



THE ROMANIAN DRAFT LAW ON THE AUTHORISATION OF 5G TECHNOLOGY MANUFACTURERS AND ITS EFFECTS ON COMPETITION : A CHALLENGE FOR MOBILE OPERATORS AND COMPETITION REGULATORS

1. Background

A draft law on measures relating to information and communication infrastructures of national interest and the conditions for the implementation of 5G networks (the “**Draft Law**”) was launched on August 4, 2020 for public consultation by the Ministry of Transportation, Infrastructure and Communications and slightly revised on September 2, 2020.

The Draft Law purports to regulate the authorisation of manufacturers of technologies, equipment and software for 5G networks (collectively the “**5G Technology**”). To this end, the revised form of the Draft Law¹ amongst others:

- fully reproduces the authorisation criteria set out in the Memorandum of Understanding dated 20 August 2019 between Romania and the United States of America² (the “**US-Romania Memorandum**”), namely whether the manufacturer:
 - (i) is subject, without independent judicial review, to control by a foreign government;
 - (ii) has a transparent ownership structure;
 - (iii) has a history of ethical corporate behaviour;
 - (iv) is subject to a legal regime that enforces transparent corporate practices.

¹ The revised form of the Draft Law can be seen at http://www.mt.gov.ro/web14/documente/acte-normative/versiuni_imbunatite/2020/proiect2020-09-02-173747.pdf

² The criteria set by the Romania-US Memorandum are the following: (1) whether the vendor is subject, without independent review, to control by a foreign government; (2) whether the vendor has a transparent ownership structure, and (3) whether the vendor has a history of ethical corporate behavior and is subject to a legal regime that enforces transparent corporate practices. The Romania-US Memorandum can be consulted here: <https://www.comunicatii.gov.ro/wp-content/uploads/2019/11/memorandum-5g.pdf>

- contains no reference whatsoever to technical or other criteria than those mentioned above and lacks any explanations as to the actual manner in which the latter would be enforced, although they are wide enough to be construed in various ways;
- entrusts the decision on the authorisation procedure to the Romanian Prime Minister and the Romanian National Defence Council (“CSAT”), the latter having the power to refuse authorisation only by reference to the vague political criteria mentioned above; these criteria are to be construed based on general definitions of risks, threats and vulnerabilities to national security;
- provides that only authorised manufacturers may be used for the purpose of 5G networks and communication networks and infrastructure of national interest, whilst at the same time defining 5G networks as including equipment already embedded in 3G and 4G networks; in this way, the Draft Law also requires mobile electronic communication network providers (hereinafter referred to as “mobile operators”) to replace already acquired 3G and 4G equipment;
- the term for the replacement of existing 3G and 4G equipment (which has been purchased in accordance with the legislation in force at the date of their acquisition) has been set to five years; there is no mention about any compensation to be paid to electronic communication network providers for this measure having effects equivalent to an expropriation.

As mentioned in the Explanatory Memorandum of the Draft Law³, the latter is due to have an impact on competition if enforced to the effect of excluding certain technology producers from the market.

Given (a) the various public statements of highly ranked Romanian officials⁴ and the US-Romania Memorandum and (b) the vary vague and exclusively political nature of the authorisation criteria, it seems that (unlike in other EU States), the full exclusion of certain 5G technology producers based on their country of origin may be imminent in Romania.

³ *“With regard to the competitive environment, it can be noted that, as a result of the authorization regime established by the draft enactment, there may be a case where, for reasons related to national security and national defense, the options available to suppliers of electronic communications networks and services are limited when deciding on purchasing technologies, equipment and software used in electronic communications networks through which 5G electronic communications services are provided. The effects, in particular, also depend on the number of manufacturers which obtain the authorization provided by the draft law.”*

⁴ See for example the declaration of the Romanian President, Mr. Klaus Iohannis, available here <https://www.news.ro/economic/iohannis-ne-dorim-retele-controlul-unor-state-interese-cele-declarate-lucreaza-legislatie-speciala-preveni-intrarea-piata-5g-unor-firme-asupra-carora-planeaza-suspiciuni-1922400412272020081919449342>, the declaration of the President of National Authority for Administration and Regulation of Communications (“ANCOM”), available here <https://economie.hotnews.ro/stiri-telecom-23458806-arbitrul-telecom-anunta-oficial-amanarea-sase-luni-licitatiei-5g-transpunerea-memorandumului-sua-este-benefica-absolut-necesara.htm> and the declaration of Mr. Virgil Popescu, the Minister of Economy, available here <https://economie.hotnews.ro/stiri-telecom-24193537-video-virgil-popescu-imi-doresc-5g-facem-partener-euro-atlanci-nu-huawei.htm>

Moreover, due to recent amounts paid by Ericsson as part of a settlement for what has been considered as *“one of the biggest Foreign Corrupt Practices Act enforcement actions ever”*⁵ (whereby the company has been charged by the relevant US authorities with *“with conspiracies to violate the anti-bribery, books and records, and internal controls provisions of the FCPA”*⁶), the ethical corporate practices history criterion under the Draft Law could also potentially lead to the exclusion of a third major supplier from the roster of manufacturers which can supply 5G technology to Romanian mobile operators.

Additionally, companies that are now part of Nokia group, such as Alcatel⁸ and Siemens⁹ have their own track record of significant fines inflicted by US authorities for corruption practices. Hence, based on the same criterion, Nokia is not completely shielded from potential exclusions either.

This paper addresses at high level certain risks that might potentially ensue from such exclusions as regards potential distortions of competition on the relevant markets. To this end, aside from the actual effects on competition (Section 4) it is relevant to explore what seem to be rather considerable differences between the Draft Law and the EU 5G Toolbox approach (Section 2) as well as the clashes between the Draft Law and the electronic communications legal framework (Section 3). In addition, Section 5 looks at the conditions whereunder competition may be restrained by effect of a national law in Romania.

