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# Case Study: BiH

Present Situation in BiH broadband market

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Communications Regulatory Agency





# BiH Telecommunications Market

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## ❑ Institutional framework

- Council of Ministers BiH
- Law on Communications
- Telecommunications Policy Sector Framework

## ❑ Telecommunication Licences

- ✓ GSM, UMTS operators
- ✓ Fixed telephony, Fixed telephone services
- ✓ ISP
- ✓ Network operators





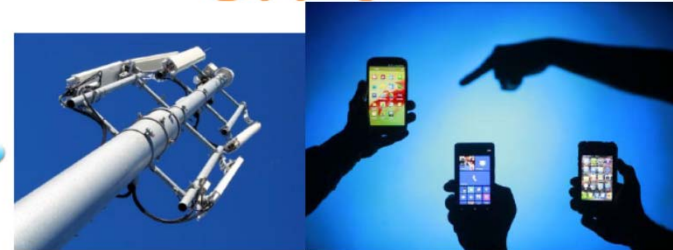
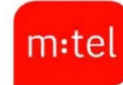
# BiH Market Overview/ Mobile

- **Mobile telephony**

- ✓ Three operators

- ✓ Number of subscribers in 2014- 3,5 Million

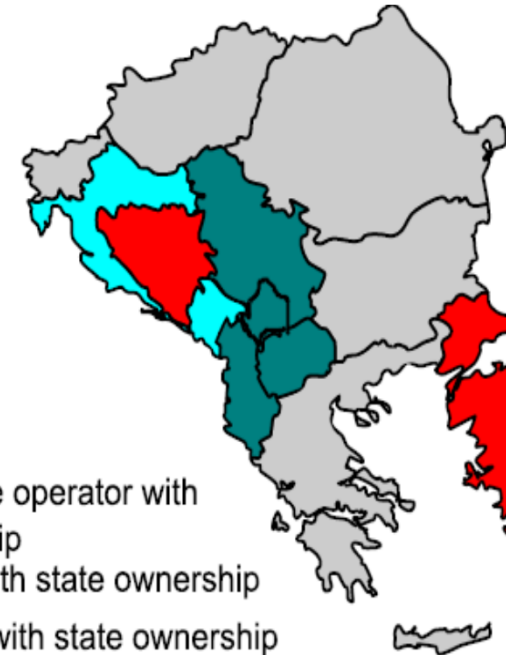
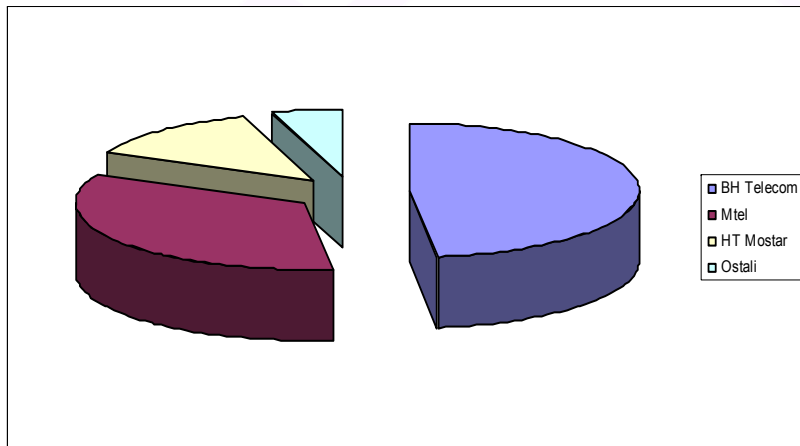
- ✓ Penetration in 2014- 90,87%





# BiH Market Overview/Fixed

- **Fixed telephony**
- 3 SMP operators
- 13 ops with Licence for fixed phone services



- more than one operator with state ownership
- no operator with state ownership
- one operator with state ownership





