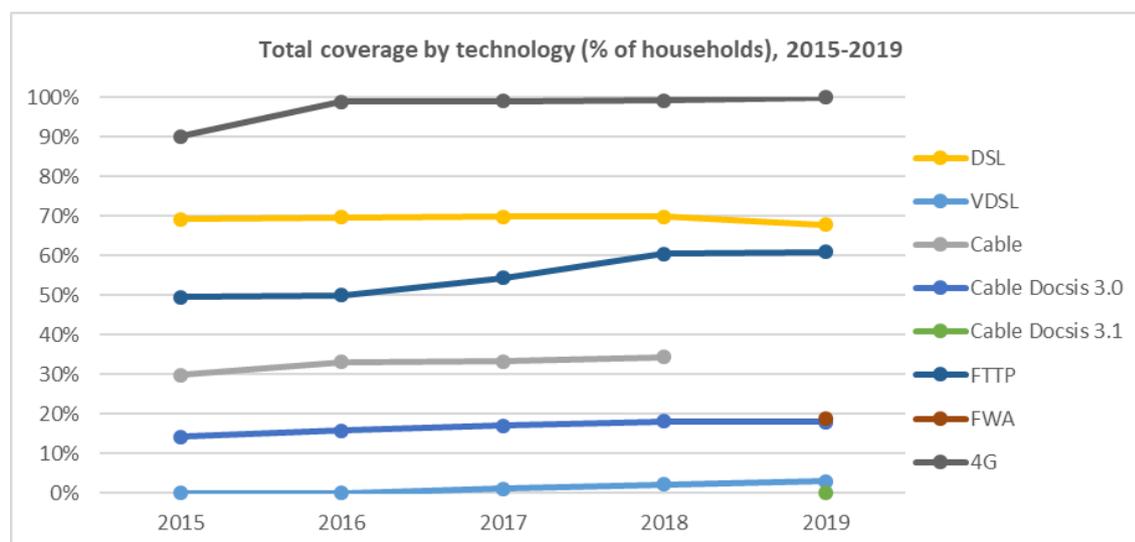
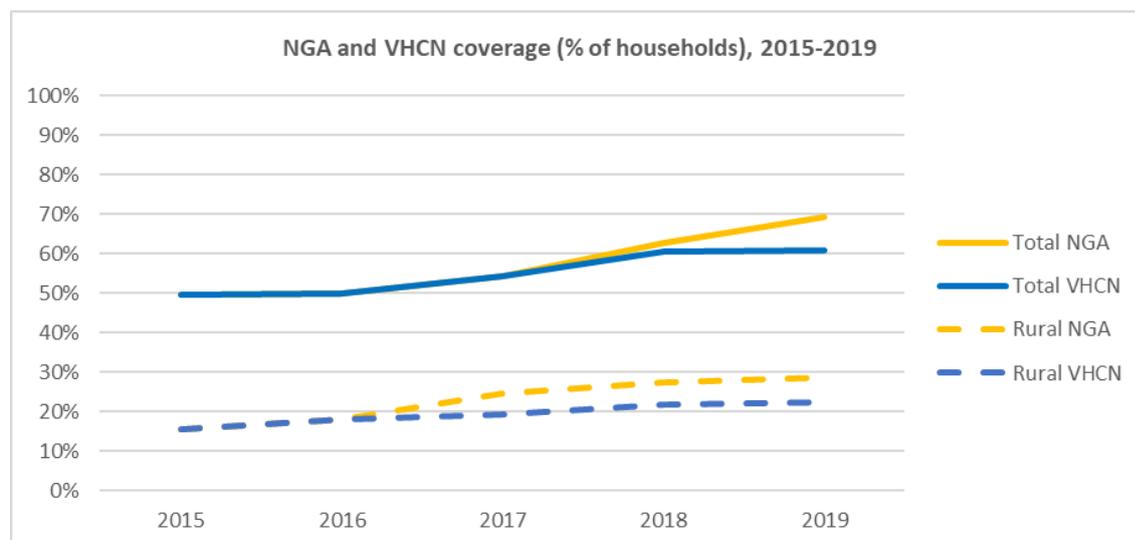