2. The Draft Law departs considerably from the EU 5G Toolbox

On January 29, 2020, the European Commission adopted the Communication that endorsed the Cybersecurity of 5G networks EU Toolbox of risk mitigating measures (**“5G EU Toolbox”**)¹⁰. The scope of the 5G EU toolbox was to pencil out a coordinated European approach based on a common set of measures aimed at mitigating the main cybersecurity risks of 5G networks¹¹.

The proposed measures encompass the following two categories:

- strategic measures, which concern increased regulatory powers for authorities to scrutinize network procurement and deployment, specific measures to address risks related to non-technical vulnerabilities (e.g. risk of interference by non-EU States or State-backed actors), assessing the risk profile of suppliers and promoting initiatives to support the development of sustainable and diverse 5G suppliers;

⁵ See <https://fcgablog.com/2019/12/06/ericsson-pays-1-billion-to-resolve-fcpa-violations/>.

⁶ See <https://www.sec.gov/spotlight/foreign-corrupt-practices-act.shtml> for information on this US anti-corruption enactment.

⁷ See <https://www.justice.gov/opa/pr/ericsson-agrees-pay-over-1-billion-resolve-fcpa-case>.

⁸ <https://www.sec.gov/news/press/2010/2010-258.htm>

⁹ <https://www.sec.gov/news/press/2008/2008-294.htm>.

¹⁰ More information is available here https://ec.europa.eu/commission/presscorner/detail/en/IP_20_123.

¹¹ As identified in the EU coordinate risk assessment report. More information is available here https://ec.europa.eu/commission/presscorner/detail/en/ip_19_6049.

- technical measures, which include measures to strengthen the security of 5G networks and equipment by addressing the risks arising from technologies, processes, human and physical factors through strict access control and secure network management, certification for 5G network components and/or processes.

As regards supplier profiling, the EU coordinated risk assessment report identifies several risk factors for the assessment of a supplier's risk profile, notably:

- (a) the likelihood of the supplier being subject to interference from a non-EU country; certain examples of factors that may facilitate the interference listed in the EU coordinated risk assessment report);
- (b) the supplier's ability to assure supply; and
- (c) the overall quality of products and cybersecurity practices of the supplier, including the degree of control over its own supply chain and whether adequate prioritization is given to security practices.

Unlike the EU 5G Toolbox, the Draft Law is exclusively based on the first prong of the test, referring to foreign States interferences. However, it only partially addresses the criteria set out in the EU 5G Toolbox for identifying the potential for such interference¹². The other two prongs of the test are completely disregarded.

Likewise, with respect to strategic measures, the 5G EU Toolbox mentions that, where strategical measures (such as restrictions) are applied for suppliers being considered of high risk, including necessary exclusions, these would concern key assets defined as critical and sensitive in the EU coordinated risk assessment¹³ (e.g. core network functions, network management and orchestration functions, and access network functions).

The Draft Law however excludes non-authorized suppliers from the entirety of 5G networks, without any assessments or definitions of key assets. As such, telecom operators would be obliged to entirely avoid suppliers that might be excluded pursuant to the Draft Law, as well as to replace any 3G and 4G equipment purchased from such suppliers that could be used for 5G purposes.

Furthermore, the purpose of the EU 5G Toolbox was to align all Member States in their strategy to mitigate potential risks arising from 5G technology, but at the same time to

¹² According to the EU coordinate risk assessment report, "Such interference may be facilitated by, but not limited to, the presence of the following factors: (i) a strong link between the supplier and a government of a given third country; (ii) the third country's legislation, especially where there are no legislative or democratic checks and balances in place, or in the absence of security or data protection agreements between the EU and the given third country; (iii) the characteristics of the supplier's corporate ownership; and (iv) the ability for the third country to exercise any form of pressure, including in relation to the place of manufacturing of the equipment"

¹³ <https://ec.europa.eu/digital-single-market/en/news/cybersecurity-5g-networks-eu-toolbox-risk-mitigating-measures>, section 6, point 1, second bullet. .

identify measures that will not have a detrimental effect on the electronic communication market.

In this respect, EU 5G Toolbox approach entails the following¹⁴:

- the criteria used should be technology-neutral, objective, reasonable and proportional;
- a substantial set of technical measures should be equally considered;
- the mitigation measures do not target any supplier or country in particular¹⁵.

It is equally noteworthy that the EU 5G Toolbox recommends one to apply a comprehensive yet tailored approach, adapted to each specific situation. According to this principle, the mitigating measures should be taken based on a balanced mix of technical and non-technical criteria, multi-vendor obligations and measures avoiding dependencies.

Contrary to these requirements, the Draft Law provides a one-size-fits-all approach referring to general and vague risks (rather than specific situations), with no indications as to how the assessment would be tailored to the specific risks, specific party and specific 5G technology concerned. All in all, the Draft Law fails to provide “*an objective assessment of identified risks and proportionate mitigating measures*” to address security risks related to the rollout of 5G, as required in accordance with the EU 5G Toolbox.

The Draft Law also completely disregards the substantial set of technical measures set out in the EU 5G Toolbox, although, as shown in other Member States (e.g., Germany¹⁶, Spain¹⁷, France¹⁸, Portugal¹⁹) technical measures could be used to reduce risks pertaining to 5G Technology.

¹⁴ More information is available here https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_127 and here <https://ec.europa.eu/digital-single-market/en/news/secure-5g-deployment-eu-implementing-eu-toolbox-communication-commission>.

¹⁵ As opposed to many statements from officials in Romania, which specifically target Huawei and Chinese producers. See the statements quoted at footnote no. 4.

