



## Action Plan 2.0

to implement non-subsidy measures to support the planning and construction of electronic communications networks

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## 1. Introduction

To large extent, the situation in the development and modernisation of the high-speed electronic communications networks in the Czech Republic does not meet the current development trends related to an increased need for a reliable and safe high-speed internet connection for citizens and businesses. An increasing number of digitalised business and sectors of Industry 4.0 with a need for the development of new applications and business models to ensure competitiveness of production, distribution and sale of goods and new services requires high-speed connection through high-capacity networks. Such connections will facilitate the use of innovative application-based intermodal transportation for traffic nodes. At the same time, both public administration and socio-economic entities need high-speed connectivity to provide services to citizens and businesses more effectively.

The envisaged new services will use both the backbone and access networks and also the 5G network. It is assumed that industrial zones, road corridors and railway line will be key areas for the first phase of the new applications. Among other, the viability of these new applications will require an availability of the 5G-based services throughout the Czech Republic.

The accomplishment of the objectives above and, consequently, and continuous improvement of the options and quality of internet connectivity are seen as a necessary premise for a healthy development of digital society and, in this context, sustainable growth of economy, as well. The existence of good connections has significant positive effects for competitiveness, innovation, as well as social and territorial cohesion and strengthening of principles of civil society. With many synergies across virtually each and every area of human activity, it will then help to continually improve the quality of life of citizens and business development.

The above is also closely related to the Program Statement of the Government of the Czech Republic and to the Digital Czech Republic strategic document addressing, among other, promotion of digital infrastructure. At the same time, the 2030 Innovation Strategy - Czech Republic - The Country for the Future also supports dynamic development of modern technologies, which is not feasible without a reliable high-speed internet connection.

However, objective-defining strategic documents cannot ensure their accomplishment without the assistance of the business sector, as the main investor of the development of electronic communications networks, as well as without municipalities, towns and districts, the cooperation of which is essential to implement such a change. In reality, specific obstacles slowing down, and in some cases, making it virtually impossible to develop electronic communications networks and services have been identified regarding the development of electronic communications networks and services, . As a result, despite the developed market environment, the development of electronic communications networks falls behind in some areas and is not profitable in certain parts of the territory for economic reasons.

By its Resolution No. 350 of 10 May 2017, the Government approved the “Action Plan” to implement non-subsidy measures to support the planning and construction of electronic communications networks. The objectives of this document have been gradually achieved. As a result of further developments and changes in the legislation, a number of other objectives have been exceeded, while

new barriers have been identified. This is why the original Action Plan has been updated. By its Resolution No. 694 of 24 October 2018, the Government discussed the report regarding the implementation of the Action Plan.

The aim of the submitted document entitled Action Plan 2.0 to implement non-subsidy measures to support the planning and development of electronic communications networks (hereinafter referred to as the "Action Plan 2.0") is to identify the most pressing issues and barriers to the development and operation of electronic communications networks that are currently the most limiting factors to investments in such networks. At the same time, the document proposes measures that should lead to the elimination of identified problems in the field of planning and development of electronic communications networks; it is also necessary to proceed in accordance with the public aid rules and in the case a cumulative fulfilment of defining features of public aid is identified, to apply relevant legal regulations in the given area.

The issue was discussed in detail with the Czech Telecommunication Office (with regard to its scope of competence) and with professional associations or associations covering entrepreneurs in electronic communications.

The results of the round table held on 29 May 2019 that was also attended by representatives of relevant ministries and public administration authorities, the Association of Regions of the Czech Republic, the Association of Towns and Municipalities of the Czech Republic, the Association of Local Authorities of the Czech Republic and representatives of associations of entrepreneurs active in electronic communications have also been included in Action Plan 2.0.

The Ministry of industry and Trade will regularly inform the Government of the Czech Republic of any progress in the implementation of measures set out in Action Plan 2.0, with an annual frequency, always by 30 June of each calendar year.

## **2. Priority Measures**

In order to support the development of public electronic communications networks in the Czech Republic, it would be appropriate to implement a number of measures aimed at removing existing obstacles and barriers restricting or negatively affecting the development.

Some obstacles, or barriers respectively, are of systemic nature, and their resolution will necessarily require a more detailed analysis of the options and potential impact of each of the alternatives in the framework of inter-ministerial cooperation, while other obstacles are rather clearly defined and as a result, specific remedies can be applied.

In this context, two main areas have been identified (see chapters 2.1 and 2.2 below), the nature of which can now be seen as the most important to facilitate; acceleration and making the development of electronic communications networks less expensive.

### **2.1. The use of newly established or significantly renovated line structures for the development of electronic communications networks**

#### **Problem Definition**

When electronic communications networks are being developed, unnecessary investment costs and other obstacles usually arise, often in places where other line structures (e.g. road construction or power lines, sewerage, etc.) are or will be built or significantly renovated. A significant part of the costs could be reduced if the needs of electronic communications networks were taken into account in the development or major renovations of the said line structures by installing appropriate physical infrastructure in the developed or renovated line structure (including but not limited to shafts, collectors or cable ducts).

