RRT

Infrastructure Sharing in Lithuania:

Regulatory decisions and outcomes

31 October 2019

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MAIN FACTS

LITHUANIA

- Population: 2.794 million
- Territory: 65.200 km²
- Capital city – Vilnius
- EU member since 2004

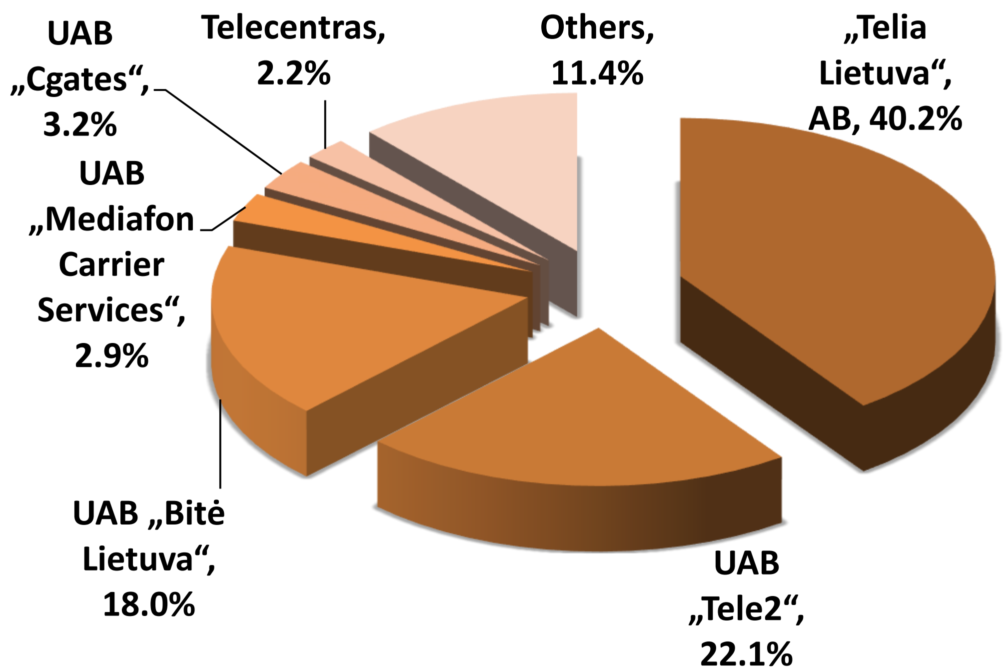
- GDP – 45.2 billion Eur.
- Inflation rate – 1.9%
- Average netto wage – 817 Eur/month (netto)
- Unemployment rate – 6.2%

- Source: Official Statistics portal, https://osp.stat.gov.lt/

STATISTICS OF COMMUNICATIONS MARKET IN LITHUANIA

COMMUNICATIONS STATISTICS

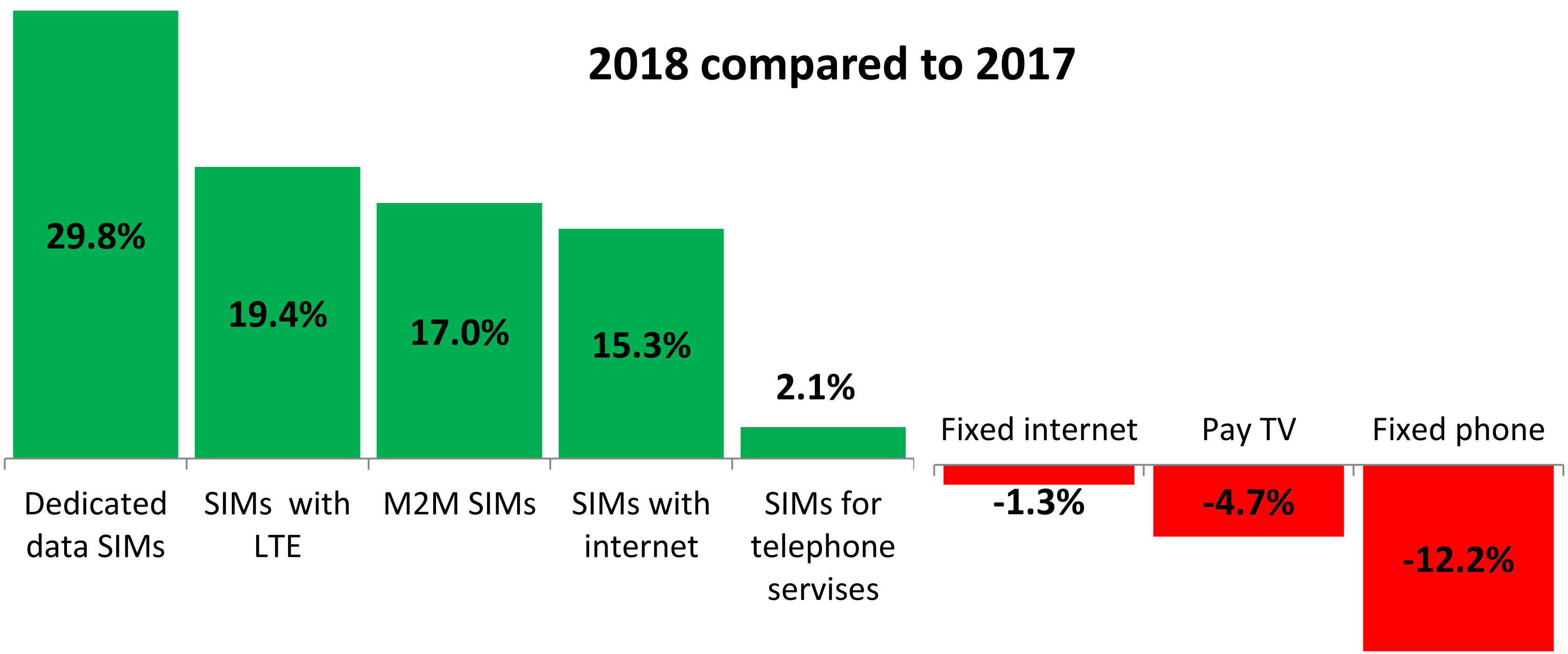
- Total providers – 116
- Mobile market (voice) :
  - 15 providers
    - 8 resalers
- Fixed market (voice):
  - 32 providers
    - 29 VoIP providers
- Internet access:
  - 81 providers
    - 51 FTTx providers
- Pay TV:
  - 40 providers



