Slovenia

<table>
<thead>
<tr>
<th>1a1 Fixed broadband coverage</th>
<th>DESI 2017 value</th>
<th>Slovenia value</th>
<th>DESI 2018 value</th>
<th>Slovenia value</th>
<th>DESI 2019 value</th>
<th>EU DESI 2019 value</th>
</tr>
</thead>
<tbody>
<tr>
<td>% households</td>
<td>98%</td>
<td>98%</td>
<td>98%</td>
<td>2018</td>
<td>97%</td>
<td>2018</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>2017</td>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1a2 Fixed broadband take-up</td>
<td>77%</td>
<td>77%</td>
<td>85%</td>
<td>5</td>
<td>77%</td>
<td>2018</td>
</tr>
<tr>
<td>% households</td>
<td>2016</td>
<td>2017</td>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1b1 4G coverage</td>
<td>90%</td>
<td>96%</td>
<td>98%</td>
<td>10</td>
<td>94%</td>
<td>2018</td>
</tr>
<tr>
<td>% households (average of operators)</td>
<td>2016</td>
<td>2017</td>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1b2 Mobile broadband take-up</td>
<td>54</td>
<td>66</td>
<td>74</td>
<td>26</td>
<td>96</td>
<td>2018</td>
</tr>
<tr>
<td>Subscriptions per 100 people</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1b3 5G readiness</td>
<td>NA</td>
<td>NA</td>
<td>0%</td>
<td>13</td>
<td>14%</td>
<td>2018</td>
</tr>
<tr>
<td>Assigned spectrum as a % of total harmonised 5G spectrum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1c1 Fast broadband (NGA) coverage</td>
<td>82%</td>
<td>83%</td>
<td>86%</td>
<td>18</td>
<td>83%</td>
<td>2018</td>
</tr>
<tr>
<td>% households</td>
<td>2016</td>
<td>2017</td>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1c2 Fast broadband take-up</td>
<td>19%</td>
<td>24%</td>
<td>38%</td>
<td>17</td>
<td>41%</td>
<td>2018</td>
</tr>
<tr>
<td>% households</td>
<td>2016</td>
<td>2017</td>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1d1 Ultrafast broadband coverage</td>
<td>NA</td>
<td>75%</td>
<td>80%</td>
<td>12</td>
<td>60%</td>
<td>2018</td>
</tr>
<tr>
<td>% households</td>
<td>2016</td>
<td>2017</td>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1d2 Ultrafast broadband take-up</td>
<td>9%</td>
<td>13%</td>
<td>16%</td>
<td>17</td>
<td>20%</td>
<td>2018</td>
</tr>
<tr>
<td>% households</td>
<td>2016</td>
<td>2017</td>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1e1 Broadband price index</td>
<td>75</td>
<td>73</td>
<td>75</td>
<td>25</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>Score (0 to 100)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>2017</td>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Progress towards a gigabit society

Slovenia ranks 12th among the EU Member States on standard fixed broadband coverage and is slightly above the EU average on next-generation access (NGA) coverage. It also ranks 12th (in both relative and absolute terms) on ultrafast coverage. While its total ultrafast coverage is almost 20 p.p. above the EU average, in rural areas it reached 49.1 % as compared with an EU average of 29.2 %. The underlying reasons are geographical characteristics and a dispersed population.

The deployment of fibre to the premises (FTTP) continued in 2018. Slovenia’s overall FTTP coverage is 31.5 p.p. above the EU average. Rural coverage is 34.3 %, as compared with an EU average of 14.2 %.

As the objectives of the current 2020 next-generation network (NGN) plan are not aligned with the targets of the gigabit society, in March 2018 the authorities conducted a public consultation on an addendum to the plan that was more geared to the latter. The government adopted the addendum in July. In March 2019, the government adopted the national roadmap for the use of 700 MHZ frequency band, which sets 30 June 2020 as the deadline to assign the band. In April and May 2018, Slovenia awarded trial licences for 5G testing frequencies in the 700 MHz and 3.5 GHz spectrum to BTC, AMZS, Elektro Gorenjska, Internet Institute and Telekom Slovenije. The licences were granted until January 2019 for the 700 MHz frequency band and May 2021 for the 3.4-3.8 GHz band1.

