



Czech Telecommunication Office

October 2021

Telegraphically

Security of e-mail boxes according to the National Cyber and Information Security Agency

The National Cyber and Information Security Agency [issued a measure](#), according to which administrators and operators of information systems, which are crucial for the functioning of the state and the security of its citizens, will have to secure their e-mail boxes. The measure will apply to selected ministries, authorities and regions, but may also affect selected private sector entities. Of course, the security can also serve those who do not fall under CTU's regulation but want to keep their mail safe.

Amendment to the Electric Communications Act in the Collection of Laws

On 18 October, an amendment to the Electronic Communications Act was published as Act No. [374/2021 Coll.](#) in [Volume 166 of the Collection of Laws](#), on the content of which we have reported on in several previous Monitoring Reports. It strengthens consumer protection, makes it easier to change Internet access providers, strengthens privacy protection, provides more conceptual support for people with disabilities, and makes it easier to deploy electronic communications networks. Most parts of the Act come into effect on 1 January 2022.

CTU took over the patronage of the ECSC 2021 competition

At the turn of September and October, another annual competition for young talents in the field of cybersecurity, [European Cyber Security Challenge 2021](#), took place. It aims to foster cybersecurity talent in Europe and harness their potential in public organizations, private companies and science and research. CTU has long supported the security of public electronic communications networks, and in cooperation with AFCEA Czech Republic, we were pleased to take over the patronage of the competition.

Last chance to comment on proposed wholesale mobile market regulation

At the Discussion Site, CTU published [draft analysis of the wholesale market of access to mobile services \(Market No. 3\)](#). It stated there that the market needs to be regulated, inter alia because the wholesale price of mobile data is consistently higher than the retail price, making it impossible for virtual operators to sustainably and profitably replicate the offers of network operators and offer services with higher volumes of mobile data.

The [ongoing public consultation](#) in which anyone can comment on the draft will close on 25 October 2021. The Czech Telecommunication Office invites the professional public to do so, whatever their position, opinion, comment, suggestion or proposal may be. Whether the regulation actually takes place will depend on the European Commission, which has traditionally been interested in the reactions and opinions of market participants and has taken them into account. If the conclusions of the analysis are successfully notified to the European Commission, regulation of the trio of network operators (MNOs) could result in improved competition and ultimately lower mobile data prices for consumers.

The analysis concludes that Czech virtual operators are able to offer little mobile data at present. The structure of MVNOs' mobile service products consists of up to 77% mobile voice and SMS services with ad hoc mobile data, and only 23% of MVNOs' products also offer flat-rate data services, while only 17% products of MVNOs' mobile services offer the possibility to order additional data packages once the included data is used up. In addition, only 9 products contain more than 10GB of data per month and only 2 products contain an unlimited data package. These include 7 offers of mobile tariffs with flat-rate data and 2 mobile internet products in the price range of CZK 700 to CZK 1,000.

The inferior mobile data offer of virtual operators is related to the wholesale and retail price of mobile data. A differentiating aspect between the offers of MNOs and MVNOs is the volume of data. The price per MB of transferred data is on average 30% higher in the wholesale market compared to the price generated by the retail market. In practice, this means that, in principle, virtual operators are unable to provide data services while achieving a positive operating result from economic activity for each unit of service, as the analysis indicates. In other words, virtual operators cannot compete well enough with network operators.

The lack of effective competition due to the existence of joint significant market power of all three MNOs (O2, T-Mobile, Vodafone) creates a barrier to entry into the wholesale market and hinders its development, thus squeezing the existing virtual operators out of the retail market to the detriment of effective competition and thus to the detriment of end users (in particular consumers). The situation in the wholesale market must therefore be addressed by appropriate remedies imposed on all three network operators.

Electronic data collection: Data collection workshop

On 1 November 2021 at 10:00 a.m., a workshop for the professional public on the changes to the regular data collection for the year 2021 in the ART form - Services provided in electronic communications through the Electronic Data Collection (EDC) system will be held at CTU premises.

The workshop will also present upcoming changes in the area of regular data collection resulting from the transposition amendment to the Electronic Communications Act. This is a decree on the technical and organizational conditions for the use of the software application (ESD) and the electronic form for data collection in the field of electronic communications, which will be available for comments during the inter-ministerial commenting procedure. CTU will also open a discussion on the upcoming changes in the geographic data collection on Internet access services and networks for the year 2022 according to the new Section 115a of the Electronic Communications Act, or according to Article 22 of the European Electronic Communications Code and the related BEREC Mapping Guidelines ([BoR \(20\) 42](#)).