SUBSCRIPTION

Mobile network

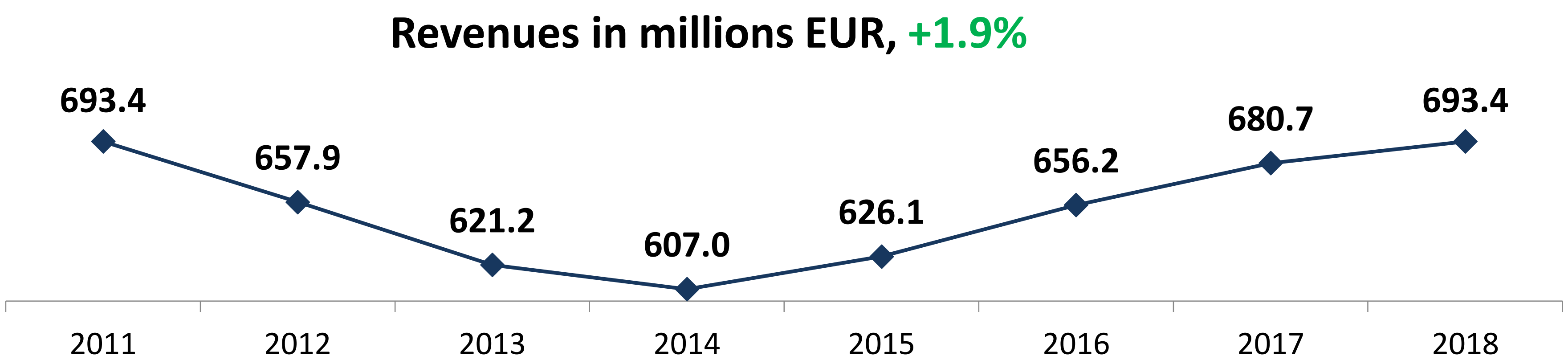
Fixed network

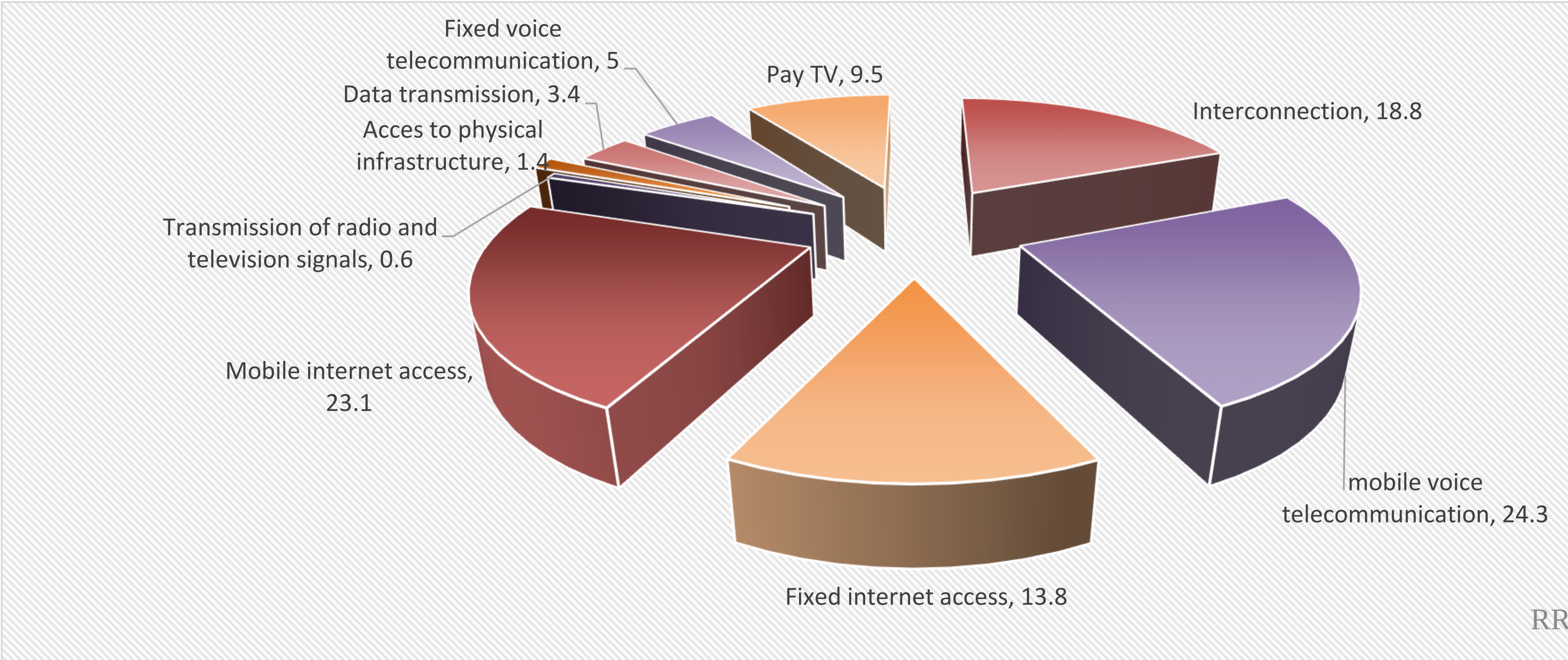


532,2	2 107,2	293,6	2 818,2	3764,7	788,7	676,2	426,5

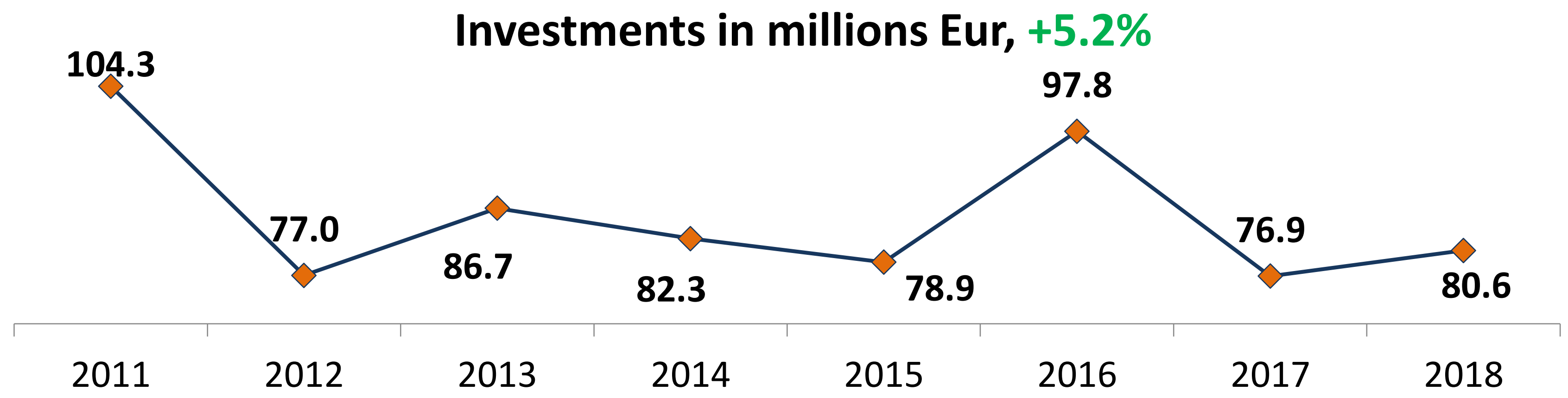
- Subscription of mobile network services is growing
- Subscription of fixed network services is going down