By Act No. 194/2017 Coll., on measures to reduce the cost of development of high-speed electronic communications networks, adopted in the transposition of The European Parliament and Council Directive 2014/61/EU<sup>1</sup>, sharing of physical infrastructure for the purposes of the development of electronic communications networks is possible. At the same time, it seems appropriate to develop appropriate infrastructure for electronic communications networks already during the construction or major renovations of line structures.

Due to the fact that this is a general issue, it would be appropriate to address it comprehensively in other relevant laws (e.g. by amending Act No 416/2009 Coll., on speeding up the development of transport, water and energy infrastructure and electronic communications infrastructure, and Act No 13/97 Coll., on public roads). The current legislation defined by Act No 194/2017 Coll. cannot cover this issue in its complexity.

In addition, Section 10 of Act No 194/2017 Coll. lays down the obligation to coordinate construction works in the development of high-speed electronic communications networks. This obligation is limited to constructions works financed as a whole or in part from public funds and only in cases where

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<sup>1</sup> The European Parliament and Council Directive 2014/61/EU of 15 May 2014 on measures to reduce the cost of development of high-speed electronic communications networks

the so-called obligated person is the developer<sup>2</sup>. This will both reduce the number of situations when coordination can be requested, as well as the number of persons who are obliged to comply with requests for coordination.

The hands-on experience of authorized persons shows that, primarily for time reasons, it is not realistic for the person requesting the coordination, from the moment when he becomes aware of the intended development of the new structure from the obligated person, to make his own spatial planning in the given area and subsequently, within the legal period, to comply with any and all professional and administrative obligations arising from the building regulations and standards to carry out e.g. the potential co-placement.

It is clear from the above that it is desirable to analyse the introduction of the new obligation of the developer with regard to the development or major renovation of line structures, particularly roads, to create appropriate means in line structures for the placement of public communications network elements (e.g. by creating collectors, ducts, trunks, etc.), while taking into account the principle of efficiency and the necessary scope. Such means for the placement of public communications network elements would be made available by the line structure owner to operators of electronic communications networks. In general, any marginal costs involved in the construction or major renovation of line structures would allow the application of Act No. 194/2017 Coll. and ultimately, would promote the development of high-speed electronic communications networks that are the backbone of digital economy and make space for new business models, modern technologies, innovative services and applications serving the society as a whole.

### **Proposed Measures**

#### Measure A

The drafting of the amendment to Act No 416/2009 Coll., to set an obligation of developers of any and all newly developed or significantly renovated line structures to allow co-placement of passive infrastructure elements in such line structures.

#### Measure B

Identification of relevant technical standards and other similar standards governing directly and indirectly the placement of infrastructure elements of electronic communications networks in the space of line structures and their revision to allow the placement of passive infrastructure of electronic communications networks during the development of other line structures, including the revision of requirements for the termination of passive elements of electronic communications networks (e.g. ducts) and revision of requirements for the placement of active elements of electronic communications networks.

#### Measure C

Analysis of an option to place the infrastructure elements of electronic communications networks in line structures, particularly in roads (for motorways this has already been addressed in a different way), thereby speeding up the development of such networks, or in local roads and proposing amendments to relevant legislation where necessary. The aim is to adequately allow for any potential subsequent

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<sup>2</sup> Please see Section 2 (c) of Act No 194/2017 Coll.

development of infrastructure of electronic communications networks into the existing road infrastructure (e.g. road side). At the same time, responsibilities and prioritization of any repairs or renovations of road infrastructure should they impact the infrastructure elements of electronic communications networks need to be specified.

**Responsibility**

Responsible party: Ministry of Industry and Trade

Cooperation: Ministry of Transport, Road and Motorway Directorate, Railway Infrastructure Administration  
Ministry of Regional Development  
Ministry of the Interior  
Czech Office for Standards, Metrology and Testing  
Czech Standardization Agency

**Planning horizon**

Measure A

By 31 December 2020

Measure B, Measure C

By 30 June 2020

## **2.2. A substantial reduction of payments for establishing easements for the placement of public communications networks on land lots of state and regional authorities**

### **Problem Definition**

In order to place elements of public communications networks in land plot of another entities, it is generally necessary to establish an easement for the benefit of the developer; with the owner being entitled to a one-off compensation for the establishment of such easement. The necessary costs related to the establishment of the easement consisting in payments to owner will often make up more than 25 % of the total costs for the development of electronic communications network and in some instances, such costs would exceed 50 % of the total costs. It is estimated that the state and the state-established organizations only own about 5 to 10% of all land where easements for electronic communications networks are established; payments for the easements for the state and the state-established organization account for some CZK 50-70 million per year; largest payments for the establishment of easements are paid to local authorities.

At the same time, corruption risk where non-market benefits are sought for the establishment of easements in exchange compensations in legitimate amounts may be involved.