¹⁶ Please see: <https://www.reuters.com/article/us-germany-usa-huawei/merkels-conservatives-set-to-stop-short-of-huawei-5g-ban-in-germany-idUSKBN205146> and <https://www.cnbc.com/2019/04/15/germany-reportedly-says-huawei-can-stay-in-5g-race.html>.

¹⁷ Please see: <https://www.telcotitans.com/telefonica-watch/telefonica-takes-huawei-to-5g-core-in-spain/927.article>.

¹⁸ President Emmanuel Macron said France was not excluding any company including China’s Huawei from its next-generation 5G mobile market, but that his strategy was one based on European sovereignty. Source: <https://www.reuters.com/article/us-france-macron-huawei/macron-says-frances-5g-strategy-founded-on-european-sovereignty-idUSKBN2502IJ>, August 28, 2020.

¹⁹ Please see: <https://apnews.com/e0a8229846154d6ba27094e042db1abd>.

3. The Draft Law infringes the electronic communications legislation

Both the EU and national legislations require that the principles of objectivity, transparency, proportionality and non-discrimination are observed²⁰ whenever new obligations are imposed on telecom operators. At the same time, any implemented measure must not lead to an infringement of the obligation to ensure a regulatory framework that is predictable, secure and consistent²¹.

In this respect, in a report²² issued by GSMA²³ regarding “Best practice in mobile spectrum licensing” it is argued that the duration of the licences for spectrum usage should be of minimum 20 years in order to provide sufficient certainty to support substantial new network investment (in 4G and in the near future 5G). Moreover, it is mentioned that the predictability can be further enhanced by introducing indefinite licence terms.

In the process of revision of the European electronic communication framework and the adoption of the Directive (EU) 2018/1972 of the European Parliament and of the Council establishing the European Electronic Communications Code (“**EEC Code**”), such views were taken into account. The EEC Code, that will be transposed into the Romanian legislation by December 2020, sets a minimum licence duration of 25 years.

At the same time, Article 5 of Government Emergency Ordinance no. 22/2009 provides that the National Authority for Management and Regulation in Communications (“**ANCOM**”) must ensure an efficient usage of the limited resources in the field of electronic communications, including by encouraging efficient investments in infrastructure and by promoting innovation. The EEC Code states the same principles. It is thus obvious that the electronic communication networks providers should benefit from a predictable regulatory environment that will allow them to invest in the most efficient way.

It can be easily noted that the Draft Law infringes all principles mentioned above: the authorization criteria prone to interpretations coupled with the potential of withdrawing authorizations and the need to replace already purchased equipment do not amount to a predictable and secure regulatory framework. Objectivity, transparency, proportionality and non-discrimination requirements and the principle of efficient investments undertaken by the electronic communication networks provider are equally breached.

²⁰ As per Article 24 paragraph (2) of Emergency Ordinance no. 111/2011 on electronic communications (“**EO no. 111/2011**”).

²¹ As per Article 8 of Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (“**Framework Directive**”).

²² More information can be found here: <https://www.gsma.com/spectrum/resources/best-practice-mobile-spectrum-licensing/>

²³ The GSM Association is an industry organisation that represents the interests of mobile network operators worldwide. More than 750 mobile operators are full GSMA members and a further 400 companies in the broader mobile ecosystem are associate members.

Furthermore, it is noteworthy that the electronic communication sector is on the path of deregulation, aiming to allow as many markets as possible to be governed only by the competition rules (ex post regulation).

Following the third revision of the Commission Recommendation on relevant markets in 2014, the European Commission continued the deregulation trend. Out of 18 markets that were previously deemed potentially in need of ex ante regulation, only four wholesale markets remained subject to the same.

A similar path has been followed by the national regulators, which have gone even further and decided to fully deregulate or to deem as competitive even some of the relevant markets mentioned by the Commission Recommendation 2014/710/EU as being susceptible to ex ante regulation.

The EEC Code is also aimed at progressively reducing ex ante sector-specific rules and to ensure that electronic communications market is governed only by competition law.

The Draft Law may come in contradiction with the ex ante deregulation process. Since (as shown in Section 4 below) the potential exclusion of certain 5G Technology suppliers seems to raise significant risks of competition being restricted on various markets pertaining to electronic communications, it cannot be excluded that ex ante regulation may become necessary on some of those markets in order to compensate for the negative effects of competition distortions.

4. The Draft Law may negatively affect competition and trade between Member States

The 5G infrastructure broadly consists of the core network and the access network. The core is the backbone of the network and is the place towards which the voice and traffic data converge. The network core is formed of routers connected through optical fiber. The core of the network is connected with the access network, which may be radio access network (“RAN”) for mobile communications and fixed access network.

As the 5G EU Toolbox allows in certain circumstances certain strategic restrictions for the core of the network²⁴, since there are a good number of suppliers of technology for the core of the network (including Juniper, ECI, Huawei, Cisco, Nokia, Ericsson, etc.) and since RAN is the predominant part of the network, this paper mainly concerns risks of competition restrictions on the RAN equipment markets and their potential effects on other markets.

²⁴ The implementation of which seems to be underway in some of the EU Member States, such as for example France, Italy, the Netherlands.

4.1. Market definition

As regards the provision of telecommunications network equipment and related services, the European Commission decisions²⁵ include definitions of the following relevant product markets:

- (i) Radio Access Network (“RAN”) equipment;
- (ii) Core Network Systems (“CNS”) solutions;
- (iii) network management and business management systems; and
- (iv) network-related services.