The launch of NetTest was successful

The [NetTest](#) measurement tool has completed its first month of operation and the numbers show that there is interest in measuring with this tool. From the launch on 17 September to 17 October, a total of 172,841 tests were performed, from 84,838 clients and 68,827 IP addresses. The total number of certified measurements was 7,657. The total number of retests (in the loop) reached 14 680.

The launch of the tool was without any difficulties in terms of operation, load and measurement. Test performance requests were serviced immediately without any delays. Hardware utilization was low, with the highest CPU utilization of the measuring server being 25% at the initial “peak”. Connectivity capacity was also sufficient.

The reactions of the professional public to the tool itself, the accuracy and reliability of the measurements are positive. Minor difficulties that arose during the first month were resolved individually and promptly by CTU staff (e.g. they concerned the identification of the autonomous system number based on the IP address). Shortly after the launch, IPv6 support was added and today it is possible to use IPv6 to both access the tool website and perform the actual measurement.

We also handle enquiries that come to the e-mail nettest@ctu.cz. Inaccuracies, if any, of the measured values are overwhelmingly related to the user equipment (CPU load, low-performance hardware).

The launch of NetTest is accompanied by an information campaign with actor Otakar Brousek Jr. You can watch a longer video on our YouTube channel [here](#). A shorter TV spot is then broadcast on Czech Television and can be found at the same place [here](#). Additional information, including sample forms or a contact phone numbers, is available on the CTU website: ctu.cz/plattezaskutecnourychlost.

Checked by CTU in September...

...compliance with terms and conditions of General Authorization No. [VO-R/12/03.2021-3](#) for the use of radio frequencies and for the operation of equipment for broadband data transmission in the bands 2.4 GHz to 71 GHz

CTU carried out a total of 31 inspections. Defects were identified in 24 cases, consisting in harmful interference with priority radiocommunications service stations (meteorological radar), use of indoor frequencies outside a building and failure to comply with other terms of the general authorization, which were resolved by a call to rectify the identified deficiencies and which will subsequently be addressed in administrative proceedings.

... compliance to the conditions of an individual licence for the use of radio frequencies

12 inspections of compliance with the conditions of an individual licence for the use of radio frequencies were carried out. In three cases, a violation of the conditions of the individual licence was detected and the operators will be subject to administrative proceedings.

...the use of radio frequencies without authorization

CTU carried out 5 inspections focusing on the use of frequencies without authorization. All of the inspections revealed the use of frequencies without individual licence; the cases were referred for resolution in administrative proceedings.

... sources of interference with the operation of electronic communications equipment and networks, the provision of electronic communications services or the operation of radiocommunications services

In September, CTU closed 23 cases of interference with GSM and LTE public mobile communication networks (in 6 cases an active element of TV signal reception was the source of interference), 4 cases of interference with radio and satellite reception and 10 cases of interference with various devices (PCO receiver, amateur station, short-range devices, etc.).

... sources of interference with TV reception

In accordance with [Section 100\(5\) of the Electronic Communications Act](#), CTU informs that in September it closed a total of 53 cases of interference with television reception. The investigation of complaints about poor TV reception revealed that in 33 cases the defect was in the viewer's equipment (most often a technical fault of the receiving antenna), in 3 cases it was due to reception of signal in a non-covered area, in 7 cases the interference stopped or occurred sporadically. Five interference reports were cancelled by their submitters during investigation of the interference. In five cases, a source of interference was detected, and in three cases a mobile operator's base station was the source of interference (see below).

... pilot operation of LTE base stations in the 800 MHz band

As of 30 September 2021, 262 base stations were in pilot operation, and 16 828 stations were in permanent operation. In September, an LTE base station was not identified as a source of TV signal interference in any case.

... pilot operation of 5G/LTE base stations in the 700 MHz band

On 1 September 2021, T-Mobile started the launch of its 5G network in the 700 MHz band. As of 30 September 2021, 243 base stations were in pilot operation. In September, a 5G/LTE base station was identified as a source of TV signal interference in three cases. CTU has started to inform the citizens of the towns and municipalities in whose localities the base stations in the 700 MHz band are being launched on how they should proceed if their reception of terrestrial television signal deteriorates; a total of 406 towns and municipalities were contacted. Citizens can find more information on the issue of TV reception interference on the CTU website: "[Interference with terrestrial TV reception](#)".