The 2020 NGN plan is in the process of implementation. On the basis of the list of white spots2, the Ministry of Public Administration published a call for tenders for the construction of open broadband

2 In order to identify the white spots, the Ministry carried out two rounds of enquiry as to commercial interest in May and October 2016.
networks (GOŠO 3) in January 2018, but there were no applications. Given the lack of response, the Ministry identified potential applicants and invited them for individual consultations. The operators explained the issues that had prevented them from applying and proposed alternative conditions and improvements. In July, the Ministry published a second invitation to tender for the co-financing of the construction of the networks (GOŠO 3A). The new tender split the territory into two regions: GOŠO 3A EAST and GOŠO 3A WEST. It closed on 19 October. The Ministry received four applications. All applications were rejected as they did not meet the conditions.

In September 2018, the Ministry called on operators to submit statements of commercial interest in the construction of broadband networks in areas where commercial interest had not previously been tested for the construction of network connection points with a bandwidth of at least 30 Mbps. The process of gathering commercial interest was originally open until the end of January 2019. However, on 18 December, the Ministry published a new list of households for the construction of network connection points with a bandwidth of at least 100 Mbps, withdrew the previous list and extended the deadline to 11 February 2019. The data on commercial interest will form the basis of the list of remaining white spots and be used to prepare the next call for the co-financing of the construction of networks in those areas.

All major operators are actively investing in ultra-high speed networks. The number of broadband access connections continued to rise in 2018. Broadband access penetration is 32.3 % by population and 81.1 % by households. Fibre to the home (FTTH) technology was on the rise and accounted for almost 210,000 connections.

The incumbent plans to migrate users from the copper to the fibre access network. The process is regulated so as to secure the rights of alternative operators. For instance, the migration will not apply for lines and colocation that an alternative operator uses unless alternative operator is present in that specific colocation for more than 5 years. Affected operators must be informed 6 months in advance about the lines and 2 years in advance about colocation which will be abandoned.
Current regulation sets a limit for electromagnetic field (EMF) exposure that is 10 times stricter than the International Commission on Non-ionizing Radiation Protection (ICINRP) standard. Some operators have noted that this could hinder the deployment of 5G. In addition, most operators consider that other relevant legislation (e.g. environment, construction law) restricts NGN rollout. For instance, the Triglav national park should be covered, but construction is not allowed.

Preparations for the implementation of the European Electronic Communications Code (EECC) are under way. The Ministry is preparing a comparative analysis between the EECC and the Electronic Communications Act (ZEKom-1). Slovenia will implement the EECC by means of a new Electronic Communications Act. Some provisions in the current Act have been notified as national provisions and are now part of the EECC; these cover inter alia subsidised terminal equipment after termination of contract; options for the monitoring and control of consumption of data services; a public warning system; and geographical surveys of network deployments.

2. Market developments

The acquisition of Teleing by Telemach in April 2018 was the latest step towards the consolidation of the Slovenian market. Telekom Slovenije remains the incumbent.

It was reported that some operators started to supply electricity Some operators are considering the possibilities of offering insurance services.

---

3 Article 105(6) EECC / Article 129(4) ZEKom-1.
4 Article 102(6) EECC / Article 132.a ZEKom-1.
5 Article 110 EECC / Article 134(6) ZEKom-1.
6 Article 22 EECC / Article 11.a ZEKom-1.
7 Telemach acquired MNO Tušmobil and on 14 September 2015 changed its name to Telemach Mobil. Telemach took over Telemach Mobil on 3 February 2016. Si.mobil d.d. took over Amis on 1 April 2016 and TA mreža on 12 April 2016. Si.mobil changed its name to A1 Slovenija in April 2017. BBTEL acquired IKT on 23 October 2017. In December 2017, several small operators with small or non-significant impact (IT TEL, RM Sistemi and JATEL) ceased to operate. Telekom Slovenije acquired Izi mobil on 31 December 2017.
In July 2017, Slovenia Broadband S.à r.l., Luxembourg (an investment vehicle of the United Group, which already owns Telemach) announced plans to acquire Pro Plus d.o.o. in Slovenia and Nova TV d.d. in Croatia. As the owner of Slovenia’s most popular commercial TV stations (POP TV and Kanal A), Pro Plus is a dominant broadcaster, with 70-80% market share in commercial TV (previously free to air). The estimated cash purchase price was €230 million. Competition concerns arose regarding the potential benefit the acquisition of Pro Plus would bring to Telemach. Telemach became a strong alternative operator, with 21% share in mobile broadband access and around 180,000 subscribers to TV channel packages. The Slovenian Competition Protection Agency (CPA) started an investigation in March 2018. The national Agency for Communication Networks and Services (AKOS) provided its opinion and market data. On 30 October, the CPA issued a statement of objections, citing facts and evidence that show that the transaction would lead to horizontal overlaps and links that could restrict competition in closely related markets (vertical and conglomerate links on the Slovenian telecommunications and media market). On 18 January 2019, Central European Media Enterprises Ltd., which has full ownership of Pro Plus, announced that it had pulled out of the agreement to sell it.