The Commission considered that RAN and CNS could constitute separate product markets, given that the interchangeability of mobile network products is not equivalent within each product category.²⁶

It has also deemed that the RAN equipment market may be further segmented by technology standards (i.e. generations 2-2.5G, 3G, 4G and 5G) and/or between macro-cells and small-cells equipment. Moreover, according to the Commission, it cannot be excluded that Single RAN equipment may constitute a separate market segment.²⁷

Given the information available to date, we will however refer in this paper to the broader definition of the RAN equipment market, without further segmentation, as described in the Oxford Economics Report referred to at section 4.2 below.

In its previous decisions²⁸, the Commission has offered definitions for the following relevant product markets related to telecommunication services:

- (i) the retail mobile telecommunications services market;
- (ii) retail fixed telephony services market;
- (iii) the wholesale market for access and call origination;
- (iv) the wholesale market for mobile call termination;
- (v) wholesale market for fixed call termination;

²⁵ Commission decision in Case M.4297 – Nokia/ Siemens of November 13, 2006; Commission decision in Case M.6007 Nokia Siemens Networks/Motorola Network Business of December 15, 2010; Commission decision in Case M.7632 - Nokia/ Alcatel-Lucent of July 24, 2015.

²⁶ Commission decision in Case M.4297 – Nokia/ Siemens of November 13, 2006, paragraph 19.

²⁷ Commission decision in Case M.7632 - Nokia/ Alcatel-Lucent of July 24, 2015, paragraph 24.

²⁸ Commission Decision in Case No COMP/M.6497 – Hutchison 3G Austria / Orange Austria of December 12, 2012, paragraphs 58, 63, 67 and 70; Commission Decision in Case No COMP/M.5650 – T-Mobile / Orange UK, of March 1, 2010, paragraphs 27-30, 32-34, 36-37; Commission decision in Case M.8883 – PPF Group / Telenor Target Companies of July 27, 2018, paragraphs 8-43.

(vi) the wholesale market for international roaming.

As a detailed assessment of competition effects on each such market exceeds the scope of this paper, we will refer generically to electronic communications markets.

4.2. Structure of competition on the RAN markets

The European sales segment of the RAN equipment markets is oligopolistic and witnessing a rather high degree of concentration. As it can be seen from Figure 6 of the Oxford Economics²⁹ Impact Study of June 2020 on Restricting competition in 5G network equipment throughout Europe³⁰ ("**Oxford Economics Report**"), the first four players account for 96% of the market "across all generations of the mobile technology", market shares being as follows:

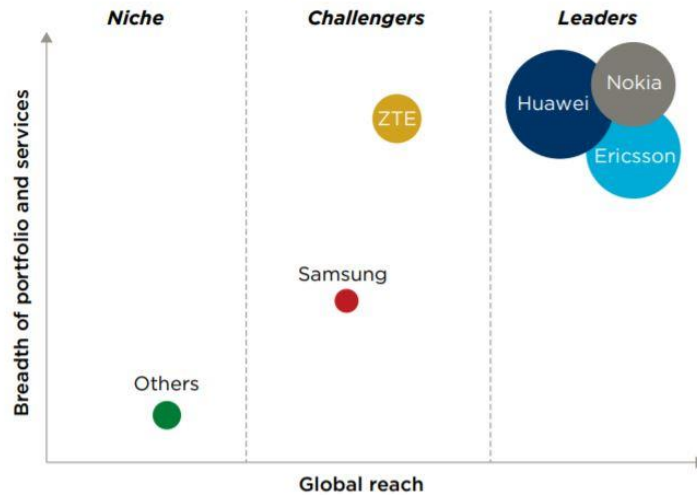
- Huawei: 35%;
- Ericsson: 31%;
- Nokia: 24%;
- ZTE: 6%;
- Samsung: 1%;
- fringe competitors: 2%.

Considering the scarcity of information publicly available for the RAN market and since, as mentioned at section 4.1, the geographical market definition proposed by the European Commission is at least EEA wide, we will use these market shares for the purpose of contemplating potential effects on competition in Romania and reproduce below Figures 6 and 7 from the Oxford Economics Report.

²⁹ According to their website, Oxford Economics' economic consulting team are world leaders in quantitative economic analysis, working with clients around the globe and across sectors to build models, forecast markets and evaluate interventions using state-of-the art techniques.

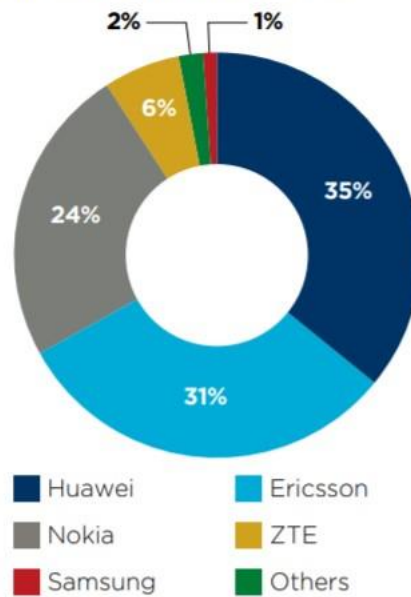
<https://www.oxfordeconomics.com/recent-releases/The-Economic-Impact-of-Restricting-Competition-in-5G-Network-Equipment>.

Fig. 6: Key players' European shares of RAN market and relative market positions, 2018



Source: Ovum, Oxford Economics

Fig. 7: Regional market shares in the RAN market, 2018



Source: Oxford Economics

As the RAN seems highly differentiated both in terms of product features (encompassing various types of equipment with various technical roles and characteristics) and quality, it is important to note that the first four players on the European segment have a similarly wide breadth in terms of portfolio and services, with ZTE representing a genuine challenger of the market due to its share and similar breadth, as it can be seen from Figure 6 of the Oxford Economics Report reproduced above and as previously flagged out by the European Commission³¹.

