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**COMMUNICATION FROM THE COMMISSION**

**Guidelines on market analysis and the assessment of significant market power under the  
EU regulatory framework for electronic communications networks and services**

**(Text with EEA relevance)**

{C(2018) 2374 final}

# Staff working document

## Explanatory note

### Introduction

#### Regulatory framework

The EU Regulatory Framework for electronic communications networks and services currently in force consists of Directive 2002/21/EC, three specific Directives 2002/19/EC,<sup>1</sup> 2002/20/EC,<sup>2</sup> 2002/22/EC<sup>3</sup> and Regulation (EU) No 531/2012<sup>4</sup> (the Framework). In line with Article 15 of Directive 2002/21/EC NRAs shall take utmost account of both the Commission Recommendation 2014/710/EU<sup>5</sup> and the SMP Guidelines in order to define relevant markets for *ex ante* regulation.

Article 15(2) of the Framework Directive stipulates that the Commission shall publish guidelines for market analysis and the assessment of significant market power (SMP Guidelines) which shall be in accordance with the principles of competition law.

The SMP Guidelines set out the principles to be applied by national regulatory authorities (NRAs) for the analysis of markets and significant market power (SMP) under the Framework in force. As stated in Article 16(1) of the Framework Directive, NRAs shall take utmost account of the SMP Guidelines when carrying out an analysis of relevant markets.

Article 14(2) of the Framework Directive provides for a definition of SMP for the purposes of *ex ante* regulation. It states that an undertaking shall be deemed to have SMP if it, either individually or jointly with others, enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers. This definition corresponds to the definition that the Court of Justice of the European Union (CJEU or Court of Justice) case-law ascribes to the concept of dominant position in

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<sup>1</sup> Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive) OJ L 108, 24.4.2002, p. 7.

<sup>2</sup> Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive) OJ L 108, 24.4.2002, p. 21.

<sup>3</sup> Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) OJ L 108, 24.4.2002, p. 51.

<sup>4</sup> Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union, OJ L 172, 30.6.2012, p. 10, as amended by Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015, OJ L 310, 26.11.2015, p. 1 and Regulation (EU) 2017/920 of the European Parliament and of the Council of 17 May 2017, OJ L 147, 9.6.2017, p. 1.

<sup>5</sup> Commission Recommendation 2014/710/EU of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, OJ L 295, 11.10.2014, p. 79.

Article 102 of the Treaty on the Functioning of the European Union (TFEU).<sup>6</sup> Article 14 further stipulates that NRAs shall, when assessing whether two or more undertakings hold a joint dominant position in a market, act in accordance with EU law and take into utmost account the SMP Guidelines.

It results from the above that the SMP Guidelines are a key instrument that guides NRAs in carrying out their duties related to the market analysis procedures under the Framework. Indeed, the SMP Guidelines adopted in 2002<sup>7</sup> (the 2002 SMP Guidelines) have been a fundamental instrument in ensuring a consistent approach to market analysis since the first days of implementation of the Framework.

In order to ensure consistency between *ex ante* regulation and *ex post* application of competition law, the SMP Guidelines are based on the relevant jurisprudence of the CJEU concerning the market definition and the notion of dominant position within the meaning of Article 102 TFEU and Article 2 of Council Regulation 139/2004 on the control of concentration between undertakings (Merger control Regulation) as well as, to the extent relevant, on the Commission enforcement practice in the application of these two provisions and the Commission practice under Article 7 of the Framework Directive.

### **Recent developments in the electronic communications sector**

The present review of SMP Guidelines takes into account the NRAs' and Commission's regulatory experience of over 15 years of application of key concepts laid down in the 2002 SMP Guidelines.

The guidance related to *ex ante* regulation is given in the context of increased convergence of the electronic communications sector. The increased demand for bundled products by retail broadband customers, in particular for (various combinations of) fixed voice, mobile voice, broadband internet and TV bundles puts pressure on electronic communications operators to be able to supply bundled retail solutions. The role of NRAs in that respect is to continue to ensure that alternative operators can benefit from an appropriate access regime, which allows them to compete with retail bundles by sourcing at wholesale level relevant inputs which fall within the scope of the Framework, where the input market is characterised by single or joint SMP.

The regulatory measures introduced across the EU as of 2002 resulted in increased competition at retail level (as well as wholesale broadband access at central and the local level) and enabled the alternative operators to complement their network investments and optimise their retail market offerings at local, regional or national level. Alternative operators have rolled out their fibre infrastructure mostly in urban areas, including on the basis of duct access. This type of access is particularly conducive to infrastructure competition, as by allowing other operators to roll out their own fibre wires in the existing buried tubes or pipes of the regulated operator, the cost of deployment

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<sup>6</sup> Case 27/76 United Brands EU:C:1978:22, paragraph 65; Case 85/76 Hoffmann-La Roche v Commission EU:C:1979:36, paragraph 38, Case C-280/08 P, Deutsche Telekom v Commission, EU:C:2010:603, para. 170; Case C-52/09, Konkurrensverket v TeliaSonera Sverige AB, 17 February 2011, EU:C:2011:83, para. 23 and Case C-457/10 P, AstraZeneca v Commission, EU:T:2010:266, paragraph 175.

<sup>7</sup> Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services, OJ C 165, 11.7.2002, p. 6.

of alternative infrastructures can be greatly reduced, given that the very costly civil engineering works to bury additional ducts can be avoided.<sup>8</sup>

More recently, local fibre initiatives were carried out in collaboration with municipal authorities or utility companies. Still, other alternative operators have preferred building and upgrading local WiFi or cable based solutions. Moreover, copper upgrades resulted in the introduction of virtual local access products that act as a functional substitute to the traditional physical unbundling solutions, but are increasingly being supplied at fewer access points than the traditional unbundling solutions. Technical developments make it increasingly possible to supply wholesale broadband solutions over cable networks (originally deployed for broadcasting purposes but now used also to deliver high speed broadband). Incumbents have reacted either by upgrading their copper networks (*e.g.*, by rolling out fibre at least up to the street cabinet - closer to end user premises than was the case in the past - and deploying technologies that enhance the performance of legacy copper wires, such as vectoring) or by racing to invest in fibre to the premises where economic conditions favour this. As a result, there is greater infrastructure competition of various types, mainly in urban areas, although with signs of local fibre rollout by municipalities; and the network landscape varies both within and between countries more than it was the case when the Framework was first adopted.

The investments necessary to build future-proof networks in the EU need a stable and predictable regulatory framework, which is, *inter alia*, based on the SMP regime as a threshold for *ex ante* regulatory intervention.

## Review process

### Stakeholder feedback

The public consultation on the review of the 2002 SMP Guidelines ran from 27 March 2017 to 26 June 2017. The consultation aimed at gathering input on the need to update all individual sections included in the 2002 SMP Guidelines, in particular on market definition, single and joint SMP, regulatory obligations and procedural issues. Fifty-four stakeholders from twenty-two EU countries provided their views to the Commission.

The participation was fairly balanced and included the Body of European Regulators for Electronic Communications (BEREC), five NRAs, electronic communications operators and services providers, industry associations, as well as one individual. Fifty-one submissions were received via EU Survey and three respondents provided their contribution by e-mail.

The great majority of respondents considered that the 2002 SMP Guidelines do not require a major review of the methodology for market definition based on competition law principles. However, the Commission's guidance was requested by some respondents (mainly representatives of the industry), for instance on the competitive constraints posed by services provided by Over-the-Top players (OTTs) and the definition of bundle markets (*e.g.* telephony, internet access and TV), both at retail and wholesale level.

