

S.DC
SofiaDataCenter

SOFIA
TELEPORT

NETFLEET

NETERRA
telecommunications

NETIX

NETERRA.TV

CLOUDWARE

Neterra Telecommunications

Telecom operator, industry leader and innovator

- Independent telecom operator
- Nearly 25 years of experience
- High quality services, ISO certified
- Board member of ECTA¹, SEC², BABTO³ and member of BBBA⁴

Forbes
BUSINESS
AWARDS



We deliver the fastest Internet in Bulgaria for institutions, business users, national and international telecoms.

We provided internet connectivity and protection against DDoS-attacks for the EU Council Presidency in Bulgaria in 2018, the Plovdiv-European Capital of Culture event 2019, the Innovation and Entrepreneurship Festival Webit 2019, and many others.

¹ European Competitive Telecommunications Association

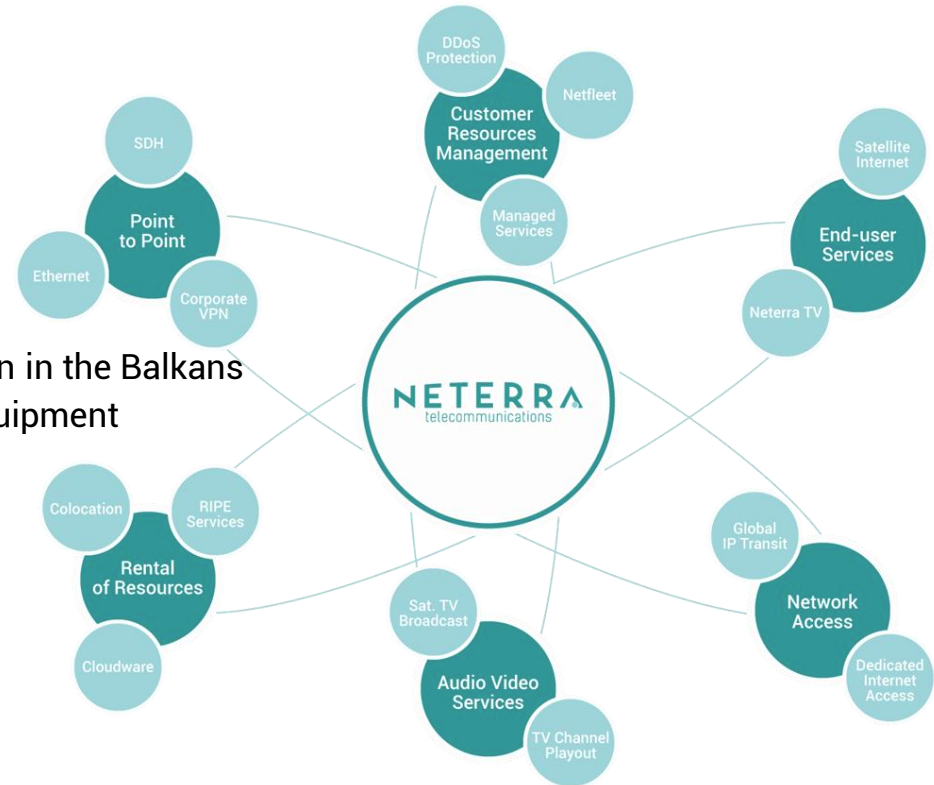