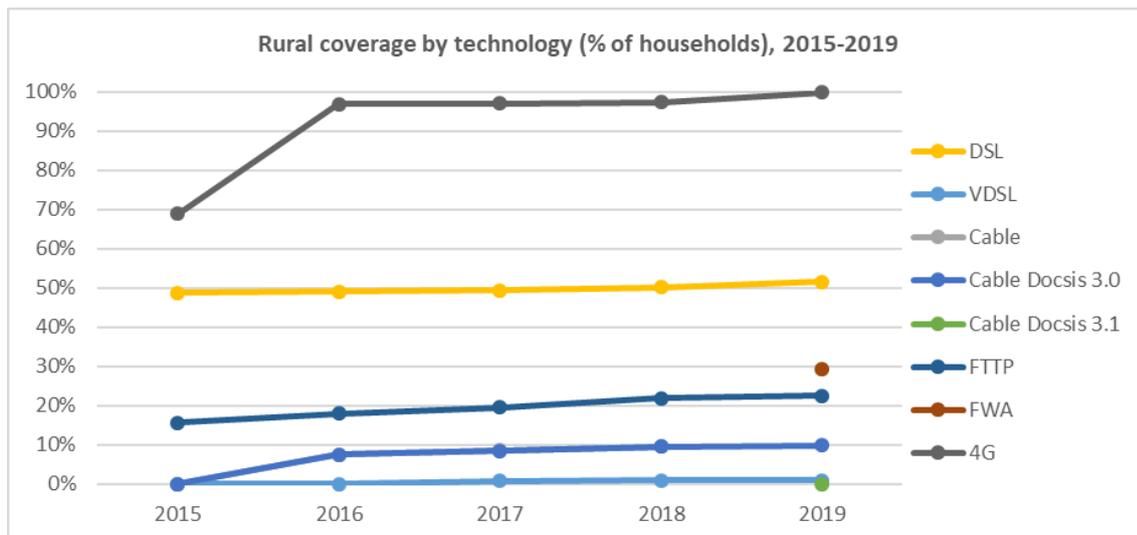
Lithuania



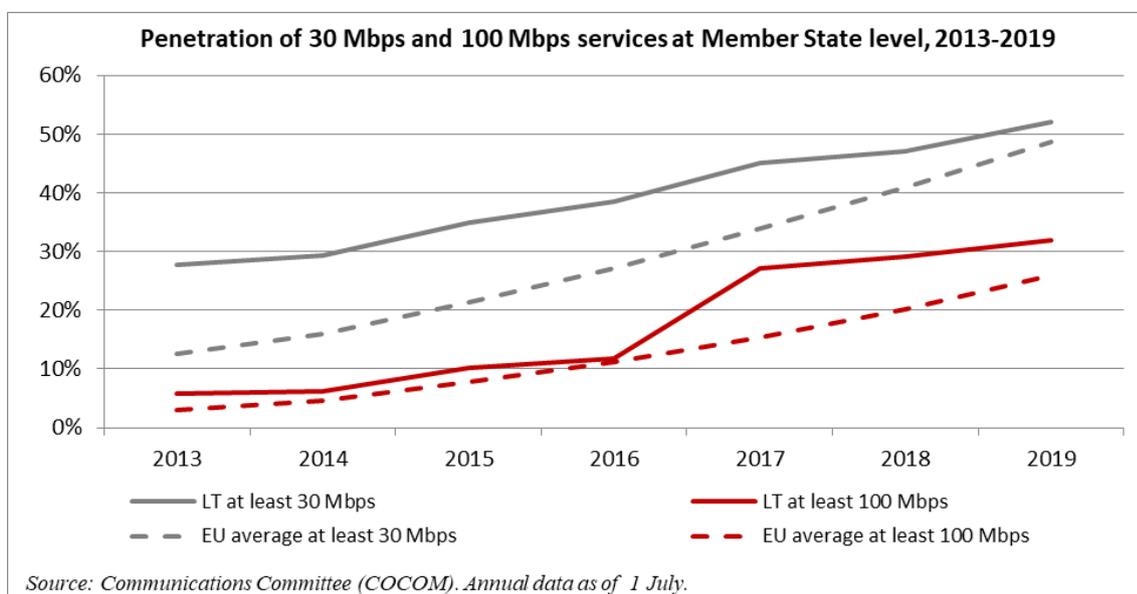
Source: IHS and Point Topic, *Broadband coverage in Europe studies*

With only 63% of its households covered by fixed networks capable of 30 Mbps in 2018 and only a small increase to 69% in 2019, Lithuania scores well below the EU average (86%), but is catching up.