The EU coordinated risk assessment of the cybersecurity of 5G networks³² mentions at its turn that, from a market share perspective, the main suppliers on the market for telecom equipment are Huawei, Ericsson and Nokia, other suppliers being ZTE, Samsung and Cisco.

Dell'Oro group report on telecommunication equipment market in 2019³³ singles out Huawei, Ericsson, Nokia, ZTE and Cisco as the largest suppliers across all telecom equipment segments (seven categories of products are included³⁴, with RAN being one of them)

Due to their considerably lower market shares and what looks like a narrower breadth of portfolio and service, as well as IP barriers, geographical market coverage and the extremely high costs involved in developing new products, it may be unlikely that Samsung and the fringe competitors be in a position to genuinely challenge the market in the short to medium term. This is for instance also the case of Cisco, who cannot at the moment supply other products than virtualised RAN³⁵.

Hence, it appears that competition on this market in the EU and Romania effectively takes place between the first four players mentioned above.

4.3. Risks arising from supplier exclusion

Should the Draft Law be enforced to the effect of excluding 5G Technology producers from China (i.e., Huawei and ZTE) from competing for the entire range of 5G network equipment, Romania would exclude not only two out of the four existing players but also what is considered to be one of the main innovators (Huawei) and one of the main challengers on the market (ZTE). It stands to reason that this alone raises significant concerns of competition being negatively affected, triggering the need to conduct in-depth competitive assessments.

In any case, in such a scenario, the remaining two significant players as well as the fringe competitors will compete for the market chunk of 41% left available further to the exits of

³¹ https://ec.europa.eu/competition/mergers/cases/decisions/m7632_788_2.pdf, paragraph 97.

³² Paragraph 1.28 at file:///C:/Users/alina.popescu/Downloads/ReportEURiskassessmentpdf%20(1).pdf.

³³ <https://www.delloro.com/the-telecom-equipment-market-2019/>.

³⁴ Broadband Access, Microwave & Optical Transport, Mobile Core & Radio Access Network, SP Router & CE Switch.

³⁵ The EU coordinated risk assessment of the cybersecurity of 5G networks, footnote no. 10.

Huawei and ZTE. Assuming they will together win over 96% of such chunk (corresponding to the current market structure) and that they will each get a slice thereof pro rata to their current market shares, it follows that there would be substantial increments to Ericsson's and Nokia's market shares of roughly 22% and 17% respectively.

In this scenario, the resulting market shares may be around 53% (for Ericsson) and 41% (for Nokia). These are both above the 40% market share threshold beyond which there is a relative presumption of individual or joint dominance pursuant to the Romanian legislation³⁶.

In any case, it is accepted³⁷ that market power can be determined pursuant to a number of indicators, including the number of competitors, barriers to entry and expansion, the countervailing power of buyers and competitors as well as the nature of oligopolistic competition.

In this case a number of indicators show that remaining players could potentially acquire market power in Romania following the exclusion of Huawei and ZTE, bearing in mind that:

- as it follows from the market structure, there would be no significant pressure from the fringe competitors (as their market shares as well as the breadth of their portfolio and products seem small);
- as shown in the Oxford Economics Report, there currently seems to be no meaningful competitive pressure from outside the European/Romanian segment of the market; although a 2015 decision of the European Commission³⁸ had looked at Samsung as a potential challenger, based on the restated small market share mentioned in the Oxford Economics Report it seems that Samsung may have not gained that status yet; further, although the Open RAN seems to be looked at as the next potential alternative to current products, whether or not it will prove reliable and competitive or how long it will take to get there is still unknown³⁹;
- there are in any case entry barriers on the RAN market due to IP rights and the very high fixed costs incurred with product development, hence competitive pressures from potential competitors on short to mid-term are rather improbable; also, in this scenario there would be administrative barriers to the entry of any potential competitors from China, which is recognised as one of the main technology hubs globally;

³⁶ Article 6(3) of the Romanian Law no. 21/1996 on competition.

³⁷ Bishop & Walker, *The Economics of EC Competition Law: Concepts, Application and Measurement*, Sweet & Maxwell, university edition, Third Edition, 2010, page 62.

³⁸ https://ec.europa.eu/competition/mergers/cases/decisions/m7632_788_2.pdf

³⁹ https://ec.europa.eu/competition/mergers/cases/decisions/m7632_788_2.pdf

- the effects of countervailing buyer pressure coming from sophistication of electronic communication network providers carrying out multiple worldwide tenders with multiple conditions regarding technology and price (which was highlighted by the European Commission as one of the main factors regulating competition on the telecom equipment market⁴⁰) may decrease as a result of (a) the significant reduction of alternatives available⁴¹, following the exit of an important innovator (i.e., Huawei, which appears to hold the largest number of patents⁴²) as well as a significant challenger to the main three players (i.e., ZTE, which had been repeatedly singled out by the European Commission in its merger decisions⁴³), (b) due to a fragmentation of the markets further to differentiated authorisation requirements for 5G Technology and (c) due to potential incompatibility with equipment of other suppliers (*see* also the paragraph below);
- moreover, due to existing interoperability issues⁴⁴, the degree to which the remaining suppliers could compete effectively in Romania may be influenced by the degree of coverage of each of the remaining suppliers' existing equipment; although Nokia reportedly claims "*they have a solution to overlay 4G equipment of another provider*"⁴⁵, it should be assessed how much of the potentially incompatible equipment would be covered by such solution; in any case, to the extent that Nokia is the only supplier to date capable to offer such solution, this may add further dominance related concerns.

Regulators should therefore carefully consider the risks of market dominance potentially ensuing from the potential exclusion of the Chinese producers as an effect of the Draft Law, as market dominance may trigger abuses translating into higher prices and efficiency losses, along with lower incentives to innovate, reduced variety and lower quality.

