

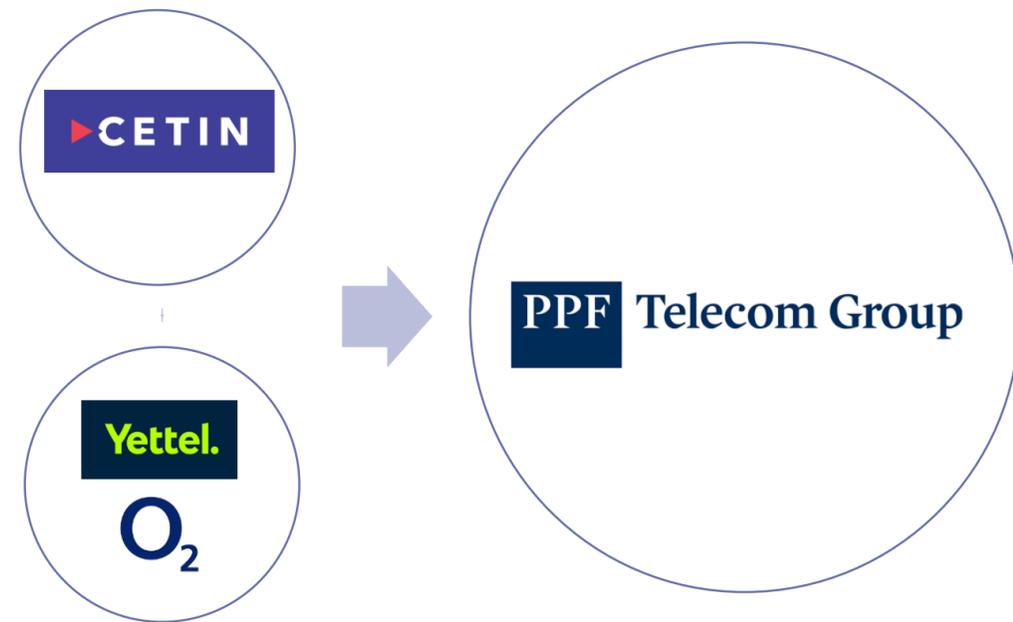
▶ Serbian Regulatory Framework for Network and Telecom Operators