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<sup>8</sup> Ducts are not available in all Member States. However, given their importance for infrastructure-based competition, already in the Commission Recommendation of 20 September 2010 on regulated access to Next Generation Access Networks (NGA), 2010/572/EU (2010 NGA Recommendation) the Commission suggested that where duct capacity is available, the NRA should impose access obligations including access to ducts.

The majority of respondents considered that the criteria in the 2002 SMP Guidelines related to SMP are still appropriate. However, several respondents suggest specific amendments. Several operators, including incumbent and alternative operators, argued that market shares should not be considered determinative *per se* and all relevant market circumstances should be taken into account. Several participants, including incumbents and alternative operators, asked to take into account constraints exerted by OTTs, the role of self-supply, wholesale access agreements between operators and the impact of bundling in measuring market presence.

Four NRAs called for powers to address alleged risks of prices above competitive levels, lack of innovation and poor quality associated with market structures with a limited number of market players where the criteria of joint dominance as applied by the Court of Justice of the European Union are not met. Incumbent operators, some other operators and associations (representing mobile network operators and fibre investors) hold that the regulation of oligopolies should be rigorously based on the SMP findings. They believe that the criteria provided in the *Airtours* ruling are sufficient to identify joint dominance and, thus, joint SMP is the only situation requiring intervention. They dispute the problem alleged to arise from tight/non-collusive oligopolies and do not see a need to intervene. On the contrary, alternative operators are concerned that the *Airtours* criteria might not be capable of fully capturing certain forms of anticompetitive behaviour.

The majority of the participants emphasize that guidance relative to the regulatory obligations should be aligned finally with the objectives of the Code.

The summary of views expressed by stakeholders in the public consultation and the non-confidential version of submissions to the public consultation were published by the Commission in October 2017.<sup>9</sup>

### **Study accompanying the SMP Guidelines review**

An independent study was prepared by a contractor. It covers all the sections of the 2002 SMP Guidelines. The contractor has reflected the results of the public consultation in its finding. The study was performed in close collaboration with the relevant BEREC expert working group. In this context, the Commission hosted a workshop between the contractor and the relevant BEREC EWG, in particular, related to the legal test for finding the joint SMP and case studies pertinent to criteria for collective SMP finding.

The study will be published by the Commission.

### **Structure of the Guidelines**

Unlike the 2002 SMP Guidelines, the Revised SMP Guidelines exclusively focus on market definition, single and joint SMP. They do not include a section on the "imposition, maintenance, amendment or withdrawal or regulatory obligations under the regulatory framework" (current section 4), "powers of investigation and cooperation procedures for the purpose of market analysis" (current section 5) and "procedures for consultation and publication of proposed NRA decisions" (current section 6), which

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<sup>9</sup> [http://ec.europa.eu/information\\_society/newsroom/image/document/2017-40/synopsis\\_report\\_smpguidelines\\_issg\\_docx\\_A03442C6-A929-8278-AED39EED93CA5A17\\_47455.pdf](http://ec.europa.eu/information_society/newsroom/image/document/2017-40/synopsis_report_smpguidelines_issg_docx_A03442C6-A929-8278-AED39EED93CA5A17_47455.pdf).

were since the adoption of the original guidelines replaced by various more specific "soft law" instruments.<sup>10</sup>

The SMP Guidelines do not deal with co-ordination and/or collusion in the context of concerted practices under article 101(1) TFEU, nor do they address market structures with a limited number of market players where the criteria of joint dominance as applied by the Court of Justice of the European Union are not met.

## **Proposed principles for market analysis and assessment of SMP**

### **Regulatory principles**

As set out in the Revised SMP Guidelines, in carrying out a market analysis in accordance with Article 16 of the Framework Directive, NRAs have to conduct a forward-looking, structural evaluation of the relevant wholesale market over the relevant period. The length of the relevant period is the one between the end of the on-going review and the end of the next market review (the next review period),<sup>11</sup> within which the NRA should assess specific market characteristics and market developments. Accordingly, NRAs should determine whether the underlying retail market(s) is (are) prospectively competitive in absence of wholesale regulation based on a finding of single or joint SMP, and thus whether any lack of effective competition is durable,<sup>12</sup> by taking into account expected or foreseeable market developments over the course of the next review period.

NRAs should take into account existing market conditions as well as expected or foreseeable market developments over the course of the next review period in the absence of regulation based on significant market power; this is known as a Modified Greenfield Approach.<sup>13</sup> On the other hand, the analysis should take into account the effects of other types of (sector-specific) regulation, decisions or legislation applicable to the relevant retail and related wholesale market(s) during the next review period.

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<sup>10</sup> Regarding regulatory remedies, the Commission has adopted recommendations such as the Recommendation of 20 September 2010 on regulated access to Next Generation Access Networks (NGA) (the NGA Recommendation), Recommendation of 11 September 2011 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment, (the Recommendation on costing and non-discrimination) and Recommendation of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, 2009/396/EC, (the Termination rates Recommendation). As regards procedural and administrative issues, specific guidance is provided in the Commission Recommendation of 15 October 2008 on notifications, time limits and consultations provided for in Article 7 of Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, (2008 Procedural Recommendation). Moreover, there is now a long-term and well-established experience of NRAs in applying the Framework.

<sup>11</sup> Article 16(6) of the Framework Directive currently states that NRAs shall notify the Commission of new draft measures within three years of the adoption of a previous measure relating to that market.

<sup>12</sup> Recital 27 of the Framework Directive.

<sup>13</sup> Explanatory Note accompanying the Commission Recommendation 2014/710/EU, SWD(2014)298, paragraph 8.

The relevant period should reflect the specific characteristics of the market and address developments over the next review of the relevant market by the NRA.<sup>14</sup>

If, where regulation is in place, the underlying retail market(s) is (are) prospectively competitive under the Modified Greenfield Approach over the next review period, the NRA should conclude that regulation is no longer needed at wholesale level. In such as case, the corresponding relevant wholesale market(s) should be analysed with a view to withdrawing regulation.

Where wholesale markets are vertically linked in the supply chain, the wholesale market to be analyzed first is the one that is most upstream from the retail market in question.

NRAs should start from the existing situation and take past and present data into account in their analysis when such data is relevant to the developments in that market in the foreseeable future. In this respect, it needs to be underlined that any readily available evidence of past practice does not automatically suggest that this practice is likely to continue in the next review period. However, past practice is relevant if the market's characteristics have not appreciably changed or are unlikely to do so in the next review period.

It follows from the above that both static and dynamic considerations, clear evidence of which is available for the period of the review, should be reflected by the NRAs in the market analysis, with a view to addressing market failures identified at retail level by imposing appropriate wholesale regulatory obligations, that should, *inter alia*, promote competition and contribute to the development of the internal market, to the benefit of the consumers and be based on the regulatory principles set out in Article 8 of the Framework Directive, such as promoting regulatory predictability, efficient investment and innovation or infrastructure-based competition.

In line with point 18 of the 2014 Recommendation on relevant markets, *ex ante* regulation at the wholesale level should be sufficient to tackle potential competition problems on the related downstream markets(s).