Act No 127/2005 Coll., on electronic communications, stipulates that the maximum amount of one-off compensations for the establishment of easements is to be determined in accordance with Act No 151/1997 Coll., on the asset valuation, which lays down a general principle in Section 16 (b) that easements shall be valued in a revenue-based manner from the annual benefit, taking into account the degree of easement restriction at the fair price, while also stipulating the specifics and more details of this calculation method. This valuation method is inappropriate in some respects for the development of public communications networks, as it does not reflect the public interest in such development.

In view of the public interest in the development of public communications networks and long-term positive effects of the implementation of such networks, there is a reasonable legitimate reason to require compensations for the establishment of easements where such easements are established on lands belonging to the state and entities using the property of the state for economic activities, as well as on the land of self-governing territorial units. In this regard, the collection of one-off compensations in many cases operates against the declared public interest thereby reducing the motivation to invest in the development of electronic communications networks, particularly in scarcely populated areas.

### **Proposed Measures**

#### **Measure A**

An analysis of an option to set a one-off compensation for easements in the amount that will not significantly financially affect the investments in public communications networks (including, where appropriate, an option to waive one-off compensations for reasons of public interest) in cases of the establishment of easements on the state land, for entities using the state property for economic activities and on land of self-governing territorial units and propose any legislative changes. To analyse and evaluate the option of setting a one-off compensation for easements, an inter-ministerial working group consisting of representatives of the Ministry of Finance, the Ministry of Industry and Trade, the



Association of Towns and Municipalities, selected self-governing authorities and representatives of relevant legal bodies or professional associations will be set up.

Measure B

A wider awareness among self-governing authorities of the option to set a one-off compensation in a symbolic amount for lands of self-governing territorial units.

**Responsibility**

Responsible party: Ministry of Industry and Trade

Cooperation: Ministry of Finance (Measure A)

Ministry of the Interior

Association of Regions of the Czech Republic

Association of Towns and Municipalities of the Czech Republic

Association of Local Authorities of the Czech Republic

**Planning horizon**

Measure A

By 31 December 2020

Measure B

Continuously

### **3. Identification of additional obstacles for the development of electronic communications networks and proposals for solution**

Chapter 3 specifies a number of other measures to remove identified obstacles and barriers restricting the constructions of specific structures, such as electronic communications networks or adversely affecting their development. The said measures complement the solutions in primary areas listed in Chapter 2 hereof.

#### **3.1. Information regarding additional infrastructure that can be used for sharing**

##### **Problem Identification**

In Section 4 of Act No 194/2017, on measures to reduce the cost of development of high-speed electronic communications networks, the right of authorized persons to request access to the existing physical infrastructure for the purposes of implementation of the high-speed electronic communications network and the right to receive data on physical infrastructure under Section 6 are regulated. The state and self-governing authorities own or operate non-public communications networks that can be used for the development of electronic communications services. The access to such means, unless this puts the state security or integrity as such at risk, may significantly facilitate the development of electronic communications networks, particularly in urban agglomerations.

In addition, the state as well as self-governing authorities, own a significant amount of infrastructure, such as urban collectors, heat lines, sewerage, urban public transport pylons that may not fall under Act No. 194/2017 Coll. However, when exercising their rights, entrepreneurs active in the field of electronic communications lack tools to obtain information on the presence of such infrastructure in an effective and expedient manner.

The Czech Republic does not yet have a single digital system providing information on the placement of non-telecommunications infrastructure and placement of physical infrastructure of non-public communications networks (all owned by the state and self-governing authorities), but only an incomplete and insufficiently coordinated system of several regional digital maps functioning on voluntary contract basis. At present, the issue of digital technical maps is coordinated by the Ministry of Regional Development. From the perspective of investors of such funds, state and self-governing units, the situation is far from optimal, as it prevents the simplification and digitization of acts related to spatial planning, planning and construction activities and obtaining information on its availability.

Increased awareness of the availability of the infrastructure suitable for sharing can be used for the development of public communications networks. At the same time, there is no common methodology for such sharing.

There is also no analysis of the reasons why the state, persons using the state property for economic activities or self-governing authorities fail to use their non-telecommunications infrastructure and physical infrastructure of non-public networks to provide public electronic communications services, whether this is prevented by legislative, technical, economic, security or other obstacles. It is

understood that critical infrastructure under Act No. 240/2000, on crisis management, must be taken into account.

### **Proposed Measures**

#### Measure A

Creating digital technical maps including information on the placement of physical infrastructure within the meaning of the Bill No. 525.

#### Measure B

Preparing a common methodology for the use and sharing of non-public communications networks of the state and self-governing authorities by private entities.

#### Measure C

Analysis of any obstacles preventing the public use of networks of electronic communications of the state, persons using the state property for economic activities and, self-governing authorities, i.e. providing publicly available electronic communications services.