The country has seen practically no new fibre deployment, except for an increase of 1 percentage point (pp) in rural FTTP coverage (23%). Nevertheless, Lithuania's fibre coverage in urban areas is almost double the EU average (61% against 34%) and surpasses the EU average in rural areas as well (23% against 18%). Legacy networks are not being upgraded: there has been no upgrade to DOCSIS 3.1 yet and DOCSIS 3.0 covers only 18% of households. In addition, only a fraction of DSL networks are VDSL. Aggregate 4G coverage is almost ubiquitous and mobile broadband penetration is slightly higher than the EU average.

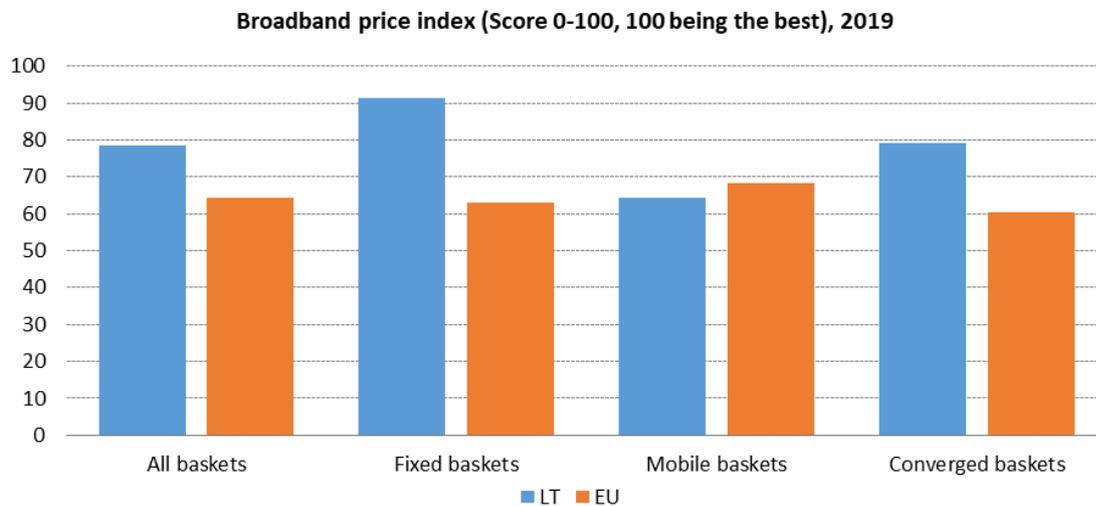
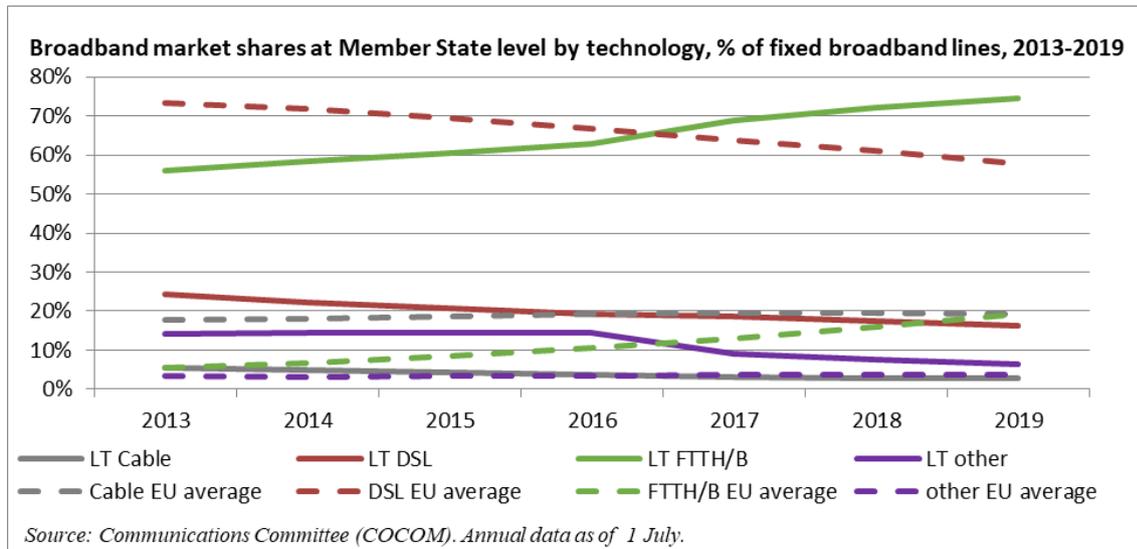


Source: IHS and Point Topic, *Broadband coverage in Europe studies*



Source: Communications Committee (COCOM). Annual data as of 1 July.