² Electronic Communications Association

³ Branch Association of Bulgarian Telecommunication Operators

⁴ British-Bulgarian Business Association

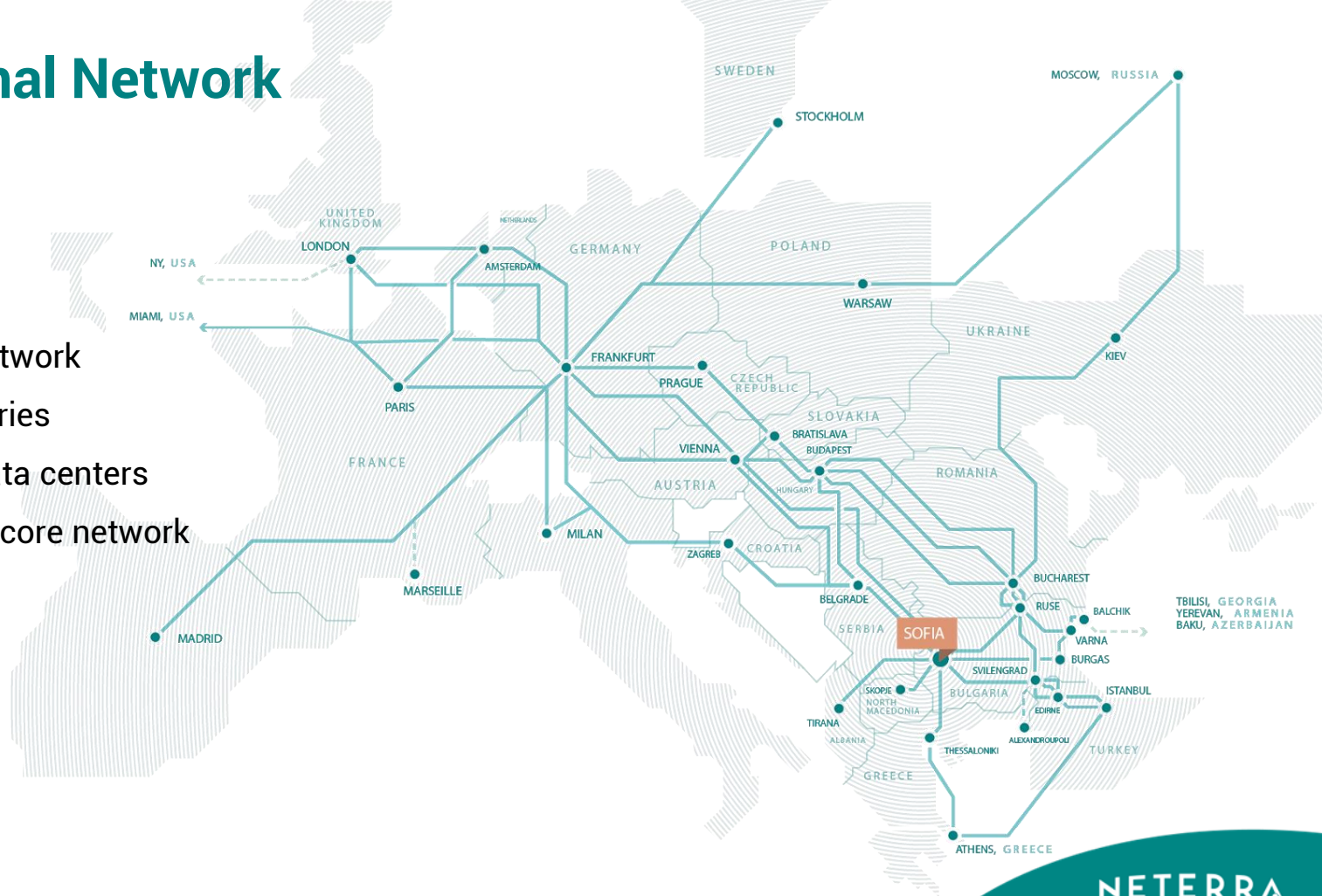
Our Services

- International connectivity – IP Transit
- Internet, Ethernet and SDH services
- 4 data centers
- Scalable Cloud platform and IT support
- Data center park, next to the largest power substation in the Balkans
- IPTV solutions and professional TV broadcasting equipment
- Fleet management and GPS tracking platform
- Largest online TV platform for Bulgarians abroad
- Satellite Internet for business and end-users
- Satellite solutions and ground stations
- DDoS protection
- IP address space assignment and IP networks
- Worldwide distribution of audio & video signals
- Managed services (both Network and IT)