### **Responsibility**

Responsible party: Ministry of the Interior (Measure A – coordination by the Ministry of Regional Development, Measure B)  
Ministry of Industry and Trade (Measure C)

Cooperation: Ministry of Regional Development  
Ministry of Finance  
Czech Telecommunication Office  
Ministry of Industry and Trade  
Czech Office for Surveying, Mapping and Cadastre  
Association of Regions of the Czech Republic  
Association of Towns and Municipalities of the Czech Republic  
Association of Local Authorities of the Czech Republic

### **Planning horizon**

#### Measure A

In line with the implementation schedule of digital technical maps

#### Measure B, Measure C

By 30 June 2021

### **3.2. Establishment of regional databases of investment plans regarding line structures in urban and non-urban areas within the meaning of Act No. 194/2017 Coll.**

#### **Problem Identification**

In Section 10 of Act No. 194/2017, on measures to reduce the costs of development of high-speed electronic communications networks, an obligation to allow for the coordination of construction works to implement a high-speed electronic communications network is laid down in certain instances. According to the provisions of Section 11(2) of the Act, upon request, the obligated person must provide information on any planned or carried out constructions works financed from public funds related to the physical infrastructure for which the authorization was granted. For practical use in the development of electronic communications networks, the regulation is insufficient, as due to a high number of municipalities and entities building passive infrastructure from public funds, the information on any planned development can only be obtained randomly or while incurring excessive costs. The investors into the development of electronic communications networks lack an effective tool to obtain aggregated information to be able to better plan and coordinate their investment development.

#### **Proposed Measures**

##### Measure A

To verify an option of creating a database of plans of investments into line structures in both urban and non-urban areas that would be maintained by regional authorities and that will include any required details of the planned developments and renovations from public funds. Such transparent sharing of plans will allow to make investment plans sufficiently in advance.

##### Measure B

Increased awareness among self-governing authorities of the creation of databases of planned developments and renovation works from public funds to coordinate construction works effectively.

#### **Responsibility**

Responsible party: Ministry of Industry and Trade

Cooperation: Ministry of the Interior

Czech Telecommunication Office

Association of Regions of the Czech Republic

Association of Towns and Municipalities of the Czech Republic

Association of Local Authorities of the Czech Republic

#### **Planning horizon**

##### Measure A

By 31 December 2020

##### Measure B

Continuously

### **3.3. Sharing of internal communications lines in residential buildings with multiple apartments**

#### **Problem Identification**

The placement of internal communications lines and conditions for sharing the electronic communications infrastructure inside residential buildings with multiple apartments was regulated in Act No. 194/2017 Coll., on measures to reduce the cost of development of high-speed electronic communications networks. However, the technical implementation of sharing of electronic communications networks inside such buildings have not yet been adequately reflected in the relevant technical standards, thereby preventing its proper application. To increase awareness of the relevant regulation into the application practice, we must also increase awareness among the actors concerned.

By removing the identified problem, the impacts on third-party property (i.e. owners of residential buildings with multiple apartments) that would otherwise arise from the duplication of physical infrastructure inside such buildings in the context of the upcoming development of electronic communications will be minimized.

#### **Proposed Measures**

##### Measure A

To verify an option to introduce any necessary standard-setting documents into the ČSN system of standards that will address the placement of internal communications lines and conditions of any potential sharing of physical infrastructure in residential house with multiple apartments from technical point-of-view.

##### Measure B

To increase awareness among designers who are members of the Czech Chamber of Authorized Engineers and Engineers Active in the Construction and Czech Chamber of Architects and among developers of the conditions for the placement of electronic communications lines inside residential buildings with multiple apartments and of the benefits of sharing such electronic communications lines.

#### **Responsibility**

Responsible party: Ministry of Industry and Trade

Cooperation: Czech Office for Standards, Metrology and Testing  
Czech Standardization Agency

#### **Planning horizon**

##### Measure A

By 30 June 2020

##### Measure B

Continuously



### **3.4. Placement of elements of electronic communications on unsurfaced areas alongside roads**

#### **Problem Identification**

At present, elements of the public communications network are primarily placed under roads, both in urban and non-urban areas. In terms of the costs of development, such approach is not effective, as the placement of elements of public communications networks in road infrastructures is in some cases up to four times more expensive than the use of unsurfaced areas alongside roads. In addition, the placement of network elements in road infrastructures also poses an increased burden on citizens of municipalities as a result of the necessary restriction of the use of road infrastructures during the development of public communications networks.

In view of this, some municipalities already have already supported the placement of elements of public communications networks on unsurfaced areas alongside roads. However, in terms of the entire territory of the state, such approach is rather exceptional, and many municipalities (such as Prague) forbid the placement of utilities on unsurfaced areas alongside roads. Therefore, an appropriate solution would be to allow the placement of the public communications network in the municipality's built-up areas alongside roads.

#### **Proposed Measures**

##### Measure A

To make an analysis of benefits of the placement of elements of electronic communications network on unsurfaced areas alongside roads.

##### Measure B

To start discussions with representatives of regional, city and municipal self-governing authorities and electronic communications network operators on the possibility of placement of elements of electronic communications networks on unsurfaced areas alongside roads.