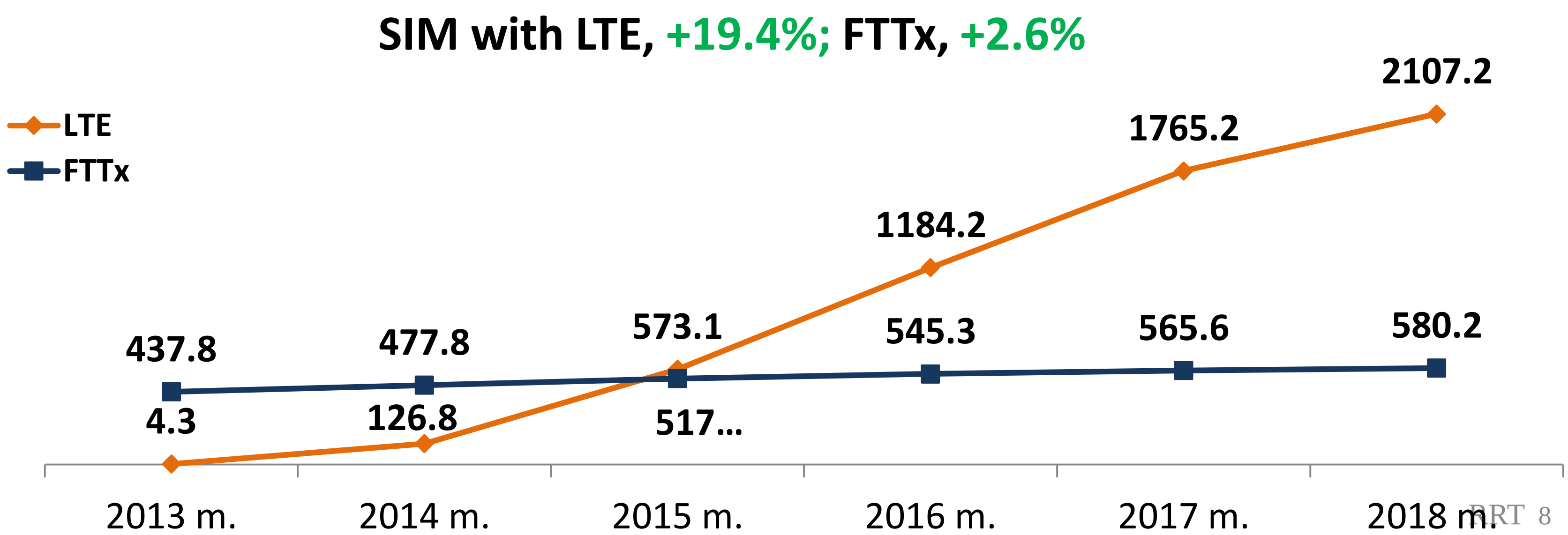
REVENUES IN COMMUNICATIONS





INVESTMENTS AND IMPACT OF THEM





REGULATION OF INFRASTRUCTURE SHARING IN LITHUANIA

SYMMETRIC OBLIGATIONS

Law on electronic communications (LoEC);
Rules for building and sharing infrastructure;
Rules for delivery and provision of access, including interconnection of access;
Rules for dispute resolution

Main principles:
–Applicable to all legal and natural persons owing infrastructure which is suitable for the construction of electronic communications networks;
–Defined list of grounds for denial to share infrastructure;
–Ex-post price regulation: cost orientation;
–First instance for infrastructure sharing disputes – RRT.

REGULATION OF INFRASTRUCTURE SHARING

From 2004:

12. Electronic communications infrastructure shall mean the **totality of physical infrastructure** which is comprised of equipment, devices, including antennas, lines, pipes, cables, ducts, collectors, manholes, retaining structures, towers, masts, buildings, building inlets, building engineering systems, distribution cabinets and **other measures intended for electronic communications activities**.

From 2017+:

Alternative infrastructure is also considered to be **suitable for installing the electronic communications infrastructure and/or sharing it with the provider of public communications networks** (<u>gas, electricity, including public lighting, heating, water, including wastewater management infrastructure and drainage systems, production, distribution, transmission, supply or management infrastructure, railways, roads, ports, airports infrastructure, and other physical infrastructure.)</u>

ASYMMETRIC OBLIGATIONS

- Market analysis: very important to identify actual situation;
- Market of physical infrastructure – from 2007 ; full set of obligations for SMP operator (incumbent):

- transparency;
- non-discrimination;
- accounting separation;
- access obligation;
- cost accounting and price regulation.