Moreover, the resulting distortions could have the potential to affect competition on mid to long term due to the characteristics of the market, such as for example the incompatibility of certain equipment between manufacturers, the lifespan of the equipment and the period required to recoup related investments⁴⁶.

⁴⁰ See paragraph 30 of Case No. COMP/M.6007 -Nokia Siemens Networks/ Motorola Network Business, document available here: https://ec.europa.eu/competition/mergers/cases/decisions/m6007_341_2.pdf.

⁴¹ Countervailing buyer power requires that there be alternative sellers and that these alternative suppliers be able to honour the increased demand. *See* Bishop & Walker, page 83.

⁴² Please see: <https://www.gizmochina.com/2020/06/02/huawei-has-the-most-5g-standard-essential-patents-globally/>.

⁴³ https://ec.europa.eu/competition/mergers/cases/decisions/m7632_788_2.pdf

⁴⁴ <https://www.fitchratings.com/research/corporate-finance/uk-ban-on-huawei-5g-equipment-increases-telecoms-capex-23-07-2020>

⁴⁵ <https://www.reuters.com/article/us-huawei-europe-gsma/europes-5g-to-cost-62-billion-more-if-chinese-vendors-banned-industry-idUSKCN1T80Y3>

⁴⁶ With regard to long term competition in telecommunications market, *see* also Janice A. Hauge, Mark A. Jamison, *Analysing telecommunications market competition*, available at <https://www.researchgate.net/publication/228737683>

At last, it is noteworthy that in the scenario indicated above, the values of the Herfindahl-Hirschman index and HHI delta following the potential exclusion of Huawei and ZTE, would be well beyond the thresholds⁴⁷ above which competition concerns may occur.

Moreover, although the European Commission has previously found coordinated effects on the RAN market unlikely⁴⁸, the significant reduction of the number of undertakings exerting significant competitive pressure may result in increased risks of collusion.

In any case, according to the European Commission's Guidelines on the assessment of horizontal mergers⁴⁹,

“mergers in oligopolistic markets involving the elimination of important competitive constraints that the merging parties previously exerted upon each other together with a reduction of competitive pressure on the remaining competitors may, even where there is little likelihood of coordination between the members of the oligopoly, also result in a significant impediment to competition”.⁵⁰

Although this is not technically a case of economic concentration, we reckon that the considerations above are fully applicable in the case at hand. If anything, close scrutiny from competition regulators is required.

In that respect, it is noteworthy that the potential exclusion of Chinese suppliers as a result of the Draft Law could also possibly affect the downstream electronic communications markets in at least the following ways:

- due to compatibility issues inherent to the current status of telecommunication technologies, the telecom operators that have purchased substantial quantities of 3G and 4G equipment from producers that would be excluded may be placed at a great disadvantage as compared to their peers; contrary to certain public statements⁵¹, telecom operators claim that discarding the equipment in question would trigger substantial additional costs; for example, in recent press statements⁵², Romanian telecom operators have made it clear that the Draft Law would cause them substantial losses, amongst others since they would not be able to recover their investments in the 3G and 4G equipment to be discarded; Vodafone complained at its turn about the costs triggered by the need to replace Huawei equipment in the

⁴⁷ Post merger HHI below 2000 and delta below 250 or Post merger HHI above 2000 and delta above 150, according to the European Commission's Guidelines on the assessment of horizontal mergers, paragraphs 19 and 20.

⁴⁸ https://ec.europa.eu/competition/mergers/cases/decisions/m7632_788_2.pdf

⁴⁹ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings (2004/C 31/03), paragraph 25.

⁵⁰ Paragraph 25.

⁵¹ Please see: https://www.dcnews.ro/5g-cifre-fabuloase-ce-urmeaza-in-perioada-urmatoare-sabin-sarmas-va-fi-revolutie_769689.html

⁵² Please see: <https://www.capital.ro/proiect-de-lege-5g-liviu-popescu-aomr-exista-riscul-afectarii-planurilor-de-afaceri-si-investitiilor-aflata-in-derulare.html>.

UK⁵³, whilst Deutsche Telekom internal assessments reportedly referred to a ban on Huawei as a potential Armageddon scenario, triggering costs of three billion euros⁵⁴ for the mobile operator; according to Reuters, the GSMA, which represents the interests of 750 mobile operators, has released a report estimating the total additional costs triggered in Europe by the a full ban on Huawei and ZTE equipment to 55 billion euros⁵⁵;

- it should be carefully considered whether or not the additional costs involved could determine or accelerate the exit from the market of certain telecom operators, in the context in which the Romanian competition regulator is keen on preserving the number of players on this market to four⁵⁶;
- it is not excluded that additional costs would trigger the increase in prices of 5G communication services, thus potentially depriving a part of the population and of the business environment to such services, as also shown in the Oxford Economics Report;
- due to the additional costs involved as well as the rather lengthy authorization procedure along with the substantial uncertainty stemming from the criteria set out by the Draft Law, significant delays in the deployment of 5G networks might ensue; the GSMA report referred to above reportedly estimates the delays caused by the replacement of Huawei and ZTE equipment in Europe to 18 months and estimates that *“Such a delay would widen the gap in 5G penetration between the EU and the U.S. by more than 15 percentage points by 2025”*; in estimating the delays the GSMA reportedly took into account the difficulties for other major equipment makers in case of a sudden increase in demand, as well as the need for telecoms operators to transition from one set of equipment to another⁵⁷.