Bundled services are on a constant upward trend. One of the key factors in their growth is the provision of TV/content services in the bundles, which results in pure broadband access accounting for less than 10%. The market share of ‘4-play’ bundles is growing by around 1 p.p. every quarter and currently stands at 36.2%. This is due to competitive pricing: ‘4-play’ bundles are more cost effective than ‘3-play’ and ‘2-play’. However, ‘3-play’ bundles still have the biggest market share (43%).

In 2017, Pro Plus and Planet TV (the main TV programme providers) started to charge operators for the right to distribute their content on the network. Realistically, in order to compete in this market, bundles have to include their channels. Cable TV providers started to include them in their basic channel scheme from the beginning of 2018. This increased the cost of basic cable TV bundles for the end consumers. Some stakeholders claimed that acquiring Pro Plus would enable Telemach (as the cable TV provider) to offer Pro Plus programmes at a better price in bundles.

The trend of stable but above-EU-average fixed broadband prices continued throughout 2018.

---

8 Croatia’s competition agency cleared the merger between Slovenia Broadband and Nova TV after the electronic media agency assessed it as ‘admissible’ in the light of the special provisions of the Electronic Media Act on 26 March 2018.
9 The notifying party has the opportunity to reply within 45 days and indicate the facts and evidence in its favour, and may also propose appropriate and corresponding commitments. The CPA may only accept commitments that are comprehensive, effective and sufficient to eliminate a significant impediment to effective competition. Upon receipt and examination of the notifying party’s reply, the CPA is to issue an appropriate decision in accordance with the Competition Act. In Slovenian competition law, the sending of a statement of objections does not prejudice the outcome of the proceedings in question. The statement of objections is available at: http://www.varstvo-konkurence.si/en/information-centre/news/competition-protection-agency-has-sent-statement-of-objections-in-case-of-merger-between-s-179/
10 The fixed broadband price index weighs the cheapest retail offers from: standalone, double play (BB + TV, BB + fixed telephony) and triple play (BB+TV+fixed telephony) and three speeds categories - 12-30 Mbps, 30-100 Mbps and ≥100 Mbps. This indicator presents values from 0 to 100 (which should not be read as prices) and the higher the values, the better the country performs in terms of affordability of prices relative to purchasing power.
2.1. Fixed Markets

Despite gradual losses, Telekom Slovenije still holds the highest market share of fixed broadband connections (almost 34%). Most households in Slovenia are covered by copper network infrastructure, but the number covered by FTTH is increasing rapidly (growth of almost 10 p.p. since 2017). Coverage of households in rural areas increased slightly for all other technologies in 2018.

The Electronic Communication Act sets out a strategy to incentivise co-investment that involves requirements to notify: (i) all planned construction works, including investments in electronic communications networks (this applies to the undertaking with significant market power (SMP) and to alternative operators); and (ii) investments in utility infrastructure (this applies to all network operators).

In 2018, AKOS established a new web portal on which the notifications are published\textsuperscript{11}. Some operators claim that the efforts to encourage co-investment approach are not working.

No self-funded broadband networks have been deployed.

For the first time, fibre to the home/building (FTTH/B) technology was the dominant technology for the delivery of broadband access services in Slovenia, with its 34 % market share surpassing that of DLS technology by almost 2 p.p. The market share of DSL declined from 36.4 % to 32.2 % and that of cable remained unchanged in comparison to 2017, at 29.2 %.

Fast penetration continued its sharp increase, from 24.2 % in July 2017 to 38.4 % in July 2018, almost reaching the EU average. Although ultrafast penetration is starting to pick up and in 2018 surpassed 15 %, it is lagging behind the EU average of 19.9 %.