# BiH Market Overview/Decision Making

	HR	IS	MK	ME	RS	TR	AL	BA	XK
Carrier selection/ pre-selection	✓	✓	✓	✓	✗	✓	✓	✓	✗
Fixed number portability	✓	✓	✓	✓	✗	✓	✓	✓	✗
Mobile number portability	✓	✓	✓	✓	✓	✓	✓	✓	✗
Fixed Reference Interconnection Offer	✓	✓	✓	✓	✓	✓	✓	✓	✓
Reference Unbundling Offer	✓	✓	✓	✓	✓	✓	✓	✓	✗
Wholesale broadband access	✓	✓	✓	✓	✓	✓	✓	✗	✗
Wholesale line rental	✓	✓	✓	✓	✗	✓	✗	✗	✗
Mobile Reference Interconnection Offer	✓	✓	✓	✓	✓	✓	✓	✓	✗
National roaming	✓	✓	✓	✓	✓	✗	✓	✓	✗
MVNO/SP access	✓	✓	✓	✓	✓	✓	✓	✗	✓

Legend: ✓ - available/regulated ✗ - not available

Source: 2014 Cullen International Competitive Report

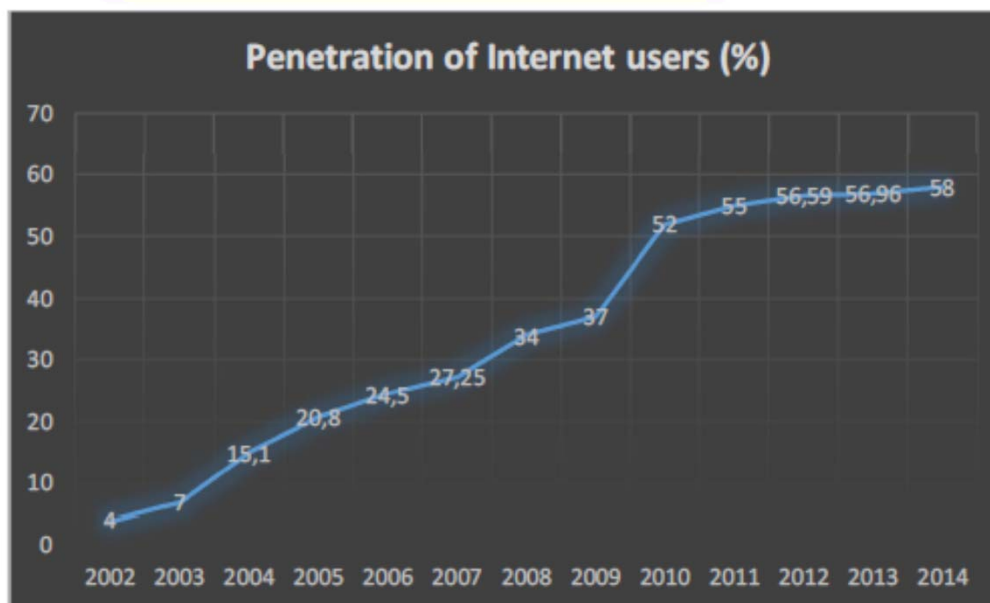




# BiH Market Overview/ISP

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of ISP operators	42	52	60	66	77	75	80	75	69	70