Dragana Ilić

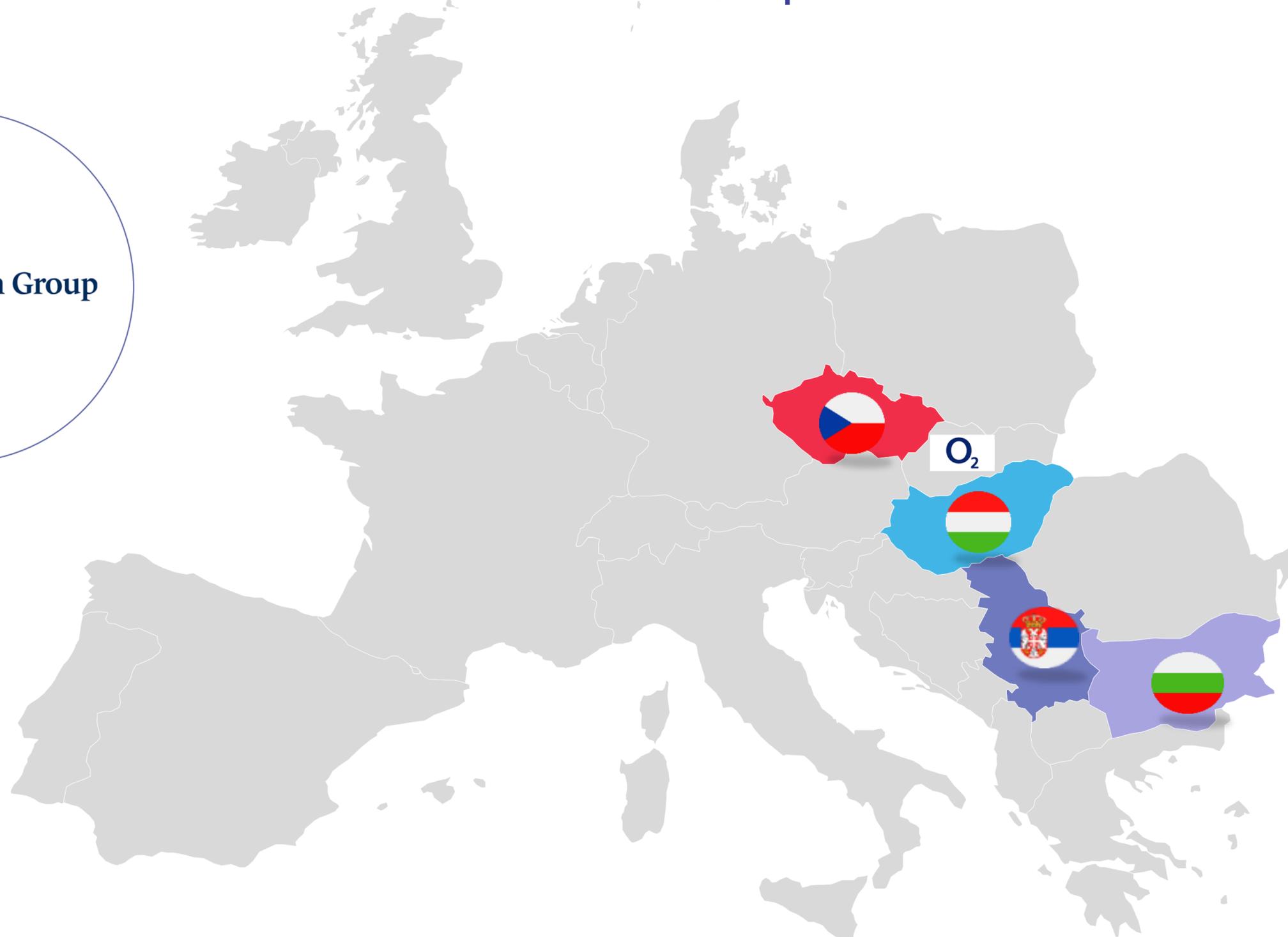
Corporate Affairs Director



PPF first in Europe carved out passive and active telecom infrastructure into CETIN Group



- ▶ Network as a Service
- ▶ Managed services
- ▶ Collocation services
- ▶ National & international capacities
- ▶ Telehousing
- ▶ Dark Fibre (IRU)
- ▶ IP Transit and Anti DDoS



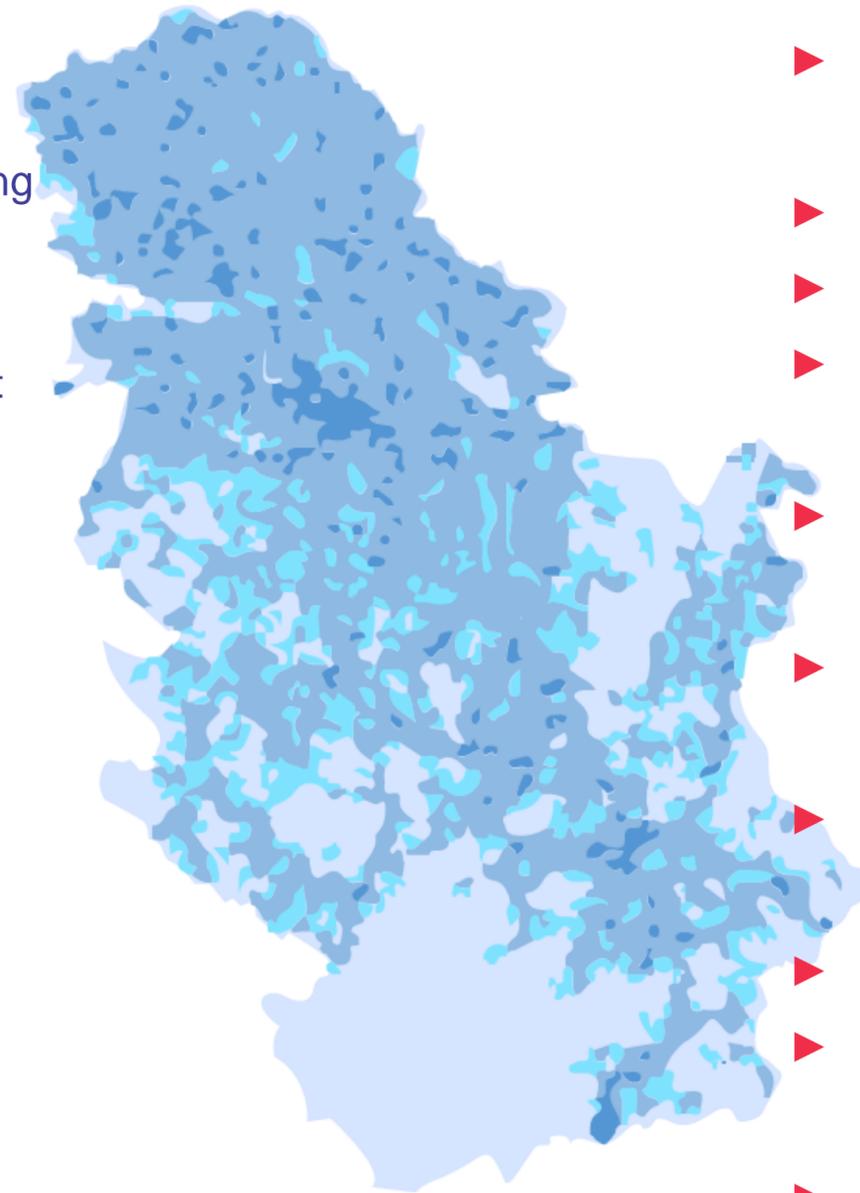
Legislation in Serbia tackling telecom nad network operators