- Due to access obligation additional requirements are set in Rules for delivery and provision of access:

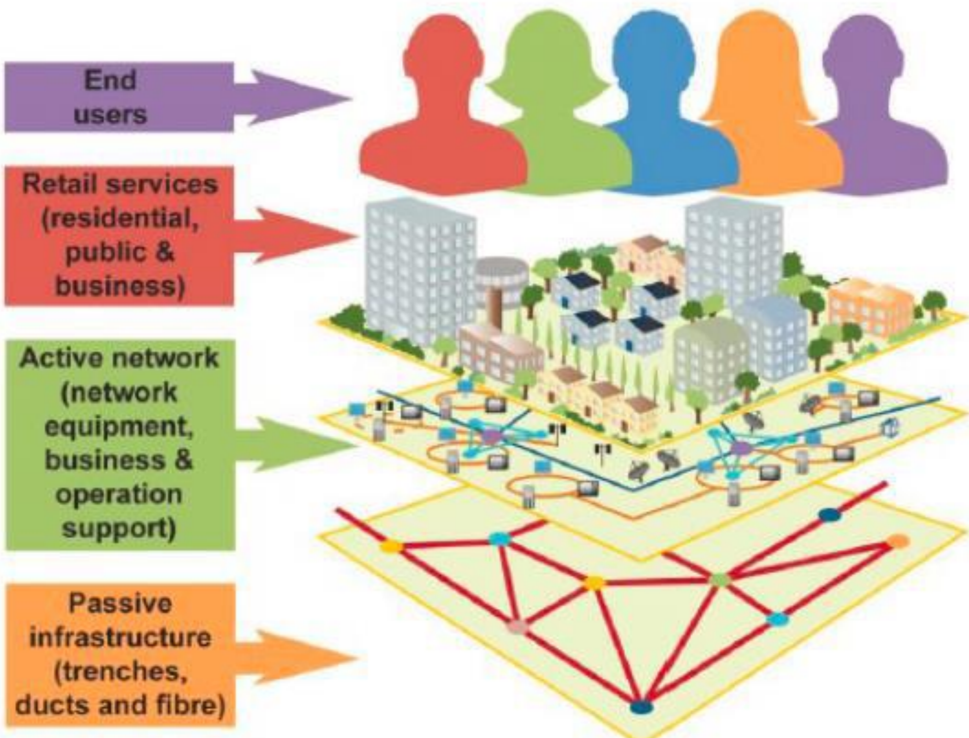
- access to GIS, applications;
- additional requirements for study of technical feasibility in reference offer

PASSIVE AND ACTIVE

Infrastructure sharing between network operators:

– Passive

– Active



Passive infrastructure sharing:

– Shared towers for mobile networks

– Shared ducts for fibre optic cables

– Shared use of fibre strands in FO cable

– Shared access to buildings

Active network sharing:

– Radio network sharing

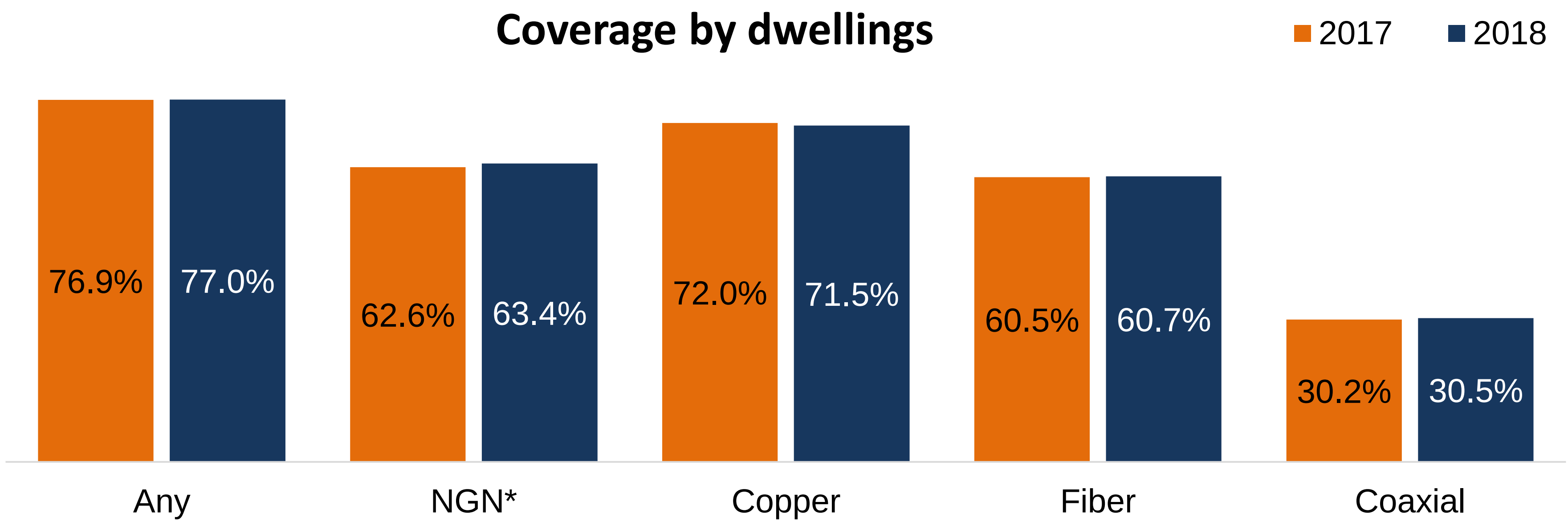
– Roaming

– Wholesale offers

– MVNOs

INFRASTRUCTURE SHARING IN FIXED NETWORK MARKET

FIXED NETWORK COVERAGE



- **Total fixed networks operators – 54;**
- **Operators with highest fixed network coverage**
  - Telia Lietuva, AB – 76.3%
  - UAB Cgates – 27.5%
  - UAB Init – 23.1%

INFRASTRUCTURE SHARING: FIXED NETWORKS

Tools for infrastructure sharing:

- Symmetric regulation (obligation to negotiate if other provider requests)
- Assymetric regulation
  - **SMP in fixed market**
    - Wholesale local access provided at a fixed location
    - Wholesale central access provided at a fixed location for mass-market products
    - Wholesale high-quality access provided at a fixed location
  - Although the SMP obligations were prolonged, the content of the obligations was amended.

  - In addition (questions examined)
    - Georefference data system
    - Technical feasibility tests

INFRASTRUCTURE SHARING: FIXED NETWORKS

Main elements of passive infrastructure to share are:

- ducts
- manholes

ACHIEVEMENTS

1. RRT - pioneer in symmetrical regulation of infrastructure sharing;
2. Dispute resolution - tool for ensuring infrastructure-based competition in LT;
3. (Symmetric + Asymmetric) price regulation = one of the lowest prices for access to ducts in Europe.