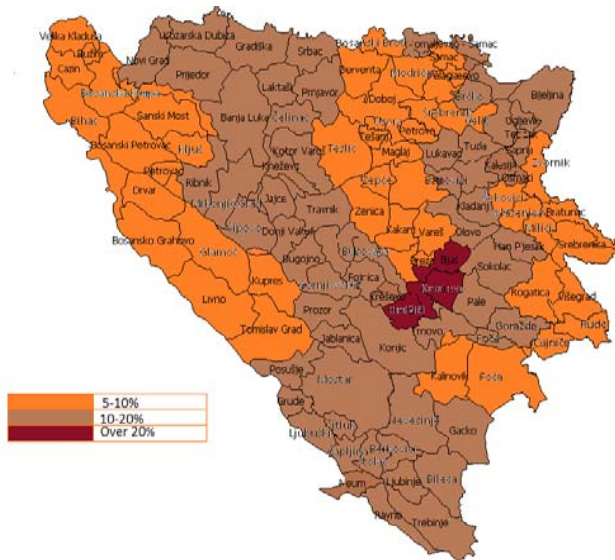
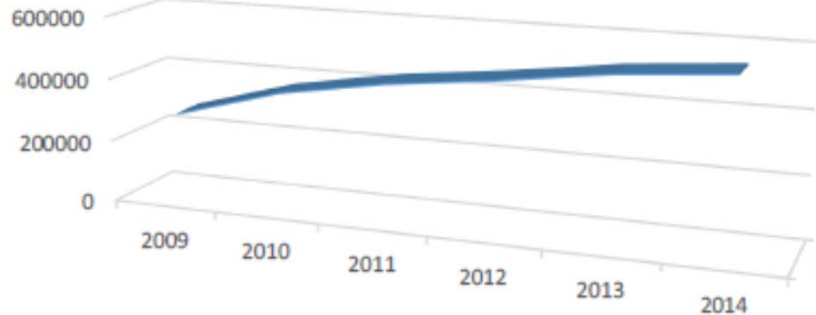
Table: Number of ISP licences (2005-2014)