Regulation	Authority	Relevance
Electronic Communication Law (2010)	Ministry of Telecommunications and Media RATEL – national regulatory agency	Fundamental law for telco and ISPs – not regulating hyperscalers / OTTs
Information Security Law (2016)	Ministry of Telecommunications and Media RATEL – National CERT	Information Security Act and control measures, notifying incidents and reporting annual statistics
Critical Infrastructure Law (2018)	Ministry of Interior	Operators have own Emergency Situations Plan approved by the ministry
Law on Defense (2007)	Ministry of Defense	Major operators have own Defense Plan in line with the National Defense Plan approved by the ministry
Law on Planning and Construction (2009)	Ministry of Civil Engeneering, Infrastructure and Transport, Local Governments	Simplified permit procedure for comms infrastructure Spatial Planning Acts
Law on Protection from Non-Ionizing Radiation (2009)	Ministry of Environment Protection Local Governmments	Procedure and limits for EMF exposure of mobile RAN
Law on Environmental Impact Assessment (2004)	Ministry of Environment Protection Local Governmments	Possibility to impose running a study for mobile RAN
Competition Protection Law (2009, 2013)	Commission for Competition Protection	Ex ante exemption of restrictive agreements Ex ante approval for M&A Ex post control of abusing the dominance position
Personal Data Protection Law (2018)	Commissioner for Personal Data Protection	Notifications of incidents with personal data breach Annual reporting on personal data processing
Consumer Protection Law (2021)	Ministry of Trade	Retail operators only
Guidelines for Network Sharing (2019 - soft regulation)	RATEL	Passive, active sharing of infrastructure and spectrum sharing (based on BEREC guidelines)
Guidelines for Open Internet (2019 - soft regulation)	RATEL	Based on EU regulations on net neutrality and BEREC guidelines from 2016

▶ **General authorisation regime for all services except for mobile comms based on licensed RF spectrum – GSM, UMTS, LTE**

Electronic communication services

- ▶ **Voice**
- ▶ **Access to Internet and Internet services** using IP addresses (except real time streaming)
- ▶ **Data services** using public EC network without using IP addresses
- ▶ **VOIP**
- ▶ **IaaS and NaaS** – leasing infrastructure and network resources
- ▶ **Media content distribution** (except content broadcasting)
- ▶ **Value Added Services** (SMS, MMS)



Main obligations under EC law

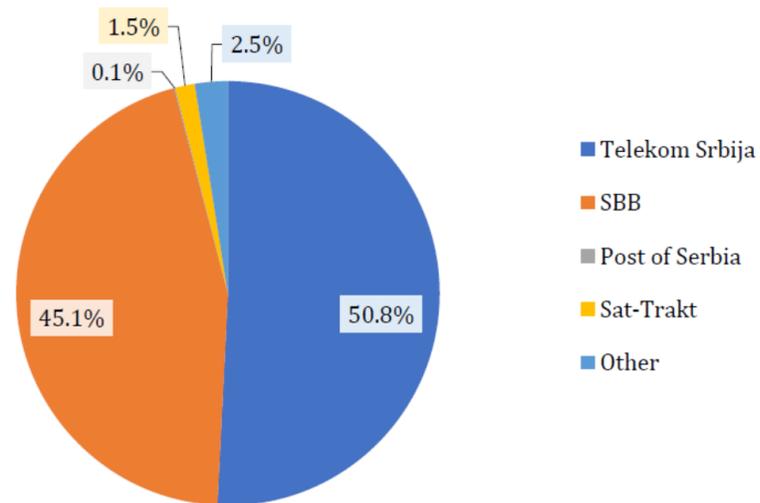
- ▶ Notification of Networks and Services before starting the operations
- ▶ Regular reporting of services, networks, revenue, use of RF
- ▶ Paying operations fee as % of revenues from EC services
- ▶ Paying fee and obtaining permit for using RF (licensed and non – licensed spectrum)
- ▶ Universal service – fix telephony, fix access to Internet, emergency calls
- ▶ Notification on Interconnection for public register – national and international
- ▶ Integrity and security of services and networks – cyber security and privacy
- ▶ Consumer protection and number portability
- ▶ Legal interception and retention of communications based on court decision
- ▶ Infrastructure sharing upon access request