INFRASTRUCTURE SHARING IN MOBILE NETWORK MARKET

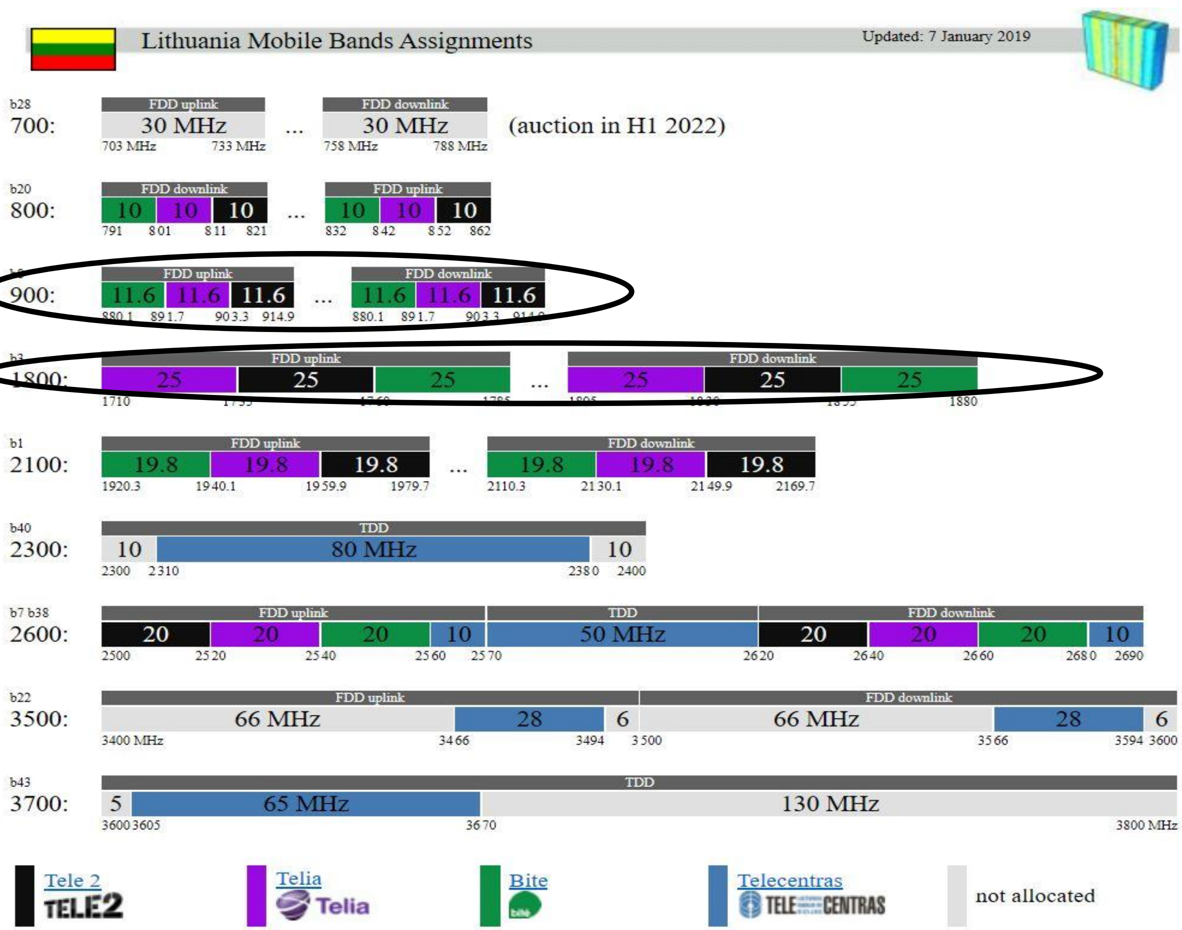
INFRASTRUCTURE SHARING: MOBILE NETWORKS

Tools for infrastructure sharing:

Frequency allocation (auction in 2015)

terms and conditions:

- 3 equal radio frequency bands
- three years period to ensure that at least 98% of the territories of the Republic of Lithuania will be covered by the mobile network to each operator, which will provide public mobile telephone services