##### Measure C

Discussion of the possibility of amendments of the relevant legislation to lay down conditions for the placement of elements of the public communications network on unsurfaced areas alongside roads.

#### **Responsibility**

Responsible party: Ministry of Industry and Trade

Cooperation: Ministry of Regional Development

Ministry of Transport

Association of Regions of the Czech Republic

Association of Towns and Municipalities of the Czech Republic

Association of Local Authorities of the Czech Republic

#### **Planning horizon**

Measure A, Measure B

By 31 December 2020

Measure C

By 30 June 2021



### **3.5. Option to establish easements for the existing public communications networks under a court decision**

#### **Problem Identification**

There is currently no legal possibility for the owner of a public communications network to claim the establishment of an easement by judicial/administrative means in cases where: where, for any reason, the legal title to use the land for the placement of his elements of the public network is lost and, in the event of a land owner's failure to reach an agreement with the owner of the public communications network, there is an obligation to remove the elements of the public communications network from the parcel concerned, which may disconnect a large number of customers from the provision of publicly available electronic communications services in the given area. The problem has arisen due to a change in legislation when the provision of Section 135 (c) of Act No. 40/1964 Coll., allowing an easement to be established under a court decision if certain conditions were met, was transposed in the amendment of the Civil Code. At the same time, the problem was exacerbated by the settled case-law of courts, which does not allow to expropriate easements for already existing structures. In fact, the only two legal options allowing the owner of the public communications network to acquire the easement to the land where the public communications network is located where the land owner insists on the removal of the network from his land. As a result of the non-existence of such legal option to acquire an easement, public communications network operators are forced to spend millions on network relocations instead of investing such resources into new network developments.

#### **Proposed Measures**

##### Measure A

To analyse the existing legal options under that would maintain and allow for an operation of public communications in cases where the placement of elements of the public communications network on the land of another was permitted; however, for legitimate reasons, the legal title enabling to keep such network elements on the land of another was subsequently lost or cannot be demonstrated. Should it transpire, on the basis of the analysis made, that the existing legal instruments are not sufficient, to consider the need for and the form of any legislative changes.

##### Measure B

By amending Act No. 127/2005 Coll., on electronic communications, to allow the establishment of an easement on land where the structure already legally exists.

#### **Responsibility**

Responsible party: Ministry of Industry and Trade

Cooperation: Ministry of Justice

Ministry of Regional Development

Ministry of Finance

Czech Office for Surveying, Mapping and Cadastre

#### **Planning horizon**

By 31 December 2020

### **3.6. Allowing access to mobile networks on railway and other transport lines and inside rolling stock I**

#### **Problem Identification**

All holders of the 800 MHz frequency allocations shall fulfil sufficiently in advance the obligation to cover all railway corridors by connecting to mobile electronic communications networks, which they accepted in 2013 under the terms of the tender for rights of use of radio frequencies. In spite of this, currently, the mobile signal inside trains is not sufficient, which is given high transmission loss at the surface of carriages. There is also no satisfactory coverage in places where lines and communications pass through the terrain, i.e. in railway, motorway and road tunnels, due to administrative and financial reasons amounts of millions of crowns to tens of millions are requested for the placement of elements of public communications networks, such as. railway corridors (including but not limited to tunnels).

The solution consisting in the deployment of Wi-Fi networks in trains is unsatisfactory to address this problem, as it does not allow to make use of conventional voice services. In addition, the lack of coverage prevents to use the eCall system services and reliable communication with the integrated rescue system.

Czech Railways, a state-owned company, have in the examined the option of vehicle telephone signal repeaters with the result that the investment cost would amount to CZK 500,000 per passenger carriage (and subsequent maintenance should also be considered). In the light of experience abroad, installation of line antenna cables into tunnels and signal coverage of problematic sections in outside areas appear to be a more satisfactory solution. The vast majority of passenger rail carriers from abroad (including high-speed train operators) do not guarantee mobile data signals in their vehicles, only offer WiFi. The low transmission loss can be required from carriers when purchasing new vehicles.

#### **Proposed Measures**

##### Measure A

To make analysis to identify obstacles preventing the placement of elements of public communications networks in tunnel areas on railways, motorways and roads.

##### Measure B

To examine an option of public financing of costs of coverage of train units and railway, motorway and road tunnels from public funds. Cooperation between the private sector and relevant public administration authorities regarding potential support of such projects.

##### Measure C

To start negotiations between mobile operators, carriers, public and private entities active in railway passenger transport regarding the implementation of technologies for signal amplification/conversion (repeaters) into rolling stock. To start negotiations between mobile operators, Road and Motorway Directorate and Railway Infrastructure Administration regarding the coverage of tunnels with the signal of mobile operators.

## Measure D

To propose any legislative changes to address the issue of availability of mobile networks already in the tunnel design documentation preparation for the prepared transport infrastructures structures (tunnels, new motorway and railway sections). During the homologation of new rolling stock intended for the carriage of passengers, to require such technical measures to be designed to allow for good coverage by the mobile network signal inside the carriages.