RATEL market regulation in 2022

Regulated wholesale markets - Serbia

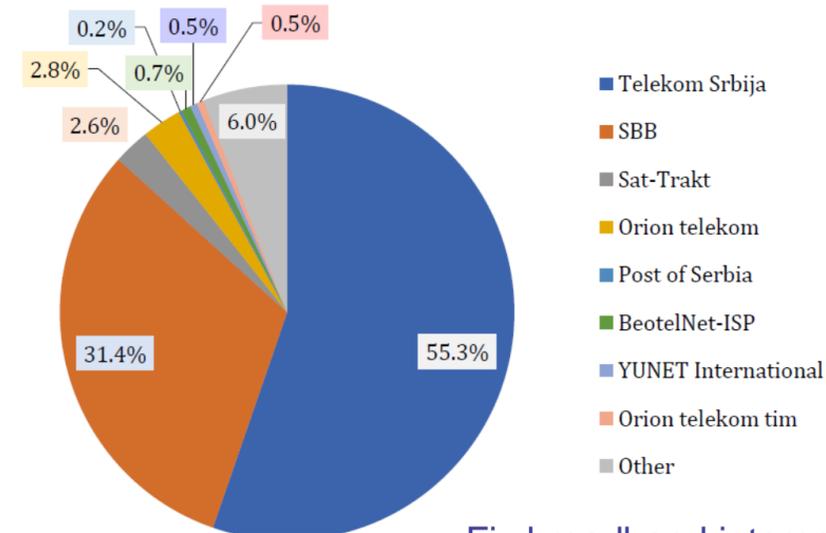
- ▶ **Mobile and fixed call termination** - all mobile and fixed operators SMPs
- ▶ **Local access** – collocation, local loop and dark fiber -Telekom Srbija SMP
- ▶ **Bitstream access** – xDSL, KDS and FO - Telekom Srbija SMP, SBB to be deregulated

Operators' market share in by number of subscribers in Q2 2022



Media content distribution Q2 2022 (RATEL)

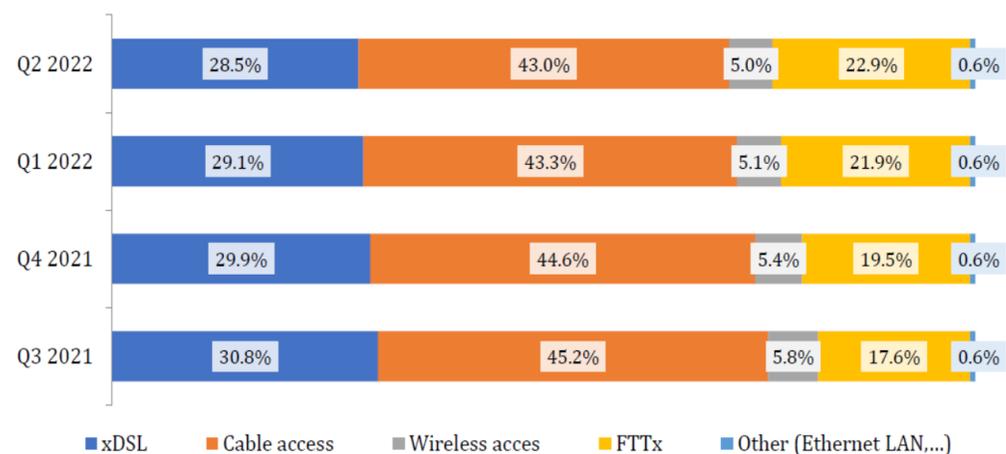
Market share in terms of number of fixed broadband subscribers in Q2 2022