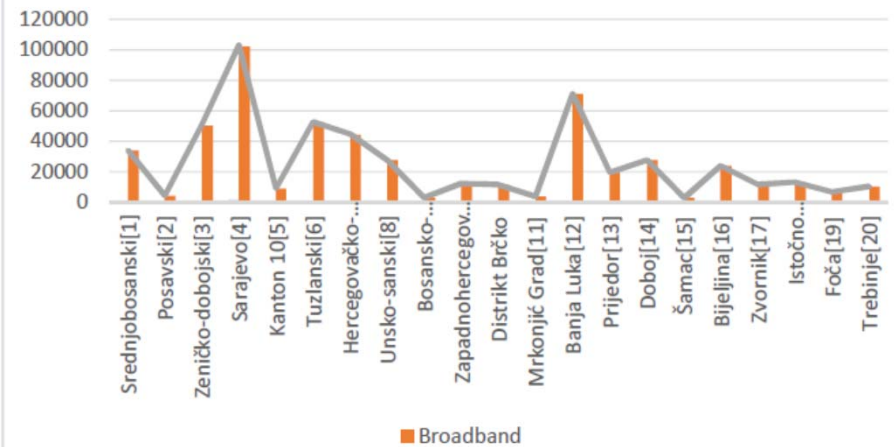


# BiH Market Overview/ISP

Number od broadband subscriptions



Number of subscribers per region

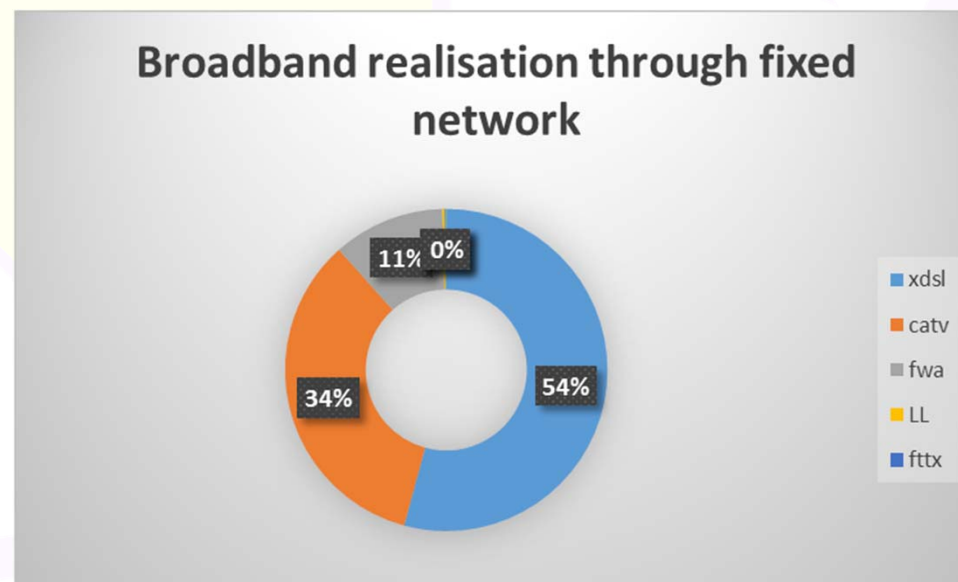




# BiH Market Overview/ISP

## Broadband realisation through fixed network:

- xDSL 54,20%
- Leased Lines 0,23%
- CaTV 34,20%
- FWA 11,20%
- FTTX 0,08%

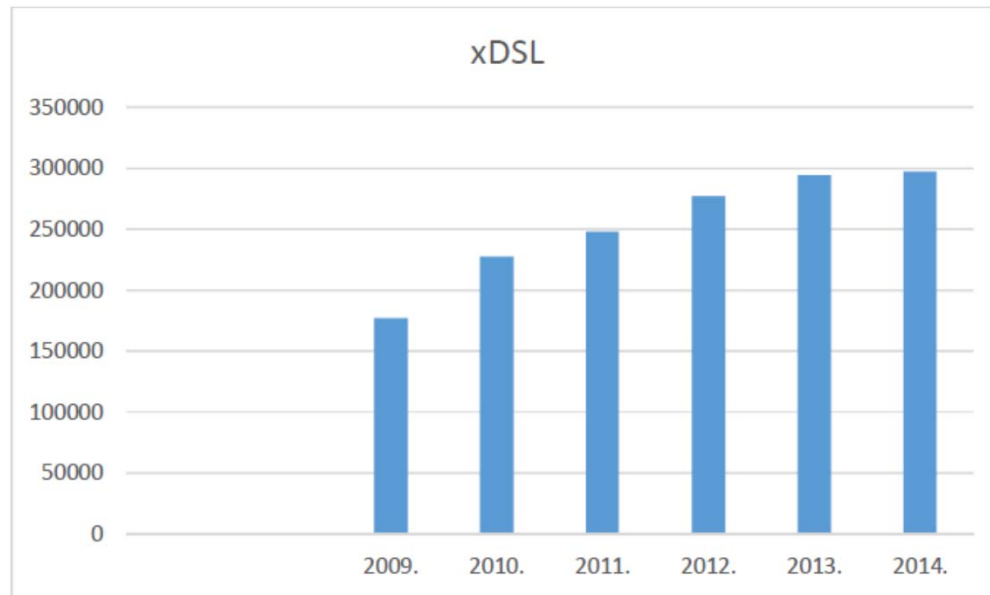






# BiH Market Overview/ISP

	2009.	2010.	2011.	2012.	2013.	2014.
Broj xDSL priključaka	177.554	227.261	248.006	277.295	294.505	297.245