Notably, the GSMA report referred to above has acknowledged the significant restrictions of competition that may occur following supplier exclusions:

“Half of this (additional cost) would be due to European operators being impacted by higher input costs following significant loss of competition in the mobile equipment market” (emphasis added);

⁵³ <https://www.cnn.com/2020/07/09/vodafone-and-bt-warn-about-cost-disruption-of-removing-huawei.html>.

⁵⁴ <https://www.handelsblatt.com/technik/it-internet/ausschluss-von-netzausruester-armageddon-szenario-telekom-spielt-huawei-bann-durch/25918402.html?share=twitter&ticket=ST-1349116-YfPb07KevxQpHuGQuKip-ap2>.

⁵⁵ <https://www.reuters.com/article/us-huawei-europe-gsma/europes-5g-to-cost-62-billion-more-if-chinese-vendors-banned-industry-idUSKCN1T80Y3>.

⁵⁶ <https://www.bursa.ro/videoconferinta-digitalizarea-romaniei-si-tehnologia-5g-bogdan-chiritoiu-presedinte-consiliul-concurentei-as-vrea-sa-replicam-succesul-4g-la-tehnologia-5g-47139932>.

⁵⁷ <https://www.reuters.com/article/us-huawei-europe-gsma/europes-5g-to-cost-62-billion-more-if-chinese-vendors-banned-industry-idUSKCN1T80Y3>.

Last, but not least, the delays in the deployment of 5G networks may deprive Romanian undertakings present on various markets of the competitive advances that might be enjoyed by their peers based in other EU countries, where 5G technology authorization would not impede on 5G services and related applications becoming available more quickly and/or at lower costs.

As regards potential additional exclusions of suppliers that do not meet the track record of ethical corporate practices, such as Ericsson (but also potentially Nokia, if the respective track records of Siemens and Alcatel were considered relevant), the ensuing effects on competition can hardly be overstated.

The potential exclusion of Ericsson along with Huawei and ZTE would lead to a de facto monopoly for Nokia, which, as shown above, would meet only fringe competition that could not exert sufficient pressure. According to the economic theory⁵⁸, as a de facto monopolist aided by entry barriers, Nokia would be in a position to increase prices, delay or reduce innovation, as well as to cause efficiency losses and to greatly affect consumer welfare⁵⁹.

Although technology disruptors, such as Open RAN, could potentially overturn the situation, as mentioned above it is currently not known whether this alternative (or indeed any other) would be feasible or competitive enough to penetrate the market.

4.4. Effects on trade between EU Member States

Romania's approach of departing from the requirements of the EU 5G Toolkit may set it apart from Member States whose policy options are or will be in line with the European Commission's recommendations. The Draft Law may thus raise obstacles to certain suppliers delivering products authorized in other Member States on the Romanian market. Those suppliers may thus have an undue competitive disadvantage at EU level as compared to their peers that will not be subject to the same restrictions.

Likewise, competition restrictions on Romanian electronic communications services markets may have ripple effects in other European markets. As mentioned in the Oxford Economics Report⁶⁰:

“the differences in regulatory requirements across countries remains a major challenge for operators. For those that have cross-border interests, restrictions or additional regulatory requirements with respect to procurement of network equipment in one country may have an impact in all the countries they operate in. These cross-border effects could lead to the economic consequences of restricting competition in one market being felt more broadly outside its borders.”

⁵⁸ Carlton & Perloff, *Modern Industrial Organization*, Fourth Edition, 2005, Pearson, page 89 et seq.

⁵⁹ Bearing in mind that the GSMA report referred to at

⁶⁰ Page 12

5. Conditions required to lawfully restrain competition by law

As per Article 8 of the Competition Law no. 21/1996 (the “**Competition Law**”), State intervention through decisions or regulations which directly or indirectly distort the competition environment is prohibited. As an exception, the State intervention may be allowed in certain circumstances where the relevant authority is acting (i) towards the enforcement of a law or (ii) when there is a major public interest involved, which may be deemed as superior to that of ensuring a functional market economy.

However, these exceptional circumstances are not a free ticket for the State to issue enactments restraining competition. As it follows from both the decisions and formal opinions issued by the Council and the law of the European Union, there are strict conditions that must be observed in order for enactments to lawfully restrain competition, irrespective whether they come in a form of a law or in other forms.

5.1. Romanian Competition Council practice

In a case concerning telecommunication services, where the municipality had granted an exclusive right to the benefit of an economic operator while protecting the same from other competing infrastructure suppliers and leading to discouraging costs for migration to the network of that specific operator, the Council flagged out the need to amend the enactments implementing the project, in order to make them compatible with competition principles.

In this case, the Council pointed out that the implementation of the electronic communications framework should keep a level of neutrality in terms of competition. As such, “[...] *the measures taken by the local authorities should not create a dominant position, nor can they restrict competition.*(...)”⁶¹

In a case where relevant ministries introduced certain discriminatory conditions between private and public health units in terms of amounts of money that would be granted by the National Health Insurance House⁶², the Council argued that the principle of equal treatment requires that comparable situations should not be treated differently and that different situations should not be treated in the same way, unless such treatment is objectively justified; moreover, in accordance with the Council’s statements:

*“A difference in treatment is justified if it is based on objective and reasonable criteria and it is proportionate to the aim pursued. Therefore, the existence of a difference in treatment (...) must be proportional in relation to the objectives pursued.”*⁶³.

⁶¹ Study of the Romanian Competition Council in collaboration with the Romanian Center for Economic Policies, “*The challenges of the single market and the competition in sensitive sectors*”, pages 138 – 146.

⁶² Decision of the Romanian Competition Council no. 69 of December 13, 2017.

⁶³ *Ibid*, page 24, paragraph 143.