Although it only ranks 22nd in the EU on overall fixed broadband penetration, 10 pps below the EU average of 78%, Lithuania lies comfortably above the EU average in both at-least-30 and at-least-100 Mbps penetration, partly thanks to its very low fixed and converged bundle prices. With a 74.6% market share, fibre remains the predominant technology used to access the internet, while the use of both copper and coaxial is decreasing. Lithuania scores consistently well in the broadband price index ranking as the 4th cheapest Member State, thanks to very low prices for fixed broadband and converged bundles.



Source: European Commission, based on data from Empirica (Retail broadband prices studies)

1. Progress towards a Gigabit Society¹

In 2019, the Ministry of Transport and Communications set up a working group on 5G to discuss and develop together with stakeholders 'Guidelines for the development of next generation mobile networks (5G) in the Republic of Lithuania for 2020-2025'. The government should approve these guidelines in 2020. They contain a set of measures that would facilitate the deployment of 5G in Lithuania, e.g. measures on access to sites for radio-network building.

Moreover, in order to facilitate 5G roll-out, Lithuania adopted new legislation aligning its EMF limits with the 1999 Council Recommendation² which entered into force on 6 March 2020. Together with the other Baltic states, Lithuania also started mapping the existing infrastructure in preparation for a cross-border 5G corridor (most likely across the Via Baltica motorway). Additionally, an international

¹ It is noted that statements regarding planned or potential State aid measures record intentions declared by Member States and do not pre-judge or pre-empt the assessment of such measures by the Commission under the relevant state aid rules. The DESI report is not meant to provide any assessment of the compliance of such measures with state aid rules and procedures.

² 1999/519/EC: Council Recommendation of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz), OJ L 199, 30.7.1999, p. 59–70.

consortium of stakeholders from the Baltic region are preparing to test autonomous driving in the cross-border areas.

The implementation of state aid measure RAIN 3 is ongoing; 468 km of fibre-optic cable lines have already been deployed and 165 telecommunication facilities have been connected. However, no telecommunication towers have been built yet, although work on design and permit granting is ongoing. According to the data provided by Communication Regulatory Authority of Lithuania (“*Ryšiy Reguliavimo Rarnyba*”, RRT), investment in the electronic communications network infrastructure amounted to €19.1 million by Q2 2019, and came mainly from Telia Lietuva.

The Ministry of Transport and Communications plans to identify, by Q4 2020, the areas that need investment to reach the 2025 Gigabit objectives.

2. Market developments

Tele2 and Bite Lietuva signed a network-sharing agreement for all mobile technologies (2, 3, 4 and 5G). The details of the agreement and possible impact on the participation of both companies in future spectrum auctions as well as on the general competitive dynamic in the Lithuanian market are not yet clear. The Competition Council blocked two acquisitions in 2019 (by Telia Lietuva and Cgates).

The mobile broadband market is growing very fast, in terms of both value and subscribers. Growth in data consumption reached almost 48% between Q1 2018 and Q1 2019.