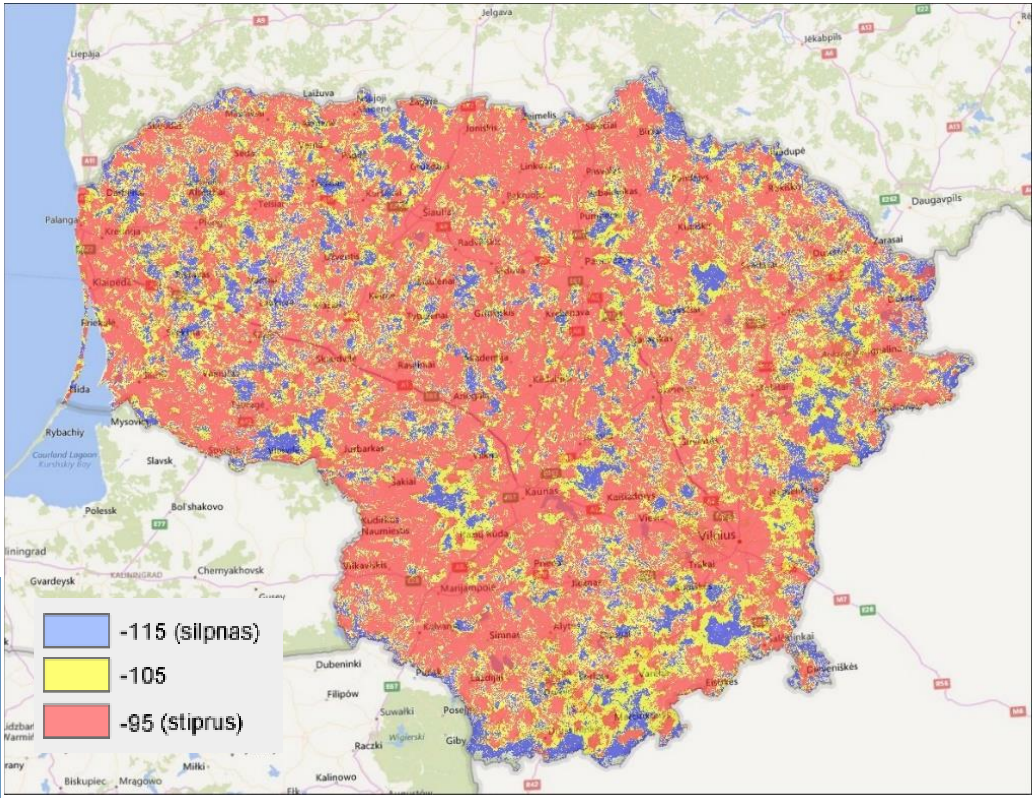


Source: https://www.spectrummonitoring.com/frequencies/#Lithuania

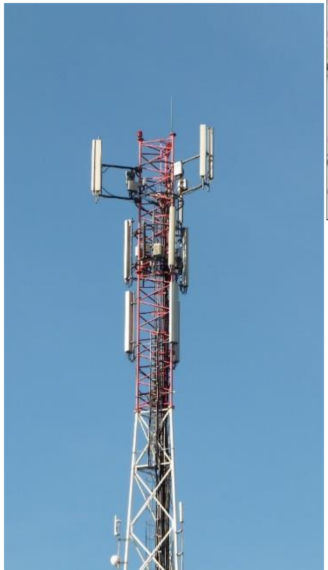
INFRASTRUCTURE SHARING: MOBILE NETWORKS

<u>Tools for infrastructure sharing:</u>

- Symmetric regulation (obligation to negotiate if other provider requests)
- Assymetric regulation
    - **SMPs** in Wholesale voice call termination on individual mobile networks