### **Responsibility**

Responsible party: Ministry of Industry and Trade (Measure A, Measure B)  
Ministry of Transport, Road and Motorway Directorate, Railway Infrastructure  
Administration (Measure C, Measure D)

Cooperation: Czech Telecommunication Office  
Ministry of the Interior

### **Planning horizon**

By 30 June 2021

### **3.7. Adjustment of fees for the use of radio frequencies in the mobile and fixed service**

#### **Problem Identification**

It can be derived from current setting of the calculation of annual fees for the use of radio frequencies that, with an increasing number of frequencies used, the volume of resources of the operators of electronic communication networks paid in the state budget will continue to increase, which could reduce the growing need for investments in such networks.

The mobile network operators are of the opinion that should not the discussions regarding the change of the fee policy for frequencies for terrestrial mobile service be started that the relevant amounts would not be sufficient for the planned investments in the new networks when new technologies and frequencies (5G/WTTX etc.) are a launched to maintain international competitiveness in terms of the quality and advancement of such networks. In particular, the deployment and availability of the 5G technology and the extension of the robustness of existing networks can be crucial for future competitiveness of the number of companies and entire sectors of the Czech economy, as well as for the availability of innovative services for the state and end-users alike.

A similar problem with the level of fees for the use of radio frequencies is signalled by mobile network operators even with regard to the fixed service, where in sparsely populated areas of the Czech Republic, high-capacity optical infrastructure is either completely missing or its use for the provision of the Internet for end customers is unrealistic for economic reasons. To increase the capacity and robustness of existing networks, it is therefore necessary to strengthen the capabilities of current wireless connections in the fixed service, which are capable of ensuring a high level of Internet connectivity using modern technologies. In rural areas of the Czech Republic, the vast majority of municipalities fall into the category with a population of less than 500 inhabitants, resulting in the low market potential of the operator in the given area due to the small number of connected households. In view of the low economic profitability of network operations in sparsely populated areas, on the one hand, and the state-declared interest in covering such areas with high-quality internet networks, it is necessary to discuss an appropriate incentive specific to the coverage of such peripheral areas.

For such a discussion, operators of public radio communications network of mobile and fixed services will prepare a detailed economic assessment, including any potential benefits for the development of new networks and services for users as well as with regard to the reduction of certain fees effective from 1 September 2018, through the amendment to the Government Decree No. 154/2005 Coll.

#### **Proposed Measures:**

To start a discussion on the justified adjustment of coefficients for the fee calculation in Government Decree No. 154/2005 Coll., on the setting of the amount and method of calculation of fees for the use of radio frequencies and numbers, for terrestrial mobile service and fixed service, resulting in the reduction of the burden of operators of electronic communication networks and service providers on such networks.

#### **Responsibility**

Responsible party: Ministry of Industry and Trade

Cooperation: Ministry of Finance

Czech Telecommunication Office

**Planning horizon**

By 31 December 2020

### **3.8. Extension of conditions for the use of microwave frequencies**

#### **Problem Identification**

The potential of radio spectrum for the provision of electronic communications services – in particular internet access services – is not yet fully exploited in the Czech Republic. Currently, this problem is felt by the industry mostly in relation to the so-called microwave frequencies. In many cases, the use of wireless connection as a complement to fibre-optic networks is indispensable, as the National Plan for the Development of Next Generation Networks shows that the 100 % availability of broadband internet for citizens and businesses cannot be realistically achieved only on the basis of cable networks. More specifically, the following options will need to be addressed:

1. In the 59-66 GHz band, to extend the conditions for the possibility of operating MGWS/WAS-RLAN/PTP outdoors.
2. To connect the 5725-5875 MHz bands to the already used WAS-RLAN bands.
3. Conditions for the 26 GHz band in terms of the current and future use.
4. To consider extending the permitted band widths in the 10.5 GHz band for 56 MHz.

In view of the different ways of current use of individual radio spectrum bands and the harmonized allocation of some of them to specific purposes, the full use of the potential of the radio spectrum while safeguarding existing key services will require long-term cooperation between the state and private sector. In doing so, the harmonization plans drawn up at European level, as well as any conditions relating to security arising from the membership of the Czech Republic, in particular in the North Atlantic Alliance or in international organizations must be respected. At the same time, the results of tenders to grant the rights of use for radio frequencies for the provision of electronic communication networks in the 700 MHz, 3400 - 3600 MHz frequency bands and other frequencies that will soon take place must be taken into account.

#### **Proposed Measures**

##### Measure A

To continue the discussions regarding the potential extension of the use of microwave bands with the spectrum administrator (Czech Telecommunications Office) and with the relevant authorities.

##### Measure B

To allow, in line with the harmonized conditions and other security conditions, the use of wide broad radio channels in suitable fixed service bands.

