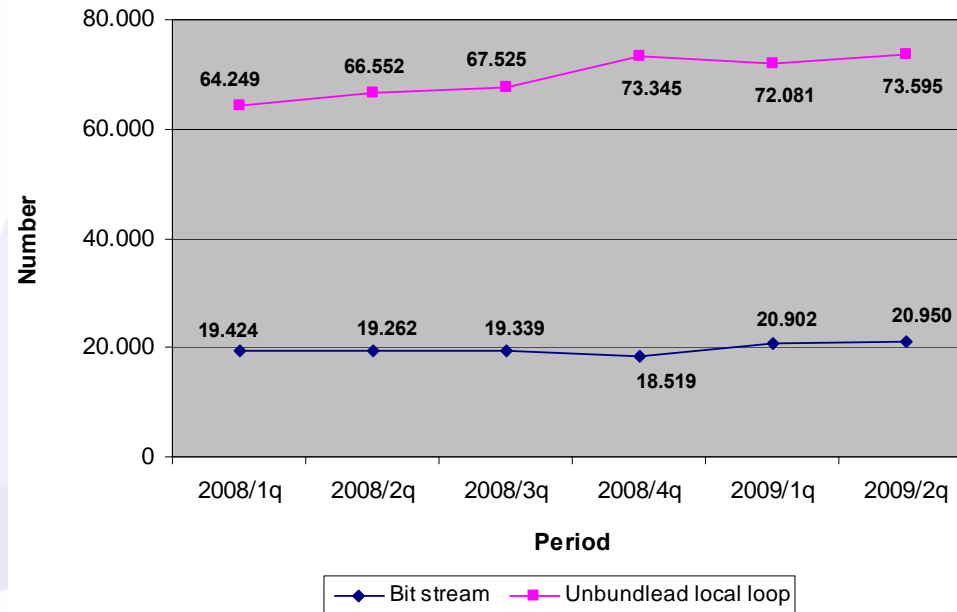
## Movement of broadband technology shares



## Ratio between bitstream and unbundled local loop

- Regulation of local (unbundled and bitstream) access is the key to enable broadband competition

Ratio between bitstream and unbundled local loop



- The ratio between local loop unbundling and bitstream services shows a high degree of alternative infrastructure investment



- **Draft Commission Recommendation on NGA**
- **ERG Common Positions on Wholesale Local Access / Wholesale Broadband Access**
- **Unbundling of fibre and bitstream over fibre**
- **Access to ducts**
- **Ethernet backhaul regulation**
- **SLA and KPI to ensure equal treatment**
- **Prevention of pre-mature closing down of MDFs and removing of copper local loops**



- **Is full infrastructure competition a likely outcome? Bottleneck access facilities are likely there to stay, whereas duopoly triggers collusion**
- **Service competition clearly beneficial for consumer welfare**
- **Regulation of local physical access may therefore be permanently required in order to overcome the problem of access bottleneck**
- **Bistream regulation may in the long run at least be required in order to afford the benefits of competition to rural customers**
- **How about future mobile data networks regulation?**