Source: RRT, Common 4G network coverage (4 operators)



INFRASTRUCTURE SHARING: MOBILE NETWORKS

Additional tools for infrastructure sharing:

- National roaming study

Development of mobile network + symmetric regulation	**4**
MVNO	**4**

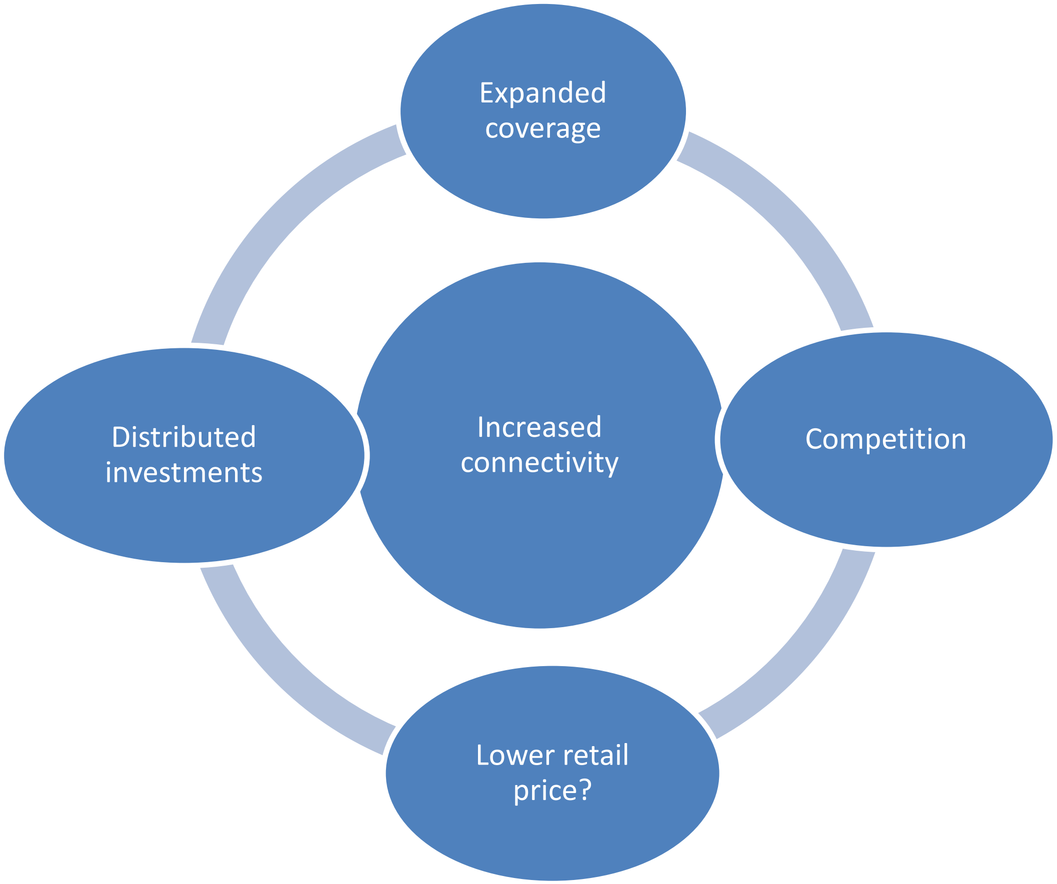
•Operator	-115 dBm	-105 dBm	-95 dBm
•Bitė Lietuva + Tele2 + Telia Lietuva	99,4 proc.	85,9 proc.	55,7 proc.
•Bitė Lietuva + Tele2 + Telecentras + Telia Lietuva	99,4 proc.	85,9 proc.	55,7 proc.

  - Coverage – not increased
  - Prices – no tendency to decline
  - Not enough arguments to state high barries to competition
    - RRT decision – no obligation for national roaming, no restrictions for agreements on the commercial basis

- MVNO right

Discussions whether there are enough motives to grant access or agree on contractual terms for MVNO. But no possibility to change terms of frequency usage

BENEFITS OF INFRASTRUCTURE SHARING



"Like air and drinking water, being digital will be noticed only by its absence, not its presence."
– *Nicholas Negroponte*

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