In the waste treatment and recycling field, in a case where the municipality imposed the necessity of obtaining a specific permit in order to conduct the relevant activity and unjustifiably delayed the procedures of issuing the permit while granting exclusivity to a specific sanitation operator⁶⁴; in that case, the Council had found that the anticompetitive conduct of the municipality consisting of suspending the procedure of permit issuance, had blocked the operators willing to enter on the market, while the refusal/delay of the authorities to issue the permit had created administrative entry barriers on the market⁶⁵; moreover, the enactments issued by the local municipality had *"allowed the sanitation operator to expand its dominant position, of monopoly, from the sanitation service market (...) to the relevant market of packaging waste collection and ancillary transport services (recyclable waste collected from the population), and implicitly the exploitation of this position to the detriment of the collecting economic operators, as well as to the detriment of the population"*.⁶⁶

All in all, as mentioned previously by the Council, the intervention of the State within the competition environment shall be allowed if that conduct is deemed necessary according to the law⁶⁷. Furthermore, the State intervention must observe the principle of the minimum impact on competition.⁶⁸ As previously indicated by the Council⁶⁹, restrictions of competition should be objective, necessary, and proportional in order to meet their purpose.

In the case at hand, the exclusion of 5G Technology producers solely based on the criteria set out by the Draft Law may not be deemed as either objective, necessary or proportional. In this, the Draft Law and the 5G EU Toolbox (which requires a balanced, tailored, untargeted approach and according to which supplier exclusions to be potentially applied should concern key assets) differ considerably.

It thus seems that the Draft Law could not lawfully distort competition by excluding 5G Technology produced by certain manufacturers from the entirety of the network and without addressing the actual technical risks involved by corresponding technical security measures, which would be objective, proportional, tailored, etc.

5.2. European Union law

Although Article 101 (regarding anticompetitive agreements) and Article 102 (regarding the abuse of dominant position) of the Treaty on the Functioning of the European Union ("TFEU") do not directly refer the acts of the authorities of Member States and only refer to

⁶⁴Decision of the Romanian Competition Council no. 73 of October 8, 2019.

⁶⁵ Ibid, page 80, paragraph 170.

⁶⁶ Ibid, page 79, paragraph 168.

⁶⁷ Ibid, page 10.

⁶⁸ The opinion of the RCC regarding the legislative proposal for completing paragraph (2) of article 28 of the Law on community services of public utilities no. 51/2006, pages 1-2.

⁶⁹ RCC Guidelines on the interpretation and application of the provisions of the Competition Law on the markets of local sanitation services, respectively recommendations for improving the competitive environment in these markets, pages 14-15.

acts of undertakings, Article 4(3)⁷⁰ of the Treaty on European Union (“TEU”) provides a general duty of cooperation between the European Union and the Member States. By virtue of this principle, authorities of the Member States should not adopt any measures which may deprive competition rules applicable to undertakings of their effects.

According to the Court of Justice of the European Union⁷¹, Member States actions that impose or induce anti-competitive behaviours by undertakings, thereby causing competition restraints, are contrary to Article 4(3) TEU and Article 3(3) TFEU.

Furthermore, any measures amounting to restrictions of competition should be limited to what is necessary to ensure the implementation of legitimate objectives⁷².

As explained above, the Draft Law and its Explanatory Memorandum do not seem to coherently justify Romania’s choice of the measures so as to ensure that restrictions inherently imposed competition-wise are objective, necessary and proportional with the aim of protecting national security and national defence in the case at hand.

6. Conclusions

Whilst limited supplier restrictions are currently envisaged at EU level under certain conditions, the Draft Law seems to disregard the recommendations adopted by the European Commission with respect to the manner of devising measures to address risks pertaining to 5G technology.

At the same time, the Draft Law infringes fundamental principles set out in the electronic communications legal framework and, due to its potential effects on competition, may come counter the deregulation trend that has become fundamental on this market.

Considering the various public statements, there is a risk that these may result in the potential exclusion of the Chinese producers of 5G technology from the Romanian market.

Due to the structure of the relevant markets, the exclusion of two of the four main 5G technology producers (which seem to be currently holding over 90% of the RAN equipment

⁷⁰ Said article provides that „Pursuant to the principle of sincere cooperation, the Union and the Member States shall, in full mutual respect, assist each other in carrying out tasks which flow from the Treaties. The Member States shall take any appropriate measure, general or particular, to ensure fulfilment of the obligations arising out of the Treaties or resulting from the acts of the institutions of the Union. The Member States shall facilitate the achievement of the Union’s tasks and refrain from any measure which could jeopardise the attainment of the Union’s objectives.”

⁷¹ See Faull & Nikpay, *The EU Law of Competition*, Oxford University Press, 2014, cases cited at paragraph 6.05.

⁷² Please see Judgment of the Court of Justice of the European Union of September 4, 2014 in joined Cases C-184/13 to C-187/13, C-194/13, C-195/13 and C-208/13, requests for a preliminary in the proceedings *API – Anonima Petroli Italiana SpA v Ministero delle Infrastrutture e dei Trasporti, Ministero dello Sviluppo economico*, paragraph 48, available at <http://curia.europa.eu/juris/celex.jsf?celex=62013CJ0184&lang1=en&type=TXT&ancre=;>; Judgment of the Court of Justice of the European Union of December 22, 2010 in case C-338/09, reference for a preliminary ruling in the proceedings *Yellow Cab Verkehrsbetriebs GmbH v Landeshauptmann von Wien*, paragraphs 25 and 26, available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62009CJ0338&from=EN>.

market in the European Economic Area) has the potential to negatively impact competition in Romania and trade between EU member States.

Although laws may at times restrict competition, the Draft Law does not seem to meet the conditions required from a legal perspective so that it may do so.

All things considered, an in-depth scrutiny of the Draft Law and of its effects on competition should be conducted by the relevant regulators, based on detailed market information.



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