\textsuperscript{11} http://investicije.akos-rs.si/.
2.2. Mobile markets

Telekom Slovenije still has the biggest share of the mobile telephony market. On 31 December 2017, it acquired Izi mobil, a mobile virtual network operator (MVNO) on its network. There are now five MNVOs on the Slovenian market.

\[12\] Market share data are confidential and hence not reported.
Slovenia continued to improve its 4G performance. 4G coverage reached 98%, above the EU average of 94%. Despite a 12 p.p. increase, mobile broadband take-up is only 74 subscriptions per 100 people, well below the EU average of 96.

There is no obligation to phase out any specific technology: operators are free to choose when to phase out any outdated technology. Telekom Slovenije has started to phase out its 3G network, but does not plan to phase out its 2G network in the near future.

The price for the least expensive handset offer (1 GB + 300 calls) did not change in 2018 and remains much lower than the EU average.

Slovenia’s current electronic communications legislation does not cover ‘over-the-top’ (OTT) players (Skype, WhatsApp, Viber, etc.), who are not obliged to report to AKOS. OTT services are having an impact on the national market, as can be observed in higher broadband data traffic consumption. However, AKOS did not register any drop in the usage of operator services due to the availability of OTT services.

3. Regulatory developments

3.1. Spectrum

Slovenia has assigned 620 MHz, i.e. only 30% of the spectrum harmonised at EU level for wireless broadband\(^\text{13}\). This low percentage is mainly due to the lack of assignment procedures for the 700 MHz, 3.6-3.8 GHz and the 26 GHz bands.

Slovenia has still not adopted its strategy for the management of the radiofrequency spectrum. The draft strategy has undergone two rounds of public consultation, the most recent of which was in September 2018. It included intention to put obligations in relation to public protection and disaster

\(^{13}\) The ‘5G spectrum readiness’ indicator is based on the amount of spectrum already assigned and available for use for 5G 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 annexed to Commission Decision (EU) 2019/235 are considered 5G-ready. However, the percentage of harmonised spectrum takes into account all assignments in all harmonised bands for electronic communication services (including 5G pioneer bands), even if this does not meet the conditions of the 5G readiness indicator.
relief (PPDR) and a public warning system for awarded spectrum in 700 MHz band. Operators have mostly reacted negatively to these obligations and prefer to have a separate strategy on the latter. In February 2019, the government established a working group for the preparation of a separate PPDR strategy.

The draft strategy also included a national plan for the start and completion of the assignment process for the 700 MHz band for wireless broadband electronic communications services in compliance with the deadline set by Decision (EU) 2017/899\(^\text{14}\). However, the Commission sent a political letter to Slovenia, due to its failure to adopt a roadmap.

In March 2019, the government adopted the Plan for the use of the 470-700 MHz frequency band which includes the national roadmap for the assignment of the 700 MHz frequency band. The draft strategy will be adjusted. Slovenia plans to award available spectrum (700 MHz, 1400 MHz-A, B, C (1427 – 1517 MHz), 2100 MHz, 2300 MHz, 3500 – 3800 MHz and 26 GHz) together with frequencies in band 2100 MHz (for which licences expire in 2021) in a multiband auction to be carried out by 30 June 2020. Parts of the bands 2300 MHz and 3600 MHz would be auctioned separately for local usage. AKOS anticipates possible delays in the assignment of the 700 MHz band due to its use for digital terrestrial television (DTT) in neighbouring countries.

Overall, operators consider that the delay and the lack of transparency are having a negative impact on their business planning. All operators call for greater transparency and regulatory predictability from AKOS and the MPA.

AKOS awarded several temporary licences for 5G testing frequencies in 2018 and also in the beginning of 2019.

AKOS completed negotiations with the Ministry of Defence on changes to the national allocation of the 26.5-27.5 GHz band and reallocated governmental usage in the lower part of 26 GHz band.

### 3.2. Regulated access

Decisions on the market for wholesale local access provided at a fixed location (Market 3a in the 2014 Recommendation on relevant markets\(^\text{15}\)) and the market for wholesale central access provided at a fixed location for mass-market products (Market 3b/2014) had been published on 5 December 2017 and both entered into force on 5 January 2018. On 4 February, Telekom Slovenije issued its reference offer for wholesale central access. On 22 February, T-2 asked AKOS to initiate a supervisory

---


procedure regarding the offer, due to alleged steep price increases for bitstream access. T-2 refused to pay the disputed parts of the invoices from April and lodged objections. Telekom Slovenije rejected its objections and it brought the dispute before AKOS on 26 June. The case is still pending.