The analysis should be based on a functional understanding of links between the relevant wholesale and underlying (and if the NRAs deem it appropriate, also other related) retail market(s). The Commission has underlined in previous decisions<sup>15</sup> that retail market conditions may inform an NRA of the structure of the wholesale market, but are not in themselves conclusive as regards a finding of SMP at the wholesale level. As established in several Commission decisions under Article 7 of the Framework Directive<sup>16</sup>, there is no need to prove single or joint SMP at retail level, in order to

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<sup>14</sup> In line with point 15 of the Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, 2014/710/EU, OJ L 295, 11.10.2014, p. 79–84 (2014 Recommendation on relevant markets), even if a market is characterised by high barriers of entry other structural factors in that market may entail that the market still tends towards becoming effectively competitive within the relevant time horizon. A tendency towards effective competition implies that the market will either reach the status of effective competition absent *ex ante* regulation within a period of review or will do so after that period provided clear evidence of positive dynamics (such as technological developments or convergence of products and markets which may give rise to competitive constraints being exercised between operators active in distinct product market) is available within the period of the review.

<sup>15</sup> Cases FI/2004/0082, ES/2005/0330 and NL/2015/1727. See also Case CZ/2012/1322.

<sup>16</sup> Cases IE/2004/0121, ES/2005/0330, SI/2009/0913 and NL/2015/1727.

establish that (an) undertaking(s) enjoy(s) single or collective SMP in the relevant wholesale market(s).

In line with point 10 of the 2014 Recommendation on relevant markets, when analysing the market boundaries and market power within (a) corresponding relevant wholesale market(s) to determine whether it is/they are effectively competitive, direct and indirect competitive constraints should be taken into account, irrespective of whether these constraints result from electronic communications networks, electronic communications services or other types of services or applications that are comparable from the end-users' perspective.

In line with point 23 of the 2014 Recommendation on relevant markets, newly emerging markets should not be subject to inappropriate *ex ante* regulatory obligations, even if there is a first-mover advantage. Newly emerging markets are considered to comprise products or services where, due to their novelty, it is very difficult to predict demand conditions or market entry and supply conditions, and consequently it is difficult to reliably analyse them in view of the imposition of *ex ante* regulation. Newly emerging markets should be carefully assessed to avoid that inappropriate *ex ante* regulatory obligations hinder innovation. However, at the same time, foreclosure of such markets by the leading undertaking should be prevented.

Incremental upgrades to existing network infrastructure rarely lead to a new or emerging market. The lack of substitutability of a product has to be established from both demand- and supply-side perspectives before it can be concluded that it is not part of an already existing market. The emergence of new retail services may give rise to a new derived wholesale market to the extent that such retail services cannot be provided using existing wholesale products.

Given that the Guidelines continue to be based on competition law principles, if an NRA had already carried out a public consultation in line with the 2002 Guidelines, the mere adoption of these Guidelines should not *per se* require that NRA to conduct a new public consultation.

## Market definition

Market definition is a tool to identify and define the boundaries of competition between undertakings. The main purpose of the definition of a market is thus to identify in a systematic way the competitive constraints that the undertakings involved in the market are facing. The overall objective of defining a market in both its product and geographic dimension is to identify those actual and potential competitors of the undertaking(s) potentially holding SMP, which are capable of constraining those undertakings' behaviours in the short term<sup>17</sup> and of preventing others from behaving within the defined market to an appreciable extent independently of effective competitive pressure, *i.e.* independently of their competitors, customers and ultimately consumers. As a result, the definition of the relevant market is the prerequisite for assessing whether a particular market is characterised by effective

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<sup>17</sup> Which exact time horizon is to be considered as "short term" depends on market characteristics and national circumstances. In COMP/39.525 (Telekomunikacja Polska), the Commission set out, in paragraph 580, that "there is supply-side substitution where suppliers are able to switch production to the relevant products and market them in short term in response to small and permanent changes in relative prices." According to footnote (4) of paragraph 20 of the 1997 Commission Notice on the definition of relevant market for the purposes of Community competition law (1997 Notice on Market Definition), OJ C 372, 9.12.1997, that is "such period that does not entail a significant adjustment of existing tangible and intangible assets". See also paragraph 23 of the 1997 Notice on Market Definition.



competition or should be subject to *ex ante* regulation and to set the boundaries within which to analyse competitive dynamics and to identify competition constraints faced directly or indirectly by the undertakings that are present in the market in question.

Under the Framework, markets are defined and SMP is assessed using the same methodologies as under competition law. Therefore the definition of product markets and the assessment of the geographic scope of these markets as well as the assessment of effective competition by NRAs should be consistent with the case-law of the CJEU and the Commission enforcement practice in the field of EU competition law.<sup>18</sup>

The market definition must form a rigorously and objectively based conceptual framework for any competition analysis. In line with established jurisprudence of the CJEU regarding abuse of dominance, in a market power analysis the definition of the relevant market is of essential significance, because the possibilities of competition can only be judged in relation to those characteristics of the products in question by virtue of which those products are particularly apt to satisfy an inelastic need and are only, to a limited extent, interchangeable with other products.<sup>19</sup>

Given that *ex ante* regulation aims at addressing an identified lack of effective competition that is expected to persist over a specific time horizon in the future, the analysis of markets has to be also forward-looking. As a result, markets need to be defined prospectively.<sup>20</sup>

While the methodology and tools for market definition have not undergone significant changes since the implementation of the Framework in 2002 and the adoption of the 2002 SMP Guidelines and remain relevant, new issues have arisen due to rapid technological development, which may have an effect on the outcome of the definition of relevant markets by NRAs in the sector for electronic communications.

The ever increasing use of digital transmission technologies now allows for more seamless product substitutability across different platforms and technologies. In addition, the trend of consumers demanding more and more bundled offers also will have to be taken into account by NRAs when looking at defining market boundaries for the purpose of *ex ante* regulation.

These and other trends have already been recognised in the approach recommended by the Commission for the definition of markets susceptible to *ex ante* regulation as set out in successive versions of the Recommendation on relevant markets.<sup>21</sup>

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<sup>18</sup> Further guidance on the methodology for market definition is provided in the 1997 Notice on Market Definition.

<sup>19</sup> See point 46 of the Commission Decision of 10 August 2012 in Case CZ/2012/1322, C(2012)5654. This principle was initially laid down in Case 6/72 Europemballage Corporation and Continental Can Co Inc v Commission EU:C:1973:22, paragraph 32. "*Proper definition of the relevant market is a necessary precondition for the assessment of the effects on competition of the concentration*", Joined Cases C-68/94 and C-30/95 EU:C:1998:148, Kali & Salz EU:C:1975:58, paragraph 143; Case T-342/99 Airtours plc v Commission EU:T:2002:146, paragraph 19 and Case T-151/05 NVV v Commission, EU:T:2009:144, paragraph 51.

<sup>20</sup> See also recital 27 of the Framework Directive.

<sup>21</sup> See, for example, section 3.1 of the Commission Staff Working Document (Explanatory Note) accompanying the 2014 Commission Recommendation on relevant product and services markets; SWD(2014)298.

One of the main developments since the introduction of the Framework, as set out in the 2014 Recommendation on relevant markets, is that, in general, retail markets are no longer<sup>22</sup> considered by the Commission to require *ex ante* regulatory intervention.