International Network

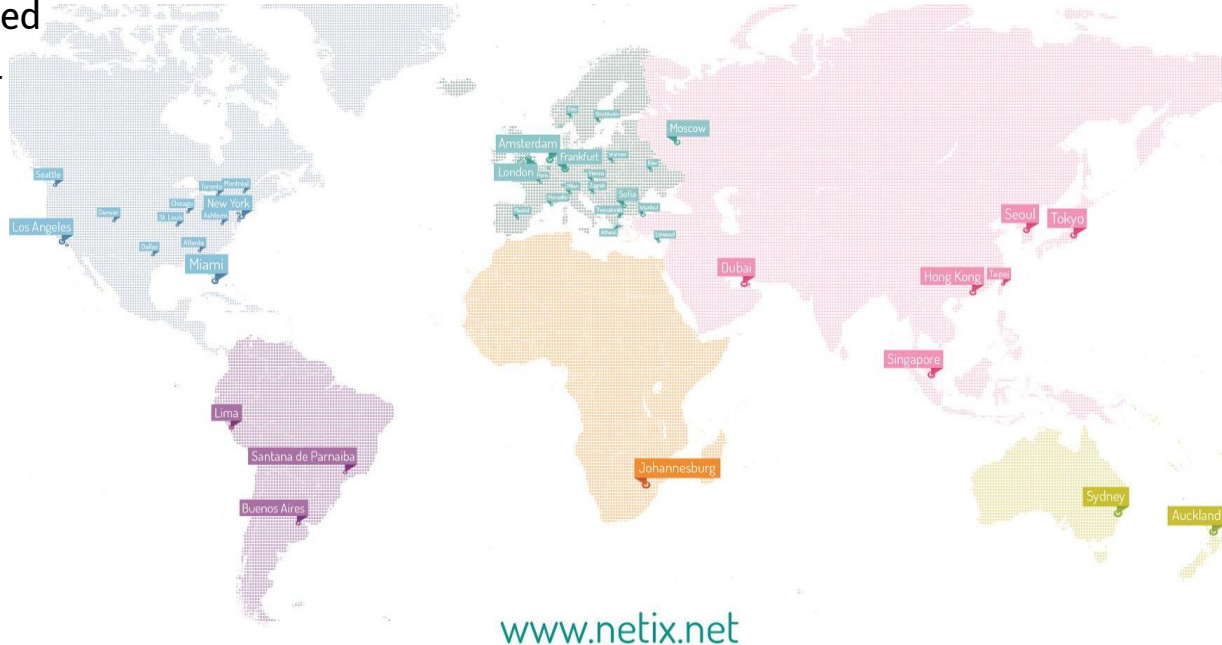
- 68 PoPs in our network
- In up to 20 countries
- Presence in 24 data centers
- 2 Tb traffic in the core network



NETIX

- World's N°6 connected network among over 65 000 networks

- 35 countries
- 65 cities
- 3 700 connected networks
- 150+ PoPs
- 30+ IXPs



FASTEST WI-FI here



Download

927.84

Mbps

Upload

878.24

Mbps

Ping

1.19

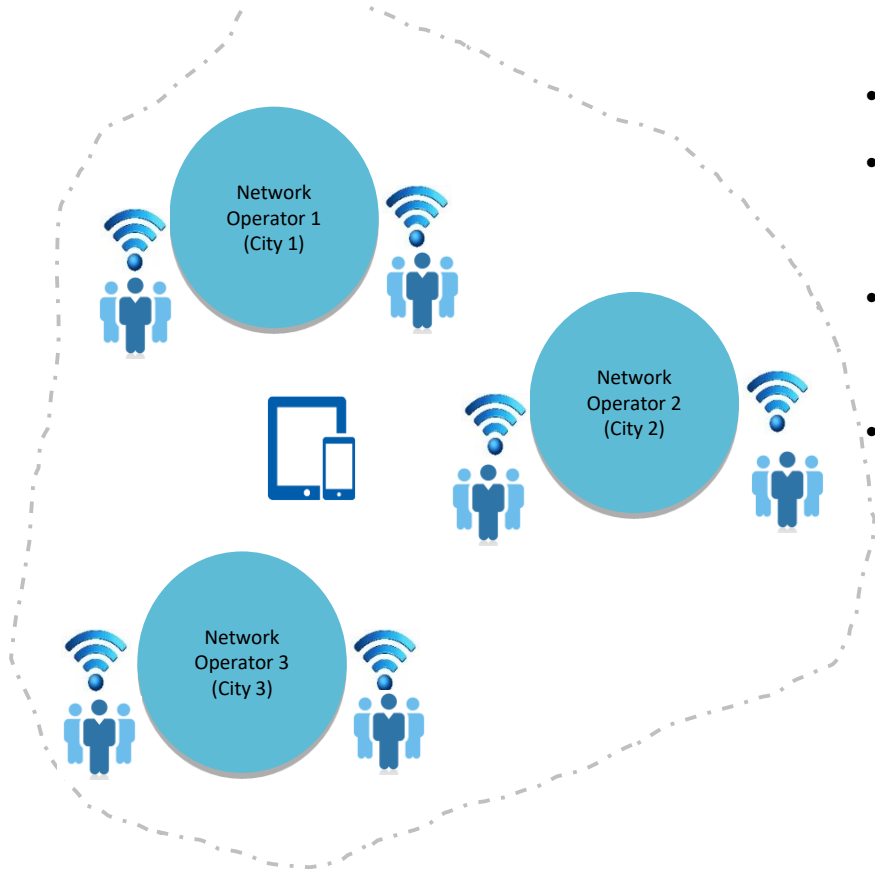
ms

Jitter

0.65

ms

Mobile Alternative Communications



- MAC AD is a joint-venture of the five leading alternative ISPs in Bulgaria.
- MAC AD plans to invest in extending its network.
- Each of MAC AD's fixed and mobile subscribers will be able to use the shared network.
- MAC AD will provide services over a mobile radio network and Wi-Fi networks.
- MAC AD plans to invest in new and innovative for the Bulgarian market services.