#### **Responsibility**

Responsible party: Czech Telecommunication Office

Cooperation: Ministry of Industry and Trade

#### **Planning horizon**

By 31 December 2020

### **3.9. Coordination of the development of high-speed internet access**

#### **Problem Identification**

There is a recommendation from the European Commission that a Broadband Competence Office (BCO) should be established in each EU Member State to contribute to the creation of a single digital market with an emphasis on the development of high-speed electronic communication networks, very high-capacity networks - see Commission Communication SWD (2016) 300 final, chapter 4.5.

The BCO office will be active in the following areas:

- to increase the efficiency and support the effectiveness of investments in the development of high-speed networks,
- to support the implementation of a single digital market by accelerating public investments in high-speed networks, also via the European Regional Development Fund (ERDF) and the European agricultural Fund for Rural Development (EAFRD);
- to provide advice and assistance to citizens and businesses in the development of high-speed networks (coverage, mapping, quality of service and penetration, future investment plans, etc.),
- to provide technical advice and assistance related to the development of high capacity networks;
- to promote expertise, i.e. the administrative capacity of public authorities in planning, implementing and monitoring of high-speed network projects;
- to assist in the coordination with the relevant EU institutions and bodies (EIAH, Jaspers, DG REGIO, DG AGRI, DG COMP, DG CNECT),
- to promote the use of subsidies and financial instruments,
- to promote aggregation of demand for high-speed services.

In addition to the above, it seems very effective for the Czech Republic that the BCO office would promote the selected tasks of Action Plan 2.0, including but not limited to:

- to promote and assist the coordination in the construction/major renovation of line structures with the development of very high capacity networks (with an aim to reducing investment resources);
- to promote and pursue the removal of existing barriers and the reduction of investment intensity (reducing the amount of serviceability, eliminating the requirements to apply extra costs for the repair of road and pavement surfaces, eliminating duplicate charges, etc.),
- to look for ways to speed up the process of designing and development of electronic communication networks.

#### **Proposed Measures**

Establishment of the BCO office with the Ministry of Industry and Trade with nation-wide operations. (The BCO should be established on the basis of the results of an evaluation of the pilot project that has taken place for several months and taking into account any recommendations by the regional authorities and self-governing authorities.)

**Responsibility**

Responsible party: Ministry of Industry and Trade

Cooperation: Czech Telecommunication Office

Association of Regions of the Czech Republic

Association of Towns and Municipalities of the Czech Republic

Association of Self-governing Authorities

**Planning horizon**

By 30 June 2020



### **3.10. Preparation of technical professions for the field of electronic communication networks**

#### **Problem Identification**

In particular, sufficient number of experts on the labour market is the fundamental condition for the development of the electronic communications sector. Currently, entrepreneurs in the field of electronic communications identify a high deficit of graduates of secondary schools and universities who would have sufficient technical expertise in the electronic communications field. This is due to the lack of specialization and disciplines oriented at the development and operation of electronic communication networks and new technologies applicable on such networks, particularly at vocational schools. It is therefore essential to start paying sufficient attention to this and other network sectors in the education process.

The National Occupational System (NSP) as a catalogue of occupations is incomplete and it is not updated for the needs of the construction and development of electronic communications networks. The National Qualification System (NSK) does not correspond with the job positions described in NSP for the area of such networks.

From the point of view of the electronic communications sector, this is the most serious future obstacle to obtaining sufficiently skilled workforce, the problem being low awareness among both entrepreneurs and citizens, and a lack of support for so-called authorized persons (especially from the secondary industrial and vocational schools), who are ideally placed to verify the required competences by means of a prescribed test.

#### **Proposed Measures**

##### Measure A

To supplement the NSP and NSK catalogues in cooperation with the Sectoral Council for the important professions needed for the design, construction and servicing of electronic communications networks.

##### Measure B

To analyse possible ways of supporting secondary technical and vocational schools to motivate such schools to become authorized persons according to the NSK catalogue.

##### Measure C

To raise awareness and support the NSP and NSK systems on the labour market.

#### **Responsibility**

Responsible party: Ministry of Education, Youth and Sports (in relation to NSK)  
Ministry of Labour and Social Affairs (in relation to NSP)

Cooperation: Ministry of Industry and Trade  
Ministry of the Interior  
The Czech Chamber of Commerce  
Confederation of Industry of the Czech Republic

**Planning horizon**

By 31 December 2020

### **3.11. Overhead communication lines**

#### **Problem Identification**

Overhead communication lines are a rational solution for the construction of optical infrastructure, in particular access networks in small municipalities and connection networks to small municipalities. In rural areas of the Czech Republic, the utility cable networks are still made as overhead communication lines. Even in areas where such networks are gradually implemented by underground lines, there are parts of municipalities that continue to use overhead lines on pylons. Owing to the structure of the municipalities in the Czech Republic it cannot be expected that the situation will change substantially in the next decade.