### ***Product Market Definition***

The process of defining a market typically starts by establishing the closest substitute (or group thereof) to the product(s), which are the focus of the analysis. These products represent the most immediate competitive constraint on the behaviour of the undertaking supplying the relevant product. As a result, in order to define a market, NRAs need to assess two main sources of competitive constraints: (i) demand substitutability and (ii) supply substitutability.<sup>23</sup>

The difference between supply-side substitution and potential competition lies in the fact that the former responds to a price increase in the short term and without significant costs whereas the latter responds to the price increase requires more time and occurs at significant cost.<sup>24</sup>

Furthermore in a vertically integrated market setting, both direct and indirect constraints may have to be taken into account in the market analysis, irrespective of whether these constraints result from electronic communications networks, electronic communications services or over-the-top ("OTT") services<sup>25</sup>. Direct constraints arise from competition at wholesale level, whereas indirect constraints are exercised by way of retail demand substitution. Where competitive constraints stem from outside the market, they should, nevertheless, be taken into account at the stage of the SMP assessment.<sup>26</sup>

Demand-side substitutability is used to measure the extent to which customers<sup>27</sup> are prepared to substitute other services or products for the service or product in question.<sup>28</sup> Supply-side substitutability on the other hand indicates whether suppliers other than those offering the product or

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<sup>22</sup> The last retail market considered to be in need of *ex ante* regulation, *i.e.* the retail market for access to the public telephone network at a fixed location for residential and non-residential customers, was removed by the Commission from the list of markets susceptible to *ex ante* regulation in 2014.

<sup>23</sup> A different competition constraint is potential competition, which is however relevant not at the stage of market definition but at the subsequent stage of the competitive assessment. See also, the 1997 Notice on Market Definition, point 13.

<sup>24</sup> See points 20 – 24 of the 1997 Notice on Market Definition.

<sup>25</sup> "Over-the-top" or OTT services refers to service providers, which deliver one or more services across an IP network (often the network of another provider).

<sup>26</sup> See in particular Case FR/2014/1670, where the Commission stated that considering the competitive constraint exercised by OTT-based messaging services on traditional (SMS) messaging services may lead to a broader market definition. In any case, the Commission went on to state that "even if instant messaging services were rightly excluded from the market definition, ARCEP should have thoroughly assessed constraints coming from these services at the stage of the SMP analysis".

<sup>27</sup> The term "customer" is meant to cover both retail and wholesale demand.

<sup>28</sup> It is not necessary that all consumers switch to a competing product; it suffices that enough or sufficient switching takes place so that a relative price increase is not profitable. This requirement corresponds to the principle of "sufficient interchangeability" laid down in the case-law of the Court of Justice; see below, footnote 32.

services in question would switch in the immediate to short term their line of production to offer the relevant products or services without incurring significant additional costs.<sup>29</sup>

One way of assessing substitutability is the application of the so-called "hypothetical monopolist" or "SSNIP test".<sup>30</sup> The SSNIP test assumes a non-transitory price increase of approximately 5-10 % and assesses if such price increase would lead to customers switching away from the product subject to the price increase towards a potential substitute product. If the price increase would determine such switch and the loss of sales caused by the assumed switching would render the price increase unprofitable, these products should be regarded as part of the same product market.

The SSNIP test can, however, not be applied, if the price level or other market parameters are not at competitive level,<sup>31</sup> as such analysis would be liable to the so-called cellophane fallacy.<sup>32</sup> NRAs faced with such difficulties could rely on other criteria for assessing the substitution, such as functionality of service, technical characteristics etc.

In addition, NRAs may be faced with a situation where no adequate access product exists at the time of the analysis, or where such product, if available, is not priced at a competitive level. This may primarily be the case where no or insufficient access regulation is currently in place. Therefore, if no access product exists, NRAs may have to assume the existence of a technically feasible and economically viable access product that would exist in a competitive market in order to be able to apply the SSNIP test. In this respect, NRAs have in the past successfully developed regulatory intervention decisions based on these principles. For example, with regards to the unbundling of existing networks, access products were created through regulatory intervention, with all necessary specifications, including the need for a modelled price, where initially no access to competitors was foreseen by the access provider (*e.g.* local loop unbundling (LLU) of the copper access network). This was done by NRAs through the assumption of a hypothetical access product in their initial market analysis. A similar approach could be envisaged with regards to alternative access networks, such as coaxial cable, and the question of their substitutability with access networks of the legacy incumbent, even if at the time of the market analysis no cable access product or access price is readily available.<sup>33</sup>

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<sup>29</sup> Supply-side substitution is particularly relevant for network industries, such as electronic communications, as the same network may be used to provide different types of services; see COMP/39.525, Telekomunikacja Polska, paragraph 580.

<sup>30</sup> See Case T-83/91, Tetra Pak v Commission, EU:T:1994:246, paragraph 68. The test is also known as "SSNIP" (small but significant non transitory increase in price). Under this test, the NRA should ask what would happen if there was a small but significant, non-transitory increase in the price of a given product or service, assuming that the prices of all other products or services remain constant.

<sup>31</sup> See also point 19 of the 1997 Notice on market definition, which states that taking into account the prevailing market price may not be possible "where the prevailing price has been determined in the absence of sufficient competition. In particular for the investigation of abuses of dominant positions, the fact that the prevailing price might already have been substantially increased will be taken into account".

<sup>32</sup> "*Cellophane fallacy*" (or *cellophane paradox*) describes a form of flawed reasoning in a market analysis, which arises when an undertaking sells a product with originally no or few substitutes allowing it to price that product above the competitive level. Once the price is set at a supra-competitive level the product may attract more and more new substitutes, creating the (false) impression of effective competition. As a result, the use of the product's elevated market price could misconstrue the results of anti-competitive behaviour as a lack of market power; see also point 19 of the 1997 Notice on Market Definition.

<sup>33</sup> See in this respect, the Commission Decisions in cases DK/2012/1340 and DK/2008/0862, where the Danish NRA introduced an obligation to provide cable-based Bitstream access following the inclusion of

This means, that, in the area of *ex ante* regulation and where a regulated access product and price exist, a regulated price, in the absence of indications to the contrary, should be taken as the starting point for the hypothetical monopolist test. At the same time, a notional alternative access product (and a hypothetical access price for such a product) should be used to inform the substitutability analysis of NRAs<sup>34</sup> in order to assess whether such a hypothetical alternative access product may form part of the same product market (*e.g.* whether an enhanced Bitstream/virtual access product over coaxial cable could be considered a full substitute in the market for wholesale local access).

In order to determine whether products are substitutable from a demand-side perspective, NRAs should analyse available evidence of customers' behaviour. Relevant data include historic price fluctuations in potentially competitive products and customers' reaction to such. If such data is not available, NRAs should assess the likely reactions of customers in case of a hypothetical price increase. This assessment requires a thorough consideration of barriers and costs to switching.

The analysis of supply-side substitution on the other hand has to focus on the costs of and required time for switching production or service provision. Where costs are found to be low enough and the expected timeframe is reasonably short, the related product may have to be included in the product market. However, if the expected switching costs for market entry are significant or other reasons such as long-term supply agreements create barriers to entering the market, the inclusion in the market would be less likely.

In order to reflect the forward-looking nature of *ex ante* regulation, a substitutability analysis needs to be carried out in a prospective, forward-looking manner, taking into account not only the currently existing market structure, but also whether new access seekers would be able to choose their access products without facing switching costs otherwise associated with a switch between platforms as well as the significance of such a choice. Furthermore every analysis of switching costs should assume a competitive market environment and disregard non-objectively justifiable impediments to switching that would not be in place in a competitive market.