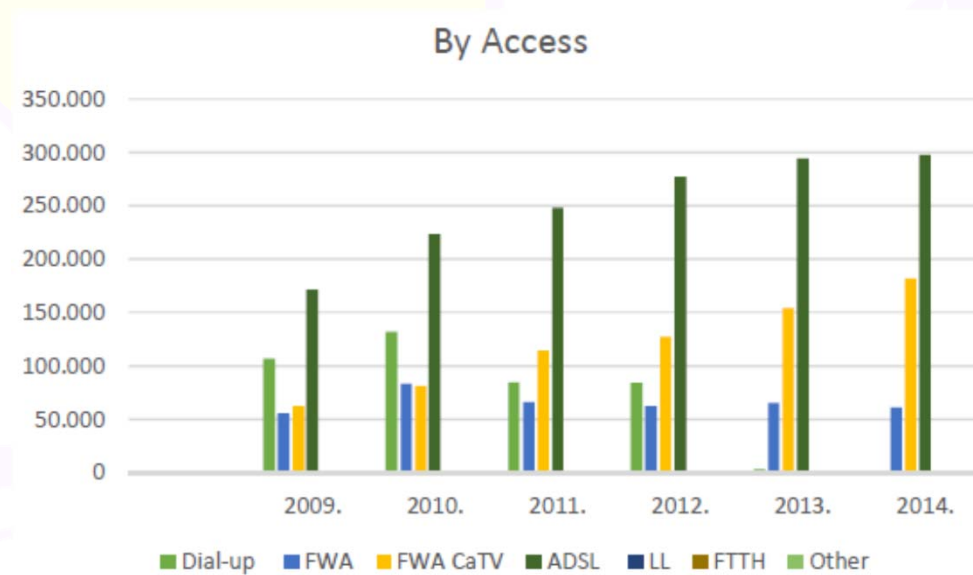




# BiH Market Overview/ISP

- Subscription rate by access type in BiH (2009-2014)