... network security and integrity

CTU checked compliance with [Act No. 127/2005 Coll., on electronic communications](#), focusing on the areas of protection of traffic and location data and confidentiality of communications under [Section 88 of the Act](#), as well as the fulfilment of the obligation in the area of network security and integrity and the provision of services in emergencies mainly arising from [Section 99 of the Act](#). An inspection was carried out in ČD – Telematika a.s.

2,003 – the number of administrative proceedings initiated in September concerning subscriber disputes between the person carrying out the communication activity and the subscriber. These are the disputes over payments and objections to the settlement of a complaint about the billing of the price or the provided publicly available electronic communications service.

3,604 - the number of decisions issued in September on the matter, of which 3,592 decisions concerned a dispute over payment (payment of the price for services).

Heavy fines for abuse of emergency lines

In the Czech Republic, the following numbers are defined by [a decree](#) for emergency calls: 150 - Fire Rescue Service of the Czech Republic, 155 - Ambulance, 158 - Police of the Czech Republic, 156 - Municipal Police, 112 - Single European Emergency Number. These numbers must be made available to save lives, health or property and there is a guarantee of free and non-stop access to these numbers. However, it is important that this access is not abused.

Unnecessary and malicious calls overload emergency lines, potentially endangering the health and safety of other citizens. Calls that have no place on the emergency lines include calls to wrong numbers, questions and complaints outside the framework of the Integrated Rescue System, nuisance calls from children or people under the influence of alcohol or addictive substances. These are non-emergency calls.

The last and most serious case is the deliberate misuse of the emergency line, when a fictitious event is reported and the Integrated Rescue System makes false calls.

People should be aware that tracing and identifying the caller is now a relatively easy matter. The advanced technology of emergency call lines makes it possible not only to find out the number of the caller, but also almost exactly where the person is calling from. The caller can even be identified if the call was made from a mobile phone without a SIM card. In addition, all calls are recorded.

At the same time, the Electronic Communications Act makes it possible to impose significant penalties for abuse of an emergency number. Under the legislation, a fine of up to CZK 200,000 may be imposed on an individual who makes malicious calls to an emergency number. In case of repeated abuse, the fine for the administrative offence is doubled. So far in 2021, CTU has conducted almost 200 such administrative proceedings, with the highest fine imposed of CZK 50,000.

Radio spectrum management

GENERAL AUTHORIZATIONS

On 30 September, CTU launched a public consultation [on draft general authorization VO-R/12/xx.2021-y](#) for the use of radio frequencies and for the operation of equipment for broadband data transmission in the bands 2.4 GHz to 71 GHz. The main reason for the update is to enable the use of radio frequencies by stations for broadband data transmission in the frequency bands 5945-6425 MHz in accordance with the decision of the European Commission. Furthermore, based on the comments and observations of the CTU Inspection Department, it is proposed to refine the conditions for fixed outdoor stations.

Universal service - discounted prices for people with disabilities

Closure of the public consultation and invitation to tender

On 4 October 2021, the public consultation on the plan to allow persons with special social needs according to Sections 44 and 45 to choose prices or price plans that differ from the price plans provided under normal commercial terms and conditions such that these persons have access to and are able to use partial services and a publicly available telephone service pursuant to Section 38(3) of the Electronic Communications Act was closed.

No comments were submitted in this public consultation and therefore CTU invite to tender for the provider of this universal service obligation in the [Telecommunication Bulletin](#) on 7 October 2021. Based on the imposed obligation, people with disabilities will be able to benefit from a price discount of CZK 200 per month for publicly available telephone service.

Telecommunications regulation in the EU

European Commission

On 15 September, following the traditional “State of the Union” address of the President of the European Commission, draft Decision of the European Parliament and of the Council called 2030 Policy Programme “[Path to the Digital Decade](#)” was [published](#). This Decision, according to the European Commission’s vision, should firmly enshrine the EU 2030 digitalization targets as already outlined in the so-called [Digital Compass](#). The draft also includes an explanatory [staff working document](#).

On 23 September, European Commission pursued [legal action](#) towards Member States that have still not transposed the Directive 2018/1972/EU – [European Electronic Communications Code](#). European Commission calls on Member States to fully transpose this Directive into national law without undue delay and inform the Commission. The Directive should be transposed by 21 December 2020. The Czech Republic notified great number of measures during the summer, in view of partially transposing the Directive into national law. Subsequently, the legislation process was successfully completed in the Czech Republic.