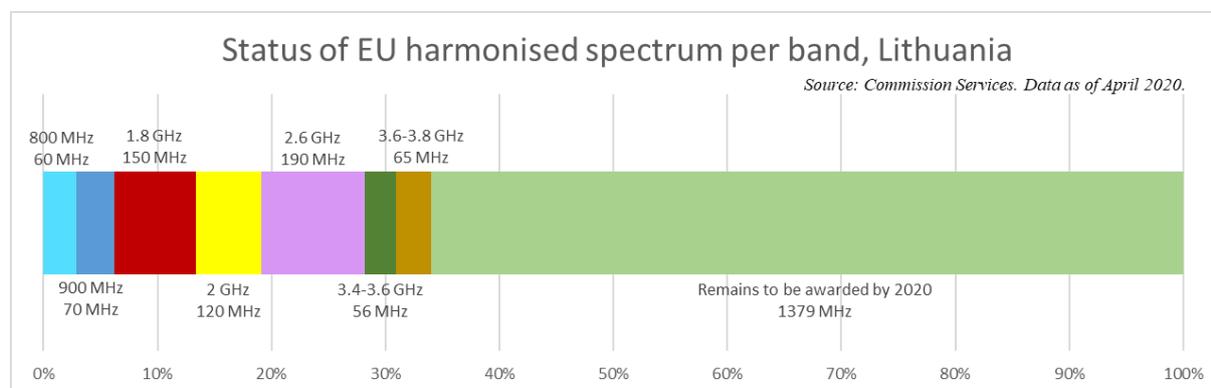
The total number of service providers decreased from 120 to 117 by the end of Q2 2019 (compared to the end of Q2 2018). On the other hand, subscriptions for services provided using fixed networks (e.g. fixed telephone, pay TV, fixed internet services) decreased or remained constant.

Between 2017 and 2018, revenue from retail services of mobile telephony, fixed internet and pay TV slightly decreased (by 2.8%, 1.8% and 2.5%, respectively). A bigger decrease was noted for fixed telephony (13.5%) and other data transmission services (11.1%). On the other hand, revenue from mobile internet increased significantly (31.8%).

The peak in bundle use was reached in 2017. Since then, bundle use has been decreasing.

3. Regulatory developments

3.1. Spectrum assignment



Overall, 34% of the spectrum harmonised at EU level for wireless broadband has been assigned so far in Lithuania. However, none of the spectrum in the 5G pioneer bands is assigned at 5G conditions, and

Lithuania scores 0 in the 5G readiness indicator³.

Cross-border coordination issues with Russia related to the 700 MHz and 3.6 GHz bands persist. Lithuania hopes to conclude an agreement on 700 MHz after Russia decides on moving broadcasting from this band, even though this will only allow the band to be used for 5G after 2022. Use of the 3.6 GHz band for 5G purposes remains problematic due to Russia's use of this band in Kaliningrad for military and satellite communications. The next round of exchanging proposals is planned for summer 2020. Before assigning this spectrum (the auction is scheduled for the second half of 2020) and to preserve competition in the Lithuanian market, the NRA needs to consider the existing rights of use for a part of this band granted to the state-owned company LRTC through a 'beauty contest' in 2012.

For the 26 GHz band, a public consultation completed at the beginning of 2020, taking into account that there is no market demand for 5G in this band yet.

3.2. Regulated access (both asymmetric and symmetric)

In 2019, the Lithuanian NRA carried out a review of: the market for wholesale call termination on individual public telephone networks provided at a fixed location (market 1 in the 2014 Recommendation on relevant markets⁴) the market for wholesale local access provided at a fixed location (market 3a in the 2014 Recommendation on relevant markets), and; the market for wholesale central access provided at a fixed location for mass market products (market 3b in the 2014 Recommendation on relevant markets).

As regards market 1, the fixed termination rate was set using a benchmarking methodology (the benchmark being pure BU-LRIC FTRs applied in EEA countries based on the most recent BEREC Report on Termination Rates⁵). It was lowered from 0.13 eurocents/minute to 0.09 eurocents/minute.

In market 3a, the NRA introduced a change to the price control obligation. As of 1 January 2020, Telia cannot differentiate prices for access to local loop unbundling (LLU) based on whether the end users of the retail services are natural or legal persons.

The review of market 3b resulted in the geographical segmentation of two areas in which competition conditions differ: area A covering 58 municipalities and area B covering 2 municipalities. Area B was deregulated, since RRT found that no operators hold significant market power (SMP) and the market is therefore effectively competitive. Market players have been particularly waiting for the application of the new price remedies imposed on Telia in Area A, especially the obligation preventing the incumbent from changing its wholesale central access price more than once per year. This should ensure lower prices and predictability for market players, and may bring to light possible cross-subsidisation. The remedies became effective as of January 2020. Also as of 1 January 2020, Telia

³ The 5G spectrum readiness indicator is based on the amount of spectrum already assigned and available for 5G use by 2020 within the 5G pioneer bands in each EU Member State. For the 3.4-3.8 GHz band, this means that only licences aligned with the technical conditions in the Annex to Commission Decision (EU) 2019/235, are considered 5G-ready. For the 26 GHz band, only assignments aligned with the technical conditions in the Annex to Commission Implementing Decision (EU) 2019/784 are taken into account. By contrast, the percentage of harmonised spectrum takes into account all assignments in all harmonised bands for electronic communications services (including 5G pioneer bands), even if this does not meet the conditions of the 5G readiness indicator.