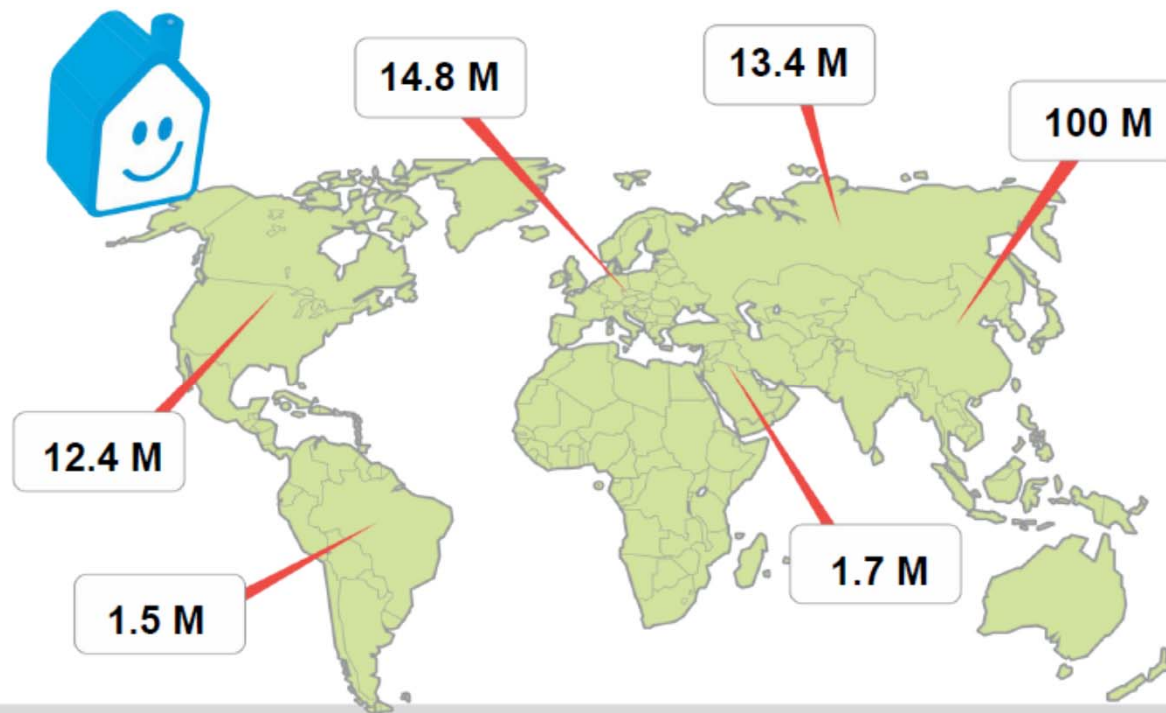
Source: operators reports





# BiH Market Overview/ISP

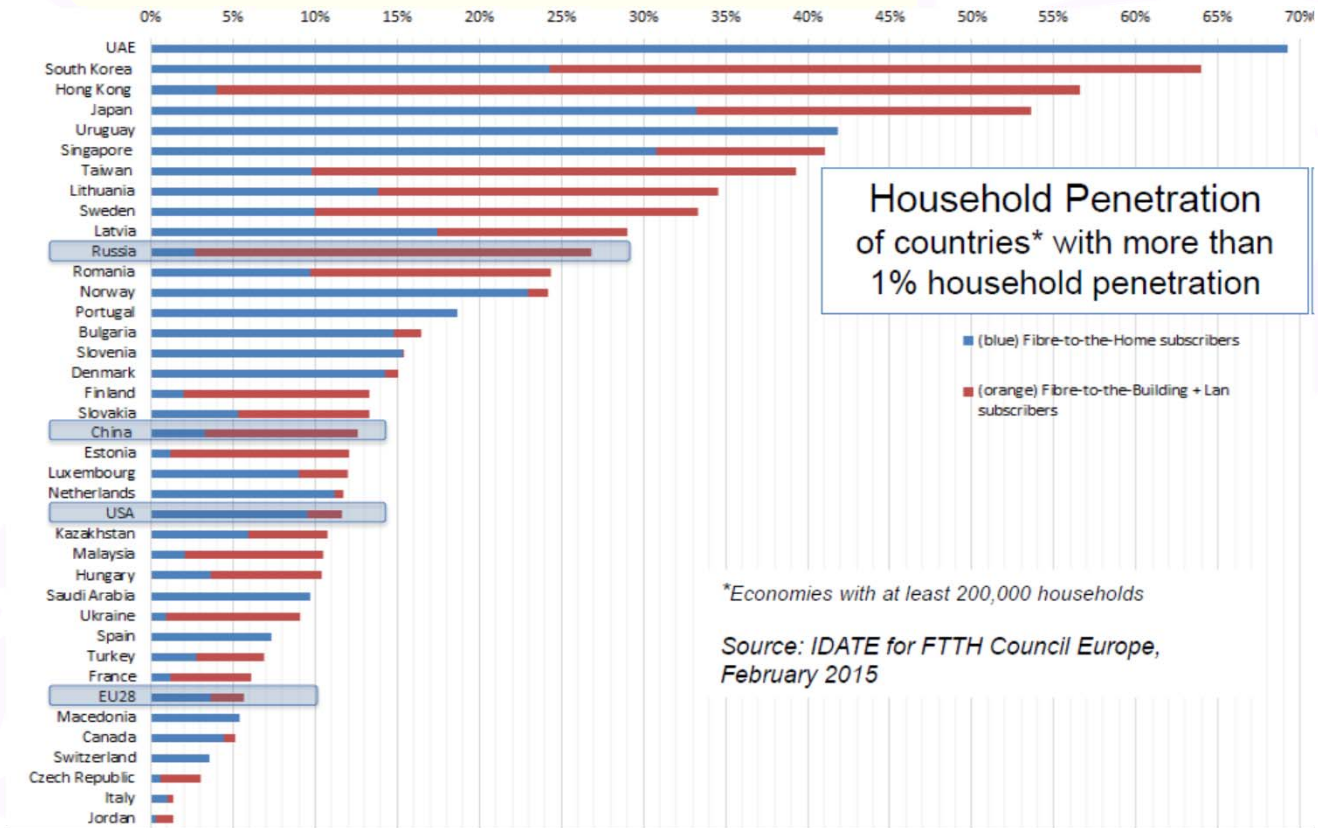
FTTH Global Panorama end 2014-total subscribers





# BiH Market Overview/ISP

## FTTH Global Ranking- end 2014





# BiH Market Overview/Network Upgrade

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- **Technology upgrade concerning**
  - Optimal solutions
  - Minimal investments
  - Exploitation of existing network





# BiH Market Overview/Network Upgrade

## Operator's choice:

- VDSL, GPON, P2P
- Parameters: population density, urban or suburban, residential or business
- 30% of internet subscribers go for new services





## Conclusion

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It is undeniable that implementation of new technologies are taking big steps forward in Bosnia and Herzegovina. There is no doubt that BiH operators will follow the technology progress but market size, economy situation and policy making structure will certainly influence investments in new technologies as well as the speed of implementation of new services.

The Agency is ready for implementation of Telecommunications Policy Framework.





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**Thank you**