Official Journal of the EU

On 30 September, [Commission Implementing Decision \(EU\)2021/1730](#) on the harmonised use of the paired frequency bands 874,4-880,0 MHz and 919,4-925,0 MHz and of the unpaired frequency band 1 900-1 910 MHz for Railway Mobile Radio, was published.

BEREC

The [48th BEREC Plenary meeting](#) took place on 30 September and 1 October 2021. The BEREC leadership team for the next term was elected during the meeting. Konstantinos Masselos (EETT, Greece) has become the Chair for 2023.

The following documents were approved for publication:

[BoR \(21\) 115](#) 27th BEREC International Roaming Benchmark Data Report - 1 October 2020 to 31 March 2021

[BoR \(21\) 116](#) 2nd BEREC Benchmark Data Report on Intra-EU communications

[BoR \(21\) 118](#) Report on how to handle third-party payment charges on mobile phone bills, and Report on the outcome of the Public consultation

[BoR \(21\) 119](#) BEREC Report on the implementation of the Open Internet Regulation

[BoR \(21\) 127](#) BEREC Report on harmonised definitions for indicators regarding over-the-top services, relevant to electronic communications markets, and Report on the outcome of the Public consultation

[BoR \(21\) 131](#) BEREC Report on the ex ante regulation of digital gatekeepers, and Report on the outcome of the Public consultation

[BoR \(21\) 135](#) BEREC's medium-term Strategy for international cooperation (for publication)

[BoR \(21\) 137](#) BEREC's medium-term Strategy for relations with other institutions (for publication)

[BoR \(21\) 138](#) Study on post-Covid measures to close the digital divide

Other documents approved for [public consultation](#):

[BoR \(21\) 129](#) Draft Report on regulatory treatment for fixed and mobile backhaul

[BoR \(21\) 133](#) Draft BEREC Work Programme 2022

On 29 October, BEREC hosted [Four-lateral Summit](#) ((BEREC, EaPeReg, REGULATEL a EMERG) in Dubrovnik to strengthen regional cooperation. The summit delegates agreed that continual cooperation and sharing of good practices among regulators are key factors to cope with new challenges arising from the connectivity in the digital world .

Open Internet

On 2 September 2021, the Court of Justice of the European Union (CJEU) adopted judgements [C 34/20](#), [C-854/19](#) a [C-5/20](#) concerning the infringement of the Regulation of the European Parliament and of the Council (EU) [2015/2120](#), specifically Article 3 – Safeguarding of open internet access. Currently, BEREC is assessing these judgements and their implications on existing regulatory practice. Based on this assessment BEREC Guidelines on the implementation of the Open Internet Regulation is expected to be reviewed in parts concerning this issue.

Cybersecurity

[The European Cyber Security Month \(ECSM\)](#) is the EU's annual cybersecurity awareness campaign that takes place each October across Europe. The aim is to raise awareness of cybersecurity threats and promote cyber security among citizens and organisations through education and sharing of good practices. The annual cybersecurity awareness campaign is coordinated by the European Union Agency for Cybersecurity (ENISA) and is supported by the European Commission, Europol, the European Central Bank, EU Member States, European Free Trade Association (EFTA) countries and more than 300 partners from the public and private sector.

From 28 September to 1 October 2021, the next edition of ECSC ([European Cyber Security Challenge](#)), which is the European final of national competitions focused on ethical hacking and organized by the [Czech branch of the AFCEA](#), took place in Prague as a part of the activities of the European Cyber Security Month ([ECSM](#)). The main professional guarantor of the competition is the National Cyber and Information Security Agency ([NÚKIB](#)). The ECSC aims at identifying young cyber security talent across Europe as well as rising awareness of the importance of cyber security in public space. Top European teams of young talent aged 15 – 25 have measured their strengths in penetration test, cryptography,

reverse engineering, forensic analysis and other demanding disciplines. ECSC has been organised since 2014 by one of the EU Member States under the auspices of the European Union Agency for Cybersecurity ([ENISA](#)).

EU Calendar

25. 10.	The end of public consultation on the analysis of wholesale market of access to mobile services
28. 10.	BEREC Stakeholder Forum , Brussels
1. 11.	CTU workshop on the changes to the regular data collection (ESD system)
8. 11.	CTU workshop on the new systemisation of activities that will be the subject of business notification in electronic communications, and requirements of the notification process