⁴ Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (OJ L 295, 11.10.2014, p. 79).

⁵ https://berec.europa.eu/eng/document_register/subject_matter/berec/reports/8306-termination-rates-at-european-level-july-2018

cannot differentiate the prices of wholesale central access based on whether the end users of the retail services are natural or legal persons.

The Lithuanian NRA notified the Commission its review of the market for access to public telephone network at a fixed location for residential and non-residential customers (market 1 in the 2007 Recommendation on relevant markets⁶) in March 2020. The market was found competitive and all regulatory obligations were lifted. The notification of the market for wholesale voice call termination on individual mobile networks (market 2 in the 2014 Recommendation on relevant markets). has been delayed to the Q2 2020.

Discussions between the Ministry of Energy and the national energy regulator have started to evaluate bottlenecks related to access to energy utilities infrastructure. It has been agreed to amend the relevant technical rules, with a view to removing unjustified technical restrictions limiting co-building of energy and electronic communications infrastructure, and access to energy infrastructure.

4. End-user matters

a. Complaints

In 2019, the Lithuanian NRA received 354 consumer complaints and 46 complaints from other end users. In comparison, the year before RRT received 291 and 28 such complaints, respectively (a 25.4% increase in total). According to the NRA, most complaints concern billing and insufficient knowledge and understanding of the contract.

In 2019, the Lithuanian NRA solved 50 out-of-court disputes between consumers and providers of electronic communications services and 23 out-of-court disputes between other end users and providers of electronic communications services. In comparison, in 2018 RRT solved 73 and 25 such out-of-court disputes, respectively. According to the Lithuanian NRA, most disputes were related to contract termination, pricing, billing and quality of service.

b. Roaming

For the first time since the introduction of RLAH, Telia did not apply for a sustainability derogation.

c. Emergency communications – 112

In September 2019, in Lithuanian case C-417/18 - AW e.a., the Court of Justice of the European Union (CJEU) ruled that telecommunications companies are required to transmit location information to the 112 emergency call authorities for free, even if the call is received from a mobile phone which is not equipped with a SIM card. Handset-based advanced mobile location has been implemented in Lithuania since 2017.

The Lithuanian authorities expect a delay in the full deployment of 112 application for smartphones, which will ensure equivalent access to emergency services for disabled people. Currently, the deployment of this application is scheduled for June 2020.

d. Universal service

In 2019, Lithuania introduced amendments to the process of designating a universal service provider. As of 2019, such a provider can be designated after RRT has evaluated the criteria that the provider

⁶ Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, OJ L 344, 28.12.2007, p. 65–69.

must meet. In October 2019, RRT published a call for expressions of interest for the provision of universal services without compensation. However, no providers expressed interest, so RRT has started the process of designating a provider of universal services according to amended procedures. The regulator conducted a survey of universal service end users, the results of which showed that less than 1% of users still use payphones, due to widely accessible communication alternatives. The survey also showed that the preferred ways of communication would not change if payphones were no longer available. Therefore, the number of payphones will be reduced in 2020 and this service will not be part of universal service provision.

5. Other issues

Following the amendments to the Electronic Communications Law, intended to ensure RRT's independence and impartiality, a new board was appointed in February 2019. According to the information received by the NRA, it consists of experts who have no links to the government or the sector. The NRA's human resources seems to remain an issue, as the new, centralised recruitment system in place for the whole public sector restricts RRT's powers to make own decisions on staff recruitment and management.

6. Conclusion

Overall, Lithuania made some progress in 2019 towards meeting the 2020 and Gigabit Society targets as well as 5G objectives, but challenges remain. The roll-out of 5G has been delayed due to the postponed assignment of spectrum in the 700 MHz band until 2022 and the unclear situation of the availability of the 3.6 GHz band. Progress of the RAIN3 project has so far been limited. On the other hand, new provisions on the impartiality of the RRT board should strengthen the national regulator's independence.