AKOS reported that 10 operators are active only on wholesale markets 3a/2014 and 3b/2014. They have limited geographic coverage and are not active on the retail level.

In January 2018, AKOS notified the Commission of its analysis of the market for wholesale high-quality access provided at a fixed location (Market 4/2014). On 9 February, the Commission opened an in-depth investigation into AKOS’ proposal to make adjustments to the standard weighted average cost of capital (WACC) formula that would raise the prices of wholesale high-quality broadband access services. AKOS then separately notified an amended WACC calculation in August. It amended its analysis and notified it on 6 February 2019\(^\text{16}\).

A public consultation on wholesale call termination on individual public telephone networks provided at a fixed location market (Market 1/2014) was opened from 21 February 2019 to 25 March 2019. A public consultation on wholesale voice call termination on individual mobile networks market (Market 2/2014) was planned for December 2018 but has yet to be published.

The analysis of the market for access to the public telephone network at a fixed location for residential and non-residential customers (retail market) (Market 1 in the 2007 Commission Recommendation\(^\text{17}\)) was published on 30 May. Following public consultation and the administrative procedures, a Decision on the deregulation of Market 1/2007 was published on 26 November and entered into force on 11 December.

In August, AKOS launched a public consultation on its strategy for the regulation of the electronic communications market for the promotion of regulatory predictability. After assessing comments and suggestions, it published the final version of the strategy on 20 December\(^\text{18}\).

On 5 June, AKOS adopted a General Act on minimal requirements for planning and implementation of access and distribution points, which entered into force on 9 July. The Act provides for:

- minimum requirements for single access points, enabling access-seekers to attach their own cable or equipment without additional civil works and enabling access to the end-users connection point. The requirements apply only where 100 or more network connection points are covered from an access point;
- minimal requirements for distribution points, enabling the reconnection of end-users without additional civil works;
- the possibility to access power lines supply for equipment;
- minimal requirements for in-house wiring providing at least 100 Mbps symmetrical upload and download speeds; and
- regulation of the cost of access to the access point (taking into account only the costs of an efficient operator). This is technology-neutral, limited to passive infrastructure (cables are excluded) and valid for newly constructed or upgraded networks only.

\(^{16}\) [https://www.akos-rs.si/popravki-analize-upostevnega-trga-%C2%B2veleprodajni-visokokakovostni-dostop-na-fiksni-lokaciji-%C2%B2AB-


The function of the single information point (SIP) under Directive 2014/61/EU\textsuperscript{19} is assigned and divided between three competent authorities: (1) the State Geodetic Administration (for Article 4 on transparency concerning physical infrastructure); (2) AKOS (for Article 6(1) on transparency concerning planned civil works); and (3) the Ministry of Public Administration (for Article 7 regarding the permit procedure).

Examples of joint deployment in 2018 include deployment of fibre optics together with the water supply system and construction of the sewage system together with an optical network.

Disputes were initiated as regards access to in-house physical infrastructure (Telemach d.o.o. versus Malteški dvori d.o.o.) and access to existing physical infrastructure (A1 Slovenija d.o.o. versus T-2 d.o.o.). In both cases, a decision has yet to be taken.

Some operators complain of a lack of transparency and incomplete data in the cadastre for existing network infrastructure. Some have called for tougher supervision by AKOS and the Ministry of Public Administration.

In April 2016, AKOS addressed additional decisions to all SMP operators in the relevant call termination markets (markets 3 and 7), changing the price obligations imposed on them.

4. **End-user matters**

In 2018, AKOS received 704 complaints which represents a slight decrease from the previous year. The two main causes of complaint are unjustified charges and payment of the invoice.

The total number of disputes resolved in 2018 was 709. The majority (436) were settled by mediation. AKOS issued a binding decision in 123 cases, rejected 143 complaints due to lack of competence or the fact that the complaint was incomplete and the applicant had not remedied the deficiencies. In seven cases, AKOS referred the complaint to a competent authority.