Conditions for MVNO access to the mobile networks and passive infrastructure need to be provided.

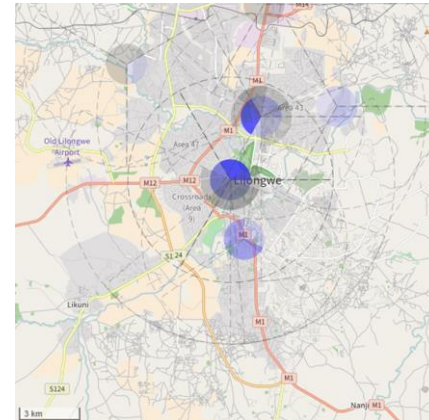
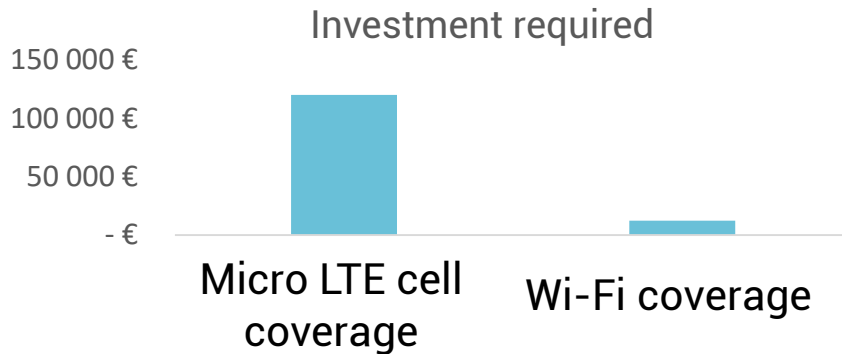
Wi-Fi 802.11 is the “5G” of today

	Wi-Fi 802.11	2G/3G/LTE	5G
Frequency range	2.4 Ghz / 5 Ghz	900/1800/ 2100 MHz	3.4 Ghz
Bandwidth of the frequency range	100 Mhz/ 910 Mhz	287.2 Mhz	400 Mhz
Bandwidth of the frequency range of an operator	100 Mhz/ 910 Mhz	22.4/30/ 30 Mhz	n/a
Maximum speed	300/1300 Mbps	1/21.6/ 112 Mbps	10 Gbps
Difference in the investments	1	x 10	x 20

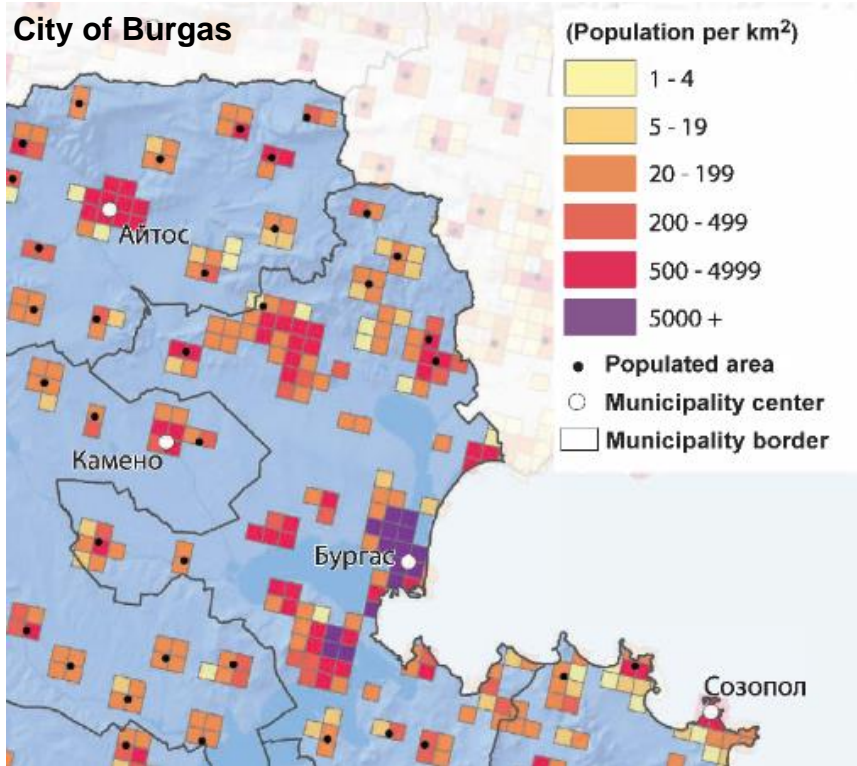
Advantages of a Wi-Fi (802.11 ac) network:

- speed comparable to 5G network
- 5 times greater capacity than the one available for LTE in Bulgaria
- much lower investment for **small** areas compared to mobile networks

Example: „Vasil Levski“ stadium



The Telecom Market in Bulgaria



Source: Cities and their Functional Urban Areas, NSI, 2016

There are over 800 telecommunication service providers in Bulgaria

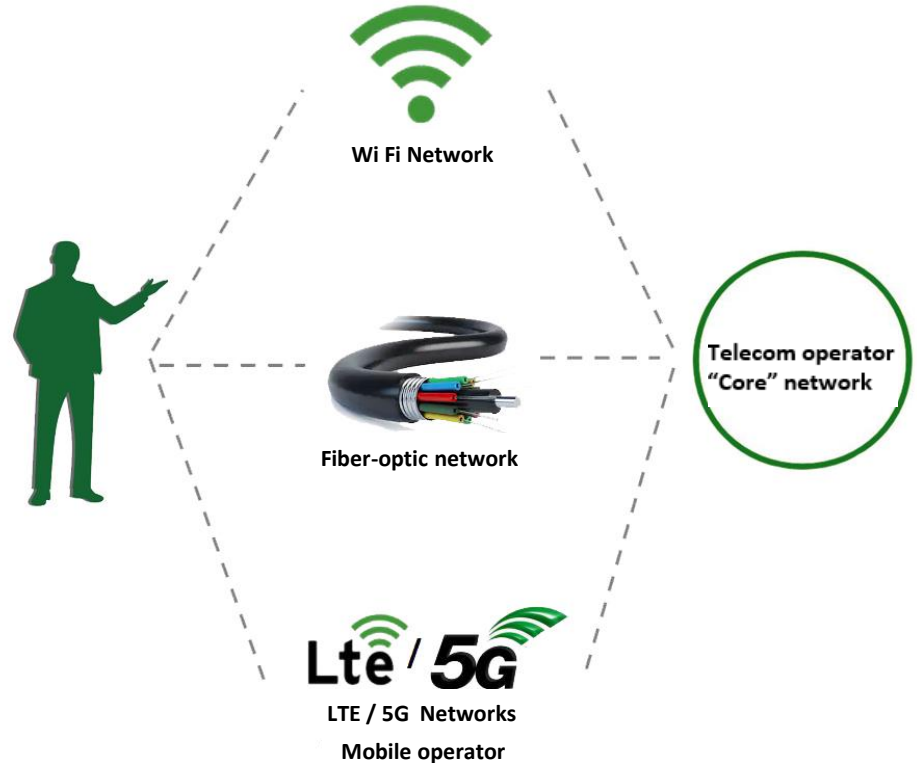
Global Rank	Country/Region	% Above 4 Mbps	QoQ Change	YoY Change
5	Malta	97%	0%	-0.1%
7	Bulgaria	96%	-0.3%	-0.8%
9	Netherlands	95%	-0.1%	-0.1%
11	Switzerland	95%	0.6%	-0.7%
12	Belgium	95%	0.8%	1.1%
16	Sweden	94%	0.1%	0.2%
19	Latvia	94%	0%	-1.2%
21	Hungary	94%	1.2%	-1.0%
23	Finland	93%	0.5%	0.8%
24	Romania	93%	-0.2%	-1.9%
25	Denmark	93%	-0.8%	-2.6%
29	United Kingdom	92%	1.2%	1.2%
30	Austria	92%	1.3%	-2.6%

AKAMAI State of the Internet Report 2017

The future of the European connectivity

Synergy between:

- Fiber-optic networks
- LTE/5G networks
- Wi-Fi 802.11 networks



Thank you!



Neven Dilkov, Founder

- 20+ years TMT experience
- Visionary serial entrepreneur
- Founded Neterra in 1996. Shaped the Bulgarian ISP/CATV ecosystem. Pioneered Bulgaria's first alternative international interconnections
- B.S. summa cum laude, Computer Science from West Virginia Wesleyan College, USA.



+359 889 90 30 30



ndilkov@neterra.net
marketing@neterra.net