### ***Innovation and technological convergence***

Since the adoption of the Framework, there have been significant technological changes in electronic communications markets, which are also likely to have an impact on the correct delineation of relevant markets. For example, increased convergence has taken the form of using a common infrastructure to provide multiple services, such as the increasing prevalence of common core (typically fibre) infrastructure which is used to supply both fixed (telephone, broadband and TV) and mobile retail services.<sup>35</sup> Trends towards a common converged core infrastructure, likely based on fibre, are set to intensify with the deployment of 5G mobile networks. It can be expected that operators may take advantage of the synergies achievable from convergence in the technical supply of services, which

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cable in the market based on a hypothetical substitution analysis (in light of the fact that no cable-based access product existed yet). Similarly, in case FI/2013/1498 the Commission stated that in such a scenario a SSNIP test carried out at monopoly price level cannot reliably inform the proper market delineation or whether a company holds a dominant position in such market.

<sup>34</sup> See Cases DK/2012/1340 and DK/2008/0862 as well as Case IT/2015/1778.

<sup>35</sup> In Case AT/2014/1599, for example, the Austrian NRA showed that dark fibre-based services are already used as one of the key products in particular by mobile operators in a similar way as terminating segments of leased lines.

may lead to a reduction of sunk costs for entering a market and in turn may impact the outcome of the analysis of supply side substitution.

Furthermore, OTT-based services have emerged as a competing force to certain retail services. OTT operators and other internet-related communication paths have over the last years gained significant importance and may in the future provide partial or full substitutes to traditional telecommunications services, although not networks. As a result of this trend, NRAs should look at potential substitutability patterns between OTT-based and more traditional electronic communication services in order to assess, whether a broadening of the product market would be justified. In any case, as also set out further below, where no sufficient substitutability can be established to warrant including such OTT-based services in the relevant product market, NRAs should, nevertheless, consider the potential competitive constraints exercised by these services at the stage of the SMP assessment.

Whilst increasing technological convergence may have implications for the results of retail and wholesale market definitions, the underlying methodologies and tools of the assessment of the market boundaries remain the same.

### ***Bundling of services and products***

Convergence has also developed in the provision of retail services, resulting in the increased bundling of services at retail level, including combining the provision of content alongside internet access and telephony services. This trend is supported from the demand-side by an increased consumer demand for packages of services offered by the same operator (often at a flat rate). Double play offers consisting of the provision of combined fixed telephony and broadband services have been standard in most Member States for several years now. Triple play offers, including (fixed) telephone, broadband and TV are now frequently found in many markets and quadruple play offers, combining fixed and mobile telephony with internet access and TV exist as retail offers in some Member States.

Whilst such increased importance of bundles in the electronic communications sector has – so far – not yet led many NRAs to define a separate product market for bundled offers (either at the retail or the wholesale level), NRAs should assess on a forward looking basis, whether it may have an impact on their market analysis (both at retail and at wholesale level), including considering the question of whether a number of retail services sold as a bundle may form a distinct (bundled) retail market. Any such analysis should be conducted on the basis of the bundling and pricing structures that would exist in a competitive environment.<sup>36</sup>

From a demand-side perspective, a separate product market for bundles may be found (at the retail level), if, from a demand-side perspective, following a small but significant, non-transitory increase in the price of the bundle, customers would not "unpick the bundle" into its component individual services. If, however, customers would, in such a case, revert to purchasing individual components such that the price increase for the bundle would become unprofitable no separate market for bundles

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<sup>36</sup> NRAs should be careful when using existing market indicators for the application of the SSNIP test in order to define markets as these indicators may have been influenced by anti-competitive conduct (so-called cellophane fallacy). In such cases, NRAs should assume market indicators which would prevail in a competitive market. The objective of such an assessment is for NRAs to assess whether under a Modified Greenfield Approach a competitive concern with regards to the provision of bundled offers at retail level arises absent wholesale regulation. It is also worth noting that with regards to merger control, in most cases to date, no conclusive finding of the existence of a separate market for bundles was made and that, as a result, the assessment of the effects on competition of the existence of bundles tends to be done at the competitive (SMP) assessment level.

should be found. From a supply-side perspective, a bundled market at the retail level may be deemed to exist if, following a small but significant, non-transitory increase in the price of the bundle, operators in related markets would not enter into the provision of bundled offers in the short term.<sup>37</sup>

If an NRA includes bundles within a relevant retail market or concludes that a separate retail bundles market exists and establishes that there are competitive concerns affecting consumers, which derive from the provision of bundles at the retail level, it should then identify and analyse the relevant wholesale market(s), to the extent that they fall within the scope of application of the Framework,<sup>38</sup> with a view to establish whether *ex ante* intervention on these upstream markets could address the identified competition problems at retail level. This is not to say that there will necessarily also be a bundled market at wholesale level. On the contrary, in all likelihood, individual wholesale markets will form the inputs for the bundled retail market.<sup>39</sup> As a result, where competitive problems affecting consumers exist in a retail market for bundled services, NRAs should identify the relevant wholesale input markets, which may address the root cause of these problems. Whether or not the identified wholesale input is offered on a commercial basis or requires *ex ante* regulation is then subject of the subsequent SMP analysis.

### ***Relationship between relevant retail and wholesale markets***

The 2014 Recommendation on relevant markets clearly shows that retail markets are no longer the main focus of *ex ante* regulation. Nevertheless, sustainable competition at retail level to the ultimate benefit of consumers and end-users<sup>40</sup> remains the ultimate objective of regulatory intervention. Therefore, the starting point for the identification of wholesale markets susceptible for *ex ante* regulation should always be the analysis of corresponding retail markets.<sup>41</sup> SMP access regulation should be applied only where this is necessary in order to address – where necessary under Modified Greenfield assumptions – a lack of effective competition at the retail level. It should thus be removed as soon as competition is achieved at retail level, which is sustainable in the absence of (wholesale) regulation. Several wholesale markets can provide wholesale upstream inputs for a particular retail market, and conversely one wholesale market can provide wholesale upstream inputs for a variety of retail markets.

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<sup>37</sup> It has to be noted, however, that the absence or very low take-up of individual offers is not in itself proof of the existence of a bundled market. If consumers have been deprived of a choice of individual components of a bundle that would be available in a competitive market and which they would have chosen, or where consumers have been incentivised towards bundled offers through pricing strategies that are not reflective of the underlying costs, the finding of a retail bundles market may not be correct.

<sup>38</sup> Notwithstanding the increasing importance of audiovisual content as part of a bundle, such content transmitted using electronic communications networks and services is excluded from the scope of the Framework, hence not all upstream wholesale inputs to the bundle may fall within the potential scope of *ex ante* regulation to be imposed by NRAs.

<sup>39</sup> At the same time, given that NRAs only need to consider what impact, if any, the different configurations of retail markets may have on the ability to address at wholesale level the competition problem identified, it may be appropriate for NRAs – where the different delineations of the retail market boundaries have no impact on the definition of the relevant wholesale market or on the downstream competition problem identified – to leave the precise boundaries of the retail market open.

<sup>40</sup> See in particular Article 8(2)(a) of the Framework Directive.

<sup>41</sup> See also section 4 of the Explanatory Note accompanying the Commission Recommendation 2014/710/EU, SWD(2014)298, page 19.

NRAs do not need to find SMP at the retail level in order to justify a further definition of associated wholesale markets. It suffices to identify a competition problem at the retail level absent wholesale regulation.

When defining the relevant wholesale markets which may be susceptible to *ex ante* regulation, NRAs should start by identifying and analysing the market which is most upstream of the retail market, in which problems have been found, noting that this may be a market which consists of or includes more generic cross-market wholesale products such as passive infrastructure access (*e.g.* duct access) or passive access remedies. Only thereafter, if remedies in the most upstream market are not sufficient in themselves to address the competitive problem in the retail market, NRAs may proceed to define and analyse wholesale markets further downstream in the supply chain, again following a Modified Greenfield approach in case regulation is in place at the moment of assessment.