Section 24 (1) of Decree No. 501/2006 stipulates that power distribution and electronic communications lines located in built-up areas of municipalities must be placed underground. However, pursuant to Article 26 of the Decree, an exemption from this obligation may be granted. The Ministry of Regional Development has issued a methodological tool for permitting exceptions to the general construction requirements. However, in practice overhead electronic communication networks are not permitted very often, also as a result of the inconsistent decision-making by the building authorities.

#### **Proposed Measures**

To start discussions regarding the recodification of public building law to stipulate conditions for the overhead communication network lines for electronic communications.

#### **Responsibility**

Responsible party:     Ministry of Regional Development  
                                  Ministry of Industry and Trade

#### **Planning horizon**

By 30 June 2020

### **3.12. Obligation by the property owner to allow the user to connect to the public communication network**

#### **Problem Identification**

At present, there is no suitable instrument to effectively enforce the obligation of the owner of the property to allow the user of the house to establish an internal communication line. Often times, the electronic communications operator despite a demand for his services may not establish such services due to the fact that no internal communication network is available in the house as a result of the attitude by the Community of Owners of Housing Units, or other house owners. Moreover, the law enforceability in this area is complicated by the fragmentation of the legislation; as there are two pieces of legislation (Act No. 127/2005 Coll., on electronic communications and Act No. 194/2017 Coll., on measures to reduce the cost of development of high-speed electronic communication networks).

#### **Proposed Measures**

To start discussion of the application of the provisions of Section 104 (16) (b) of Act No. 127/2005 Coll., as applicable, or any other provisions of relevant legislation in the context of the property owner's obligation to allow an electronic communications entrepreneur to place internal communication lines in the house if the user of the house has a demonstrable interest in using the services of the operator, which should be effectively enforced. As part of the discussion the issue of residential houses that have been divided into units and that will be governed by the rules of the Civil Code regarding the housing co-ownership must be addressed.

#### **Responsibility**

Responsible party: Ministry of Industry and Trade

Cooperation: Ministry of Justice  
Czech Telecommunication Office

#### **Planning horizon**

By 31 December 2020

### **3.13. Preparation of houses for high-speed infrastructure**

#### **Problem Identification**

The lack of required infrastructure in the family and multi-apartment buildings is currently, and will continue to be an obstacle to providing high-speed connectivity via public communications networks for the largest possible number of households, i.e. the fulfilment of objectives set in the Commission Communication to the European Parliament and Council COM (2016) 587-final and under the European Parliament and Council Regulation (EU) 2018/1972 establishing the European Electronic Communications Code.

The current legal situation in the Czech Republic is such that new multi-apartment buildings must have an access point and internal physical infrastructure (Act No. 194/2017 Coll.). However, the current regulation does not address the fixed connection of single-apartment buildings, where the non-existing physical infrastructure allowing easy and fast connection of the building significantly reduces, or rules out entirely, the possibility to connect them, especially in areas with predominantly individual housing development. It is not realistic to expect significant improvement with regard to the existing single-apartment buildings, but for newly planned houses, measures must be proposed to eliminate this.

In addition, also the Recitals to Directive 2014/61/EU measures to reduce the cost of deploying high-speed electronic communications networks where Clause 29 stipulates that due to the fact that the costs of installation of protective pipes (physical infrastructure element) during the development of the building are relatively low, while retrofitting of buildings with high-speed infrastructure can represent a significant part of the cost, all new or substantially renovated buildings should be equipped with a physical infrastructure enabling connectivity. A possible exception would only apply to buildings in isolated areas or buildings where the construction of infrastructure is very uneconomical.

#### **Proposed Measures**

##### Measure A

Discussion over possible measures to promote the development of appropriate infrastructure for electronic communications networks in all buildings, i.e. both multi-apartment and single-apartment (family) houses, taking into account the principle of technological neutrality. Financial support by the state for owners of the existing houses to build suitable physical infrastructure (including access points) would be suitable a motivation measure.

Other suitable measures include the development of an appropriate physical infrastructure for the future connection of a fixed electronic communications network in the construction of all new single-apartment buildings, or the introduction of an obligation for house owners to build a suitable physical infrastructure to build any other connection of the technical infrastructure for the house (i.e. to install, for example, an HDPE pipe in addition to the other infrastructure built – water, sewerage, electricity, gas – where the cost of co-placement of physical infrastructure will amount to tens and hundreds of crowns in most cases). There may be exceptions that would justify that physical infrastructure is not built, such as: when the prospects of high-speed connectivity is considered too distant for objective reasons to justify the development of a physical infrastructure where such equipment would be

disproportionate for economic reasons or with regard to the protection of the environment or monuments.

Measure B

With regard to raising awareness, it is desirable to disseminate information on the importance and benefits of physical infrastructure for the connection of houses to public electronic communications networks to the general and professional public, including building authorities.

**Responsibility**

Responsible party: Ministry of Industry and Trade (Measure A, Measure B)

Cooperation: Ministry of Regional Development (Measure B)

**Planning horizon**

Measure A, Measure B

By 31 December 2021