A consumer association reported an increase in the number of changes to contractual conditions. According to the 2018 Consumer Markets Scoreboard, the Slovenian’s market for internet provision improved in its market performance indicator score between 2015-2017 and stands at 1.2 points above the markets’ respective EU average score. Of the 23 services markets surveyed in both 2015 and 2017, only the ‘TV-subscriptions’ and ‘Mobile telephone services’ markets have failed to record an increase since 2015, and have remained stable instead\textsuperscript{20}.

a. **Net neutrality**

AKOS launched a public consultation on its draft General Act on internet access services. It plans to establish a minimum speed of at least 50\% of the maximum speed on fixed access lines and at least 25\% of the maximum speed for fixed wireless broadband access. Normally available maximum and minimum speeds on fixed wireless broadband access solutions promoted as substitutes for fixed access should be defined in the contract. The contract should contain a defined maximum, normally available and minimum download and upload speed calculated on IP packet payload or higher. Additionally providers of internet access services should ensure that every contract includes a clear and comprehensible explanation about any limitations and remedies available to the consumer in the event of any continuous or regularly reoccurring discrepancy between the actual speed and speed defined by contract. The provider should also offer to the potential customer a testing period in case of a fixed


wireless broadband access solution. Furthermore, the draft foresees a methodology which the user would use to check minimal and normal available speed.

AKOS carried out a formal assessment as to whether A1’s ‘Play offer’ tariff option was a violation of Article 3(3) of the Net Neutrality Regulation21. The offer consisted of zero-rating options for different categories of traffic (chat, social, music, video and mix) for an additional fee (in Slovenia and in compliance with the fair use policy when roaming): €1.99 for A1 Play Chat, €4.99 for A1 Play Social, €4.99 for A1 Play Music, €7.99 for A1 Play Video and €9.99 for A1 Play Mix (Chat+Social+Music+Video). A1 also offered 12 months’ free trial for new subscribers and those who concluded or renewed their subscription for 24 months with one of the valid mobile packages by 31 December. At AKOS’ request, A1 adjusted the offer in such a way that the option complies to fair use policy without mark-ups for all users in all mobile packages (data used in EU/EEA is not deducted from the domestic volume of the mobile services package) and posted a notice on it on its website with a commitment to take into account all complaints in this regard. Consequently AKOS stopped the supervisory procedure.

b. Roaming

AKOS dealt with several disputes regarding non-compliance with the roaming rules; these concerned the lack of a welcome SMS, failure to activate the cut-off limit for data; and failure to inform end-users of charges applicable outside the EEA.

End-users were also confused between roaming and intra-EU communications and were not aware that a call or SMS from Slovenia to elsewhere in the EU or EEA is charged at international rates.

Some operators and AKOS reported fraudulent use of ‘roam like at home’ (RLAH), such as unregulated EU numbers with the higher price. Telekom Slovenije suggested that action should be taken at EU level. Proposals include establishing: (i) numbering ranges in the EU (regulated numbering ranges, premium numbers, free-of-charge numbers); (ii) the process of information exchange on those ranges; and (iii) the process and conditions for the non-payment of the traffic between operators in the event of fraud.

AKOS commissioned a survey among end-users regarding mobile roaming services after 15 June 2017 to obtain information on end-user awareness of the new roaming rules. Some of the key findings were presented in March 201822. For instance, 73 % of the respondents answered that they were aware of the data transmission volumes from which they can benefit free of charge when roaming in the EU/EEA, regardless of their package. 80 % were satisfied with the allocated volumes. 55 % answered that they use mobile data while roaming abroad and 81 % said that, when crossing the border, they were made aware of EU/EEA roaming charges in a comprehensible way.

AKOS reported that no significant price increases of domestic mobile prices had been recorded in 2018.

c. Emergency communications - 112

New rules on the quality of service for the single European emergency number 112 and police number 113 were adopted on 1 March 2018 and entered into force on 31 March23. In fixed networks,

---

23 Pravilnik o kakovosti storitve za enotno evropsko telefonsko številko za klice v sili 112 in številko policije 113: http://www.pisrs.si/Pis.web/pregledPredpisa?id=PRAV13213
caller location data (i.e. street and house number) should be sent to the public safety answering point (PSAP) immediately over dedicated data connection. In the case of a multi-dwelling building, the caller location data also includes the number of the apartment and the floor number (data is based on the national real-estate register). In mobile networks, it consists of the caller’s mobile station international subscriber directory number (MSISDN) and international mobile subscriber identity (IMSI) number, a time stamp and a map of the coverage of the base station from which call is made.