### ***Virtual vs. physical access products***

Recent market developments, such as the increased potential of active or virtual access products, the introduction of speed-enhancing technologies like vectoring as well as current technological restrictions to unbundle certain access technologies (*e.g.* GPON-based fibre access) have led NRAs to impose in many instances virtual access in lieu of physical access obligations. In its case practice,<sup>42</sup> the Commission considered that such virtual access products may be part of the same relevant market as a functional substitute to a physical access product, provided they exhibit functionalities equivalent or comparable to the key features of physical unbundling. For the market of wholesale local access at a fixed location, the Commission set out in its 2014 Recommendation on relevant markets that virtual network access solutions may be considered to be part of the same market as physical network access solutions where virtual access exhibits functionalities equivalent to the key features of physical access. To be more precise, any virtual wholesale access product should be presumed to be part of the market for wholesale local access, where the following conditions are (cumulatively) met: (i) access occurs locally; (ii) access is generic and provides access seekers with a service-agnostic transmission capacity, which is uncontended in practice; and (iii) access seekers have sufficient control over the transmission network in order to allow for product differentiation and innovation capabilities, which are similar to those offered via physical access solutions.<sup>43</sup>

The above considerations and the increased technical potential of some virtual access products<sup>44</sup> are not only important with regard to the question as to whether a virtual access product is or is not part of the same market as a potentially comparable physical access solution. They also may inform an NRA's analysis regarding the question as to whether a chain of substitution<sup>45</sup> exists, which could justify grouping several virtual access solutions (*i.e.* more local and more central virtual access solution) in the same market and, thus, potentially diminishing the need for a clear market boundary between a wholesale local and a wholesale central access market.

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<sup>42</sup> See, as the leading case, Commission Decision in UK/2010/1064 and further Commission Decision in Case DE/2016/1876.

<sup>43</sup> For more details, see section 4.2.2.1 of the Commission Staff Working Document (Explanatory Note) accompanying the 2014 Commission Recommendation on relevant product and services markets, SWD(2014)298, page 43.

<sup>44</sup> In particular those provided over FTTx networks.

<sup>45</sup> See below for further considerations on identifying chains of substitution.

### *Inter-platform Markets*

At retail level, technological developments have generally led to inter-platform competition between services provided via fixed networks, as retail services provided over different platforms have been found to be functionally equivalent and increasingly interchangeable from the demand-side perspective. As a result, regulators have established a high degree of substitutability between VDSL and coaxial cable from consumers' perspective, as well as similar characteristics and costs of VDSL-based Bitstream offers and a potential cable alternative from an access seeker's perspective. The functional equivalence at the retail level of internet access over VDSL and over cable networks is generally accepted. Also, retail prices are usually similar. For that reason, NRAs should look at whether wholesale Bitstream services provided over VDSL and over coaxial cable networks are equivalent in terms of functionality and price, since they allow access seekers to produce retail products that are interchangeable from the retail customers' perspective.

In order to determine if fixed networks such as VDSL copper / FTTx networks and coaxial cable are included in the same wholesale market, NRAs have to assess on a case by case basis whether the competitive constraints are sufficiently strong.

When performing a SSNIP test, switching costs incurred by access-seekers already present on a given platform should be taken into account. However, other factors also need to be considered to ensure that the analysis does not reflect only the *status quo*, but is carried out in a prospective, forward-looking manner. For instance, the occurrence of further market developments may affect the durability of the identified barriers. Furthermore, such a prospective analysis should consider – on a realistic basis – potential demand by access seekers not yet providing access-based services and should assume an access regime that would exist in a competitive market and where efforts have been made to the extent possible to address barriers to switching and interoperability.

NRAs should take into account all relevant impediments to switching. This may include past evidence as regards platform or network operators' switching costs that may be relevant as regards market entry from a forward looking perspective. Impediments to switching, which are technically not justified and which may have the sole purpose to render switching either technically or financially unattractive by unduly inflating the related costs, should be disregarded.

In relation to cable-based Bitstream, the Commission has previously pointed out that a market analysis should also take into account the possible role of regulators in incentivising suppliers and operators of the DOCSIS community into developing a standard allowing VULA-type access to their networks.<sup>46</sup>

While existing operators may consider certain costs as prohibitive in relation to switching access platforms, potential entrants would be indifferent to such costs and will chose the platform on the basis of the prospective costs of access to and the performance of the chosen platform, in order to be best situated to compete in the retail market.

On the other hand, the footprint of the networks may play an important role for the question, whether access to the respective network can in fact be viewed as a demand-side substitute. Where the footprint of the respective other network is significantly smaller than the relevant geographic market,<sup>47</sup> *i.e.* not

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<sup>46</sup> Case NL/2015/1727. The development of a VULA standard on cable would enable it to be considered in the context of wholesale local access.

<sup>47</sup> For the definition of the relevant geographic market, see below.



ubiquitous, NRAs may find that even if access to both infrastructures is functionally equivalent, switching would be unlikely because access to the non-ubiquitous network would not allow alternative operators to compete in a sufficiently large part of the geographic market.

Depending on the particular market under review, the overall assessment may put high switching costs of an existing operator into question and may suggest the finding of a multi-platform wholesale market that encompasses copper/FTTx and coaxial cable, in particular where both networks are ubiquitously available in the relevant geographic market.

Retail services provided over fixed and mobile networks have been generally found by NRAs to be in separate markets. A substitutability of fixed services by mobile services may however become more likely due to future technological developments and the increasing technological and functional performance of mobile networks and to the developments in the cost base of such networks.<sup>48</sup> Nevertheless, a reverse substitutability of mobile services with fixed services seems less likely due to the mobility requirement.

### ***Inclusion of self-supply***

Given that in the context of *ex-ante* regulation, NRAs will have to assess whether future regulatory intervention in relevant market is warranted, the issue of how to take into account the self-provision of wholesale inputs arises frequently in both defining and analysing wholesale markets.<sup>49</sup> In some cases, what is under consideration is the self-supply of the incumbent operators. In others, it is the self-supply of alternative operators.

As stated above, NRAs should commence the exercise of defining the relevant product or service market by grouping together products or services that are used by consumers for the same purposes (end use).<sup>50</sup> Where self-supply and external supply are undistinguishable from a consumer perspective and services are functionally similar and interchangeable, such self-supply should be considered to be part of the same product market as the services supplied externally.<sup>51</sup>

In cases where there is likely demand substitution, *i.e.* where wholesale customers are interested in procuring from alternative operators, it may be justified to take the self-supply concerned into consideration for the sake of market delineation. Even where there is an alternative potential supplier, it may share the same strategic interests as the incumbent regarding supply to third parties. Alternative operators' self-supply should, in particular, be assessed when alternative operators' networks are included in the relevant market due to the strong direct pricing constraints they exert on the incumbent operator. However, this is not justified if alternative operators face capacity constraints, or their

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<sup>48</sup> See Case AT/2017/1987-1988, where the Austrian NRA has found mobile broadband to be included in the retail market for residential broadband; see also Case CZ/2017/1985, where the Czech NRA has found LTE mobile networks with limited mobility and allowing "nomadic" access to be part of the relevant retail market.

<sup>49</sup> The objective of the market definition exercise under Article 15 of the Framework Directive is to assess whether regulatory intervention is warranted in the first place, which justifies a potentially different treatment of the self-supply of wholesale services if compared with *ex post* competition law.

<sup>50</sup> Paragraph 33 of the Communication.

<sup>51</sup> See Case AT/2017/2020. The NRA proposed in its draft measure to define a market, excluding self-supply of the SMP operator to its parent company. The Commission required the NRA to withdraw its draft measure, finding that the exclusion of self-supply would not be in accordance with EU law.

networks lack a sufficiently large scale within the relevant geographic market expected by access seekers, and/or if alternative providers have difficulty in entering the merchant market readily.<sup>52</sup>

The question is of particular relevance, where no service equivalent to the self-supplied service is provided to third-party access seekers. If, for example, cable-based Bitstream is considered a demand substitute for VDSL-based Bitstream, but despite the technical possibility, such service is not yet offered to third-party access seekers, NRAs should, in principle, include the self-supply of cable-based Bitstream in the relevant wholesale market. Again such analysis should reflect the position in a competitive market, disregarding artificially inflated barriers to switching or interoperability by operators.

The correct treatment of self-supply in the market analysis is not only relevant for the question whether the wholesale market comprises only one or multiple network infrastructures. It is also essential in order to carry out a proper market analysis and to identify correctly the competition problems in the market, which need to be taken into account in the assessment of the appropriate remedies.<sup>53</sup>

In addition, in many cases the incumbent operator is the only undertaking that is in a position to provide a potential wholesale service. In the absence of a merchant market and where there is consumer harm at retail level, it is justifiable and appropriate for NRAs to construct a notional market when potential demand exists. Here the implicit self-supply of this input by the incumbent to itself should be taken into account.<sup>54</sup>

### ***Chain of Substitution***

The boundaries of the relevant market may be expanded to take into consideration products or geographical areas which, although not directly substitutable, should be included in the market definition because of a so-called "chain substitutability" or "chain of substitution". Chain substitutability is relevant, where it can be demonstrated that although products A and C are not directly substitutable, product B is a substitute for both product A and product C and therefore products A and C may be in the same product market since their pricing might be constrained by the substitutability of product B.<sup>55</sup>

A related and similar concept to the chain of substitution principle common in electronic communications markets is that of "one-sided" or "asymmetric" substitution. Such substitution is relevant, where product A may be a substitute for product B, even if product B may not be a substitute for product A, suggesting a broad market definition, which encompasses both products.<sup>56</sup> This is

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<sup>52</sup> Section 3.3 of the Commission Staff Working Document (Explanatory Note) accompanying the 2014 Commission Recommendation on relevant product and services markets; SWD(2014)298, page 18.

<sup>53</sup> Case AT/2017/2020.

<sup>54</sup> Commission Staff Working Document (Explanatory Note) accompanying the 2014 Commission Recommendation on relevant product and services markets, SWD(2014)298, page 18; Case NL/2015/1727, C(2015)3087, page 13. See also CZ/2017/1985.

<sup>55</sup> Paragraph 43 of the Communication.

<sup>56</sup> See also BEREC Report on impact of fixed-mobile substitution in market definition, where it is suggested that in the case of asymmetric substitution alternative product(s) are included in the same market as the focal product.

particularly relevant if technological developments lead to product innovation, where the new product subsumes all features of the previous, but adds additional features or characteristics.<sup>57</sup>

Therefore, different generations of technology are considered to be in the same market (*e.g.*, 2G, 3G, 4G),<sup>58</sup> in particular when they do not enable fundamentally different services but only lead to an improvement in quality and capacity. For example, experience under the Article 7 procedure has not shown significant breaks in the chain of substitution when comparing current-generation broadband services with next generation services provided over optical fibre.<sup>59</sup> Therefore, access to a FTTH, FTTB or FTTC/VDSL (either point-to-point or point-to-multipoint) network is likely to be considered a functional equivalent to traditional copper unbundling unless NRAs can demonstrate that a clear break in the chain of substitution exists.

The chain of substitution question also becomes relevant in order to determine whether different bandwidths/speeds should be considered to be in separate markets, *i.e.* whether there are bandwidth breaks. No such bandwidth breaks have commonly been found for mass market products, as the pricing possibilities for high-speed mass market products tend to be constrained by lower-speed mass market products. As a result, high speeds should be considered in the same market as lower speeds. From a supply-side perspective, a chain of substitution may be even more likely to be found across different speeds and qualities, if operators have the ability within the scope of the capabilities of the underlying physical infrastructure that they are using to provide product variants that are requested by customers within a relatively short period of time. The application of this principle suggests that higher speeds should be considered to be in the same market as lower speeds, if the pricing possibilities of higher speeds are sufficiently constrained by lower speeds, in particular regarding mass market product offers.

In contrast to the findings of NRAs as regards the mass market, some NRAs have found bandwidth breaks to exist for high-quality business broadband products, such as wholesale leased lines or high-quality Bitstream products. This may be the case where there is a market for low bandwidth services and a market for high bandwidth services, but no demand for an intermediate product. Furthermore, the more smoothly the total bandwidth increases are followed by incremental price increases, the more likely it is that circuits of different bandwidths fall in the same market, whereas significant price increases at certain speeds may suggest a break in the chain of substitution.

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<sup>57</sup> See Cases PL/2009/1019-1020: In that case, the NRA proposed separate market for IP peering (direct interconnections) and IP transit (indirect interconnection). The market for IP peering was defined as limited to the SMP operator's network and more specifically, to access to end-users controlled by that SMP operator. IP transit on the other hand would enable the connection to both the SMP operator's network and the global internet. The evidence suggested substitutability of direct with indirect interconnection. The Commission therefore opposed the narrow market definition and required the NRA to withdraw the notified draft measure.

<sup>58</sup> Successive mobile technologies, 2G, 3G and 4G have been considered in the same market in the context of merger proceedings such as T-Mobile/Orange UK in (COMP/M.5650) and Hutchison 3G/Orange Austria (COMP/M.6497). In the context of the Orange Spain/Jazztel merger, the Commission concluded that fixed Internet access services to residential and small business customers, regardless of whether their speed is less or more than 30 Mbit/s and irrespective of the technology used for the delivery of those services belong to the same relevant retail market (COMP/M.7421).

<sup>59</sup> See Case FR/2017/2030, in which ARCEP defined the wholesale broadband access market as including wholesale access for the provision of broadband and high speed broadband services provided - at regional access points - over copper-based DSL infrastructures, fibre-based infrastructures (FTTx) and coaxial cable networks, independently of the interfaces' technology.

When the majority of customers have migrated to a modern, higher-performance infrastructure, leaving a captive customer-base stranded on the legacy infrastructure, as is already apparent for low-speed analogue leased lines, the chain of substitution may appear to break and the market analysis may suggest the finding of separate markets. However, when such an issue is identified, NRAs should take care that the regulatory approach does not perpetuate a cycle of captivity by continuing regulation of an ever smaller niche market, but rather serves to encourage migration on to modern networks and enables the ultimate switch-off of legacy networks.<sup>60</sup>

### ***Geographic Market Definition***

The process of delineating geographic markets follows the same principles as those discussed above in relation to the assessment of the demand- and supply-side substitution in response to a relative price increase.

Although SMP analysis will be carried out at wholesale level,<sup>61</sup> the starting point of any geographic analysis should be the competitive conditions at the retail level. As a result, NRAs are expected, where geographically varying competitive conditions suggest a closer look at the possibility to identify sub-national markets, to look at a number of criteria in order to identify – following a Modified Greenfield Approach<sup>62</sup> – whether, absent regulatory intervention upstream, there is a risk of consumer harm on the retail market due to a lack of competition.