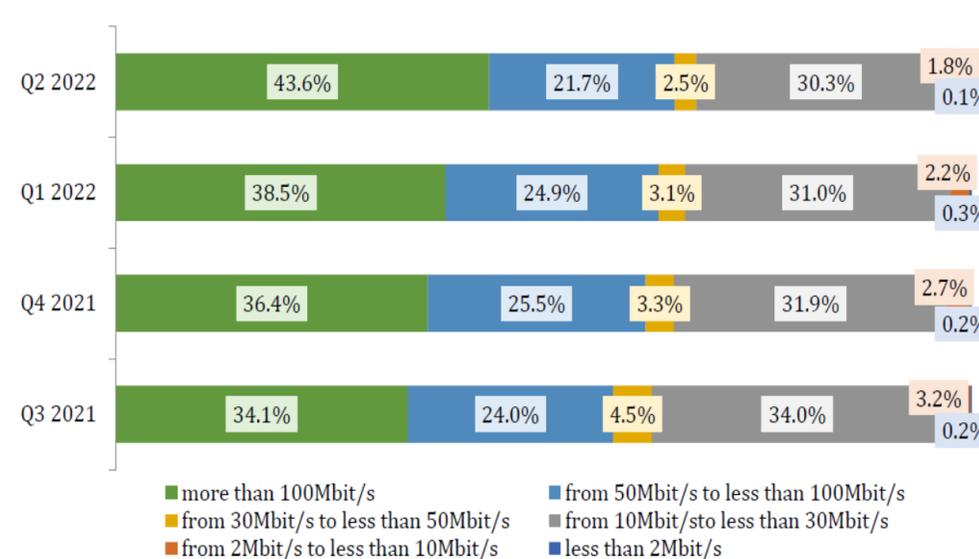
Fix broadband internet access Q2 2022 (RATEL)

Competition Protection Commission – no recent market interventions

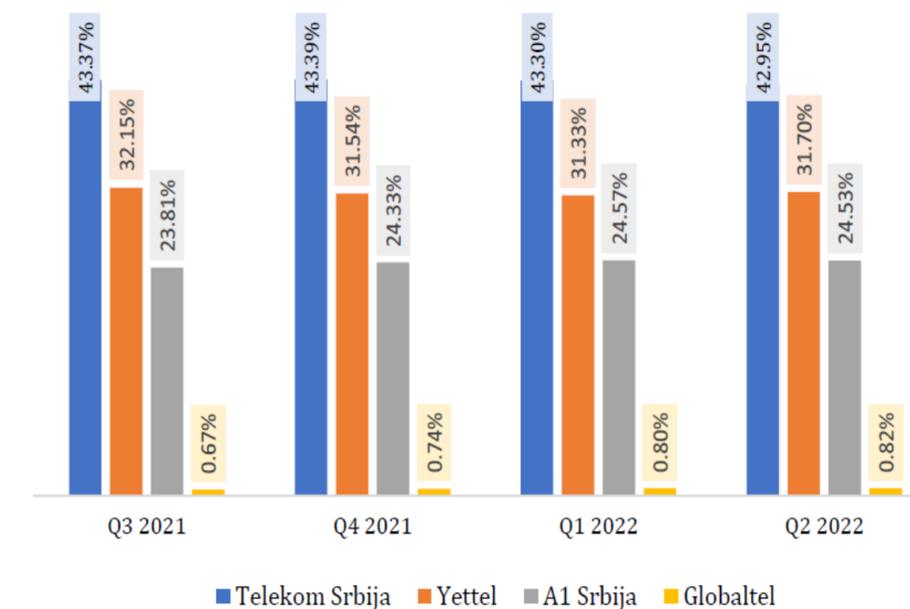
Number of subscribers by type of access



Number of fixed broadband Internet subscribers by access rate



Operators' market shares by number of active subscribers



Mobile telco service

Regulation in the pipeline...

- ▶ **New EC Law** to align with EECC (2018)
 - Net neutrality
 - Broadband network coverage map
 - Broadband as universal service
 - Numbering possible for IoT and others
 - Small cells
- ▶ **Law on Legal interception and Retention of electronic communications**
- ▶ **Broadband Infrastructure Law** to implement BCRD (2014)
 - Access to physical infrastructure
 - Joint construction works,
 - Simplified permitting
 - Comms infrastructure register
- ▶ **Rural broadband deployment subsidies** for 1500 rural areas
Call for phase 2 expected, deployment of phase 1 about to start
- ▶ **Auction for 5G** expected in H1 2023
RF spectrum 2023 - 700, 900, 2100, 2600 i 3500 MHz
- ▶ After WB6 RLAH, voluntary decrease of roaming data traffic between **WB6** and **EU** expected