Operators must enable end-users with disabilities to make emergency calls using speech, sign languages and other forms of non-verbal language in order to ensure equivalent access. This solution is based on SMS or WAP112.

According to the Communications Committee 112 implementation report for 2018, 112 calls are answered within 2.8 seconds; 100% of calls are answered within 10 seconds.

d. Universal service

Universal service consists of (1) provision of access at a fixed location and provision of telephone services and access to internet, (2) directory enquiry and directories and (3) public pay phones and other public voice telephony access points. The incumbent is responsible for the provision of access at fixed location and public pay phones, and the provision of directory enquiry and directories is entrusted to the incumbent’s subsidiary, both until 2 December 2019. Preparations for the tender for the designation of a new universal service provider started in February 2019.

In the first half of 2018, in order to include broadband in the obligation for the provision of access at a fixed location and the provision of telephone services from 20 June 2018, AKOS amended the General Acts determining the speed of internet connection, the quality of universal service and the calculation of net cost of the universal service calculation. It originally proposed an obligation to ensure a minimum download speed of 10 Mbps, but after public consultation a speed of 4 Mbps was imposed. The USO broadband obligation is technology-neutral. In practice, this means that a few thousand households are potential beneficiaries. Households need to meet two criteria: not having alternative broadband coverage; and not being in areas where the incumbent is interested in constructing optical networks in the near future.

Each household should apply for broadband universal service to the universal service provider, which will consult AKOS if the conditions are fulfilled. Until now, there have been only two applications, neither of which met the conditions.

e. Institutional issues

In 2018, AKOS adopted new statutes reflecting changes introduced in 2017 in the Electronic communications Act and in the Decision on its establishment: (1) the transfer of the power to appoint its Director from the Council to the competent minister; (2) the empowerment of the Director to propose the annual financial and working plan and the annual report; (3) the Council’s adoption of the annual report and of the annual financial and working plan; (4) the government’s confirmation of the financial plan (working plan submitted to the government for information only); (5) non-interference

by the Council with tasks and concrete procedures for AKOS’s adoption of other General Acts and Decisions; and (6) dismissal of members of the Council by governmental decision upon a proposal from the Council or the government itself.

On 19 October 2018, the Commission was informed of a proposal from the AKOS Council to the Slovenian Government to dismiss the Director of AKOS. The Commission sent a political letter emphasising the importance of the independence of national regulatory agencies (national regulatory authorities) and due process. On 29 November, the government returned the proposal to the AKOS Council.

Operators reported that AKOS and the relevant Ministry were under greater political pressure following the elections and the entry into office of the new Government.

In 2018, AKOS published four General Acts establishing the rules and conditions relating to the allocation of numbers for M2M/IoT services. The general rule, in accordance with the ECA, is that applicants for these numbers must have the status of operator in the country.

In the first quarter of 2018, on the initiative of operators and the number portability provider in Slovenia, AKOS simplified the portability procedure. It also terminated the obligation to give the user prior notice, before the call is set up, when the user calls a number ported to an operator other than that to which it was initially assigned. AKOS continues to monitor the market and in the event of a large number of user complaints would intervene again with stricter regulation.

Slovenia has not yet authorised numbering resources with extraterritorial use in the Union.

5. Conclusion

Slovenia has improved its connectivity ranking by one position. It is encouraged to continue its efforts to improve regulatory conditions, ensure stable competition to improve private investments in network rollout and make the steps necessary to complete the announced 5G spectrum auctioning. The independence of the national regulatory authority is key for regulatory predictability, which is necessary to attract investment in enhanced networks.

---

28 General Acts on:
- the numbering plan (Official Gazette RS nos 62/13, 107/13 and 41/18);
- the content and format of the application for issuing a decision on the assignment of numbering elements (OG nos 62/13 and 72/18);
- the size of numbering blocks for the acquisition of which a project is required (OG nos 62/13 and 72/18); and
- the method of calculating the charges for use of numbering (OG nos 31/13, 21/16, 15/17 and 72/18).

29 These changes were introduced through amendments to the General Act on number portability (OG nos 62/13 and 23/18).