A relevant geographic market comprises an area (i) in which undertakings concerned are involved in the supply and demand of the relevant products or services (as identified in the product market definition), (ii) in which the conditions of competition are similar or sufficiently homogeneous and (iii) which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different or heterogeneous.

The latter means that NRAs should assess, when delineating the geographic boundaries of a relevant market, in which areas competitive conditions are similar or sufficiently homogenous. In doing so, NRAs should apply the same principles as for the delineation of the relevant product market, in particular competitive constraints such as demand-side and supply-side substitution.

For historic and authorisation or rights of use reasons, geographic markets for electronic communications usually corresponded to the territory of a particular Member State. However, the geographic scope of a defined market can in principle be local, regional, national or even covering territories across the borders of individual Member States.<sup>63</sup> When delineating the exact geographic boundaries of a relevant market, account has to be taken of the scope of the potential SMP operator's network and whether that potential SMP operator acts uniformly across its network area or whether it faces appreciably different conditions of competition to a degree that its activities are constrained in some areas but not in others.<sup>64</sup>

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<sup>60</sup> See Case PT/2017/2023.

<sup>61</sup> Or, exceptionally, at the retail level only if an NRA finds that a retail market fulfils the three criteria.

<sup>62</sup> See above section on regulatory principles.

<sup>63</sup> According to Article 15(4) of the Framework Directive, after consultation with NRAs and taking utmost account of BEREC's opinion, the Commission may adopt a decision identifying transnational markets.

<sup>64</sup> Section 2.5 of the Commission Staff Working Document (Explanatory Note) accompanying the 2014 Commission Recommendation on relevant product and services markets; SWD(2014)298, page 13.

Geographically varying competitive pressure may manifest itself in different ways. For example, access regulation does not always lead to a homogenous take-up of access offers across a Member State, resulting in varying degrees of *intra-platform competition* within the territory of one Member State (for example through the geographically varying importance and take-up of local-loop-unbundling, or "LLU"). In addition, competitive pressure may stem from the presence of alternative platforms, *i.e.* network technologies other than those used by the former incumbent operator, including (coaxial) cable, Wi-Fi, mobile broadband or competing high-speed fibre networks (*inter-platform competition*). Whilst one can witness increasing investment in alternative infrastructures across the EU, such investment is often uneven across the territory of a Member State. In many countries there are now competing infrastructures only in parts of the country, typically in urban areas. In both of the above-mentioned scenarios the result may well be that competitive dynamics vary significantly across a country. Where this is the case, an NRA could, in principle, find sub-national geographic markets.

As regards the definition of sub-national markets, a geographic delineation based solely on the number of operators present in a given geographic unit (for example a local exchange area) is not by itself sufficiently detailed or robust to identify real differences in competitive conditions for the purposes of market definition. In assessing whether conditions of competition within a geographic area are *similar* or *sufficiently homogeneous*, additional structural and behavioural evidence is necessary.<sup>65</sup> Such relevant evidence includes the number and size of potential competitors, the distribution of market shares and their evolution over time. In addition, evidence of differentiated retail or wholesale pricing which might apply could help to indicate different regional or local competitive pressure. It is also considered appropriate to look at the pricing of both the incumbent and alternative operators and its evolution over time in the relevant areas as well as other related competitive aspects, which may result from relevant competitive variations between geographic areas (nature of demand, differences in commercial offers, marketing strategies etc.).<sup>66</sup>

NRAs would need to identify the competitors of the potential SMP operator(s) and assess the area of supply of these competitors. Competitors include both actual competitors providing competing offers in the relevant product market and operators who are likely to enter the market in the short term in the case of a small but significant non-transitory price increase of the incumbent's offer on that market. The fact that competitors have a supply area which is sub-national does not suffice to conclude that there are distinct geographic markets in the same Member State. Further evidence relating to demand-side and supply-side substitutability on the relevant market will have to be considered. Regional competitors can indeed exercise a competitive pressure reaching beyond the area in which they are present when the potential SMP operator applies uniform tariffs and the regional competitor is too large to ignore. Moreover, there should be evidence that the pressure for regional price differences comes from customers and competitors and is not merely reflecting variations in the underlying costs.

Additional supply and demand characteristics, which might give an initial indication of different competitive pressures in different areas, should also be appropriately examined and taken into account when defining geographic market boundaries. In that respect, differences in the functionalities or types of products being offered by both the incumbent and alternative operators or in the marketing

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<sup>65</sup> See, for example, the Commission's decisions in Cases UK/2007/733, ES/2015/1818-1820, HU/2017/2020-2021 and Commission Recommendation in Cases PT/2016/1888-1889.

<sup>66</sup> Joined Cases C 68/94 and C 30/95 France and Others v Commission EU:C:1998:148, 'Kali & Salz', EU:C:1975:58, paragraph 143; Joined Cases T-346/02 and T-347/02 Cableuropa v Commission EU:T:2003:256, paragraph 115.

strategies being pursued in different geographic areas may further reflect regional/local differences in demand and supply conditions. If necessary, a further check on supply factors can be carried out to ensure that companies located in different areas do not face impediments to developing their sales on competitive terms throughout the whole geographic market, such as a consideration of the entry conditions in a given area. It is also important that the proposed market boundaries are sufficiently stable to identify these areas for the purpose of *ex ante* regulation.

With regard to the choice of the geographic unit from which an NRA should start its assessment, established practice under Article 7 states that NRAs should ensure that these units are (a) of an appropriate size, *i.e.* small enough to avoid significant variations of competitive conditions within each unit but yet big enough to avoid a resource-intensive and burdensome micro-analysis that could lead to a fragmentation of markets, (b) able to reflect the network structure of all relevant operators and (c) have clear and stable boundaries over time.<sup>67</sup>

In the case of assessing the competitive pressure exercised by inter-platform competition, it is likely that the relevant geographic units are related to the geographic coverage of the competing alternative infrastructures. In this respect, *i.e.* administrative boundaries or numbering code areas may serve as an appropriate proxy for the geographic analysis. Regardless of the nature of the geographic unit, the NRA needs to show that competitive conditions are sufficiently homogenous within and appreciably different outside the chosen area.<sup>68</sup>

Following the delineation and a first assessment of the competitive situation in such units, the NRA should aggregate those units with largely homogenous competitive conditions in the same geographic markets. In order to group geographical units, there is no need for competitive conditions to be perfectly homogeneous across all geographical areas included within one market.<sup>69</sup> In particular where NRAs have to assess a large number of small areas, there is likely to be a continuum of competitive conditions making it difficult to draw a clear line between various degrees of competitive pressure. In such cases the practical and appropriate approach is to define clear and unambiguous criteria according to which the geographical units are aggregated and grouped in the same market.<sup>70</sup> In this regard, it is important for NRAs to bear in mind the purpose of market definition, which is not an end in itself but a means to undertaking an analysis of competitive conditions, for the purposes of determining whether *ex ante* regulation is required or not.

In a situation where NRAs could not identify substantially and objectively different conditions stable over time, which are sufficiently clear in order to define sub-national markets, the existence of geographically differentiated constraints on a SMP operator who operates nationally, such as different levels of infrastructure competition in different parts of the territory, are unlikely to be strong enough to justify the finding of distinct markets. If, however, an operator is found to have SMP in a relevant market, such geographically differing constraints are more appropriately taken into account at the remedies stage by imposing a geographically differentiated set of obligations.

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<sup>67</sup> See in particular section III of Commission Decision in Case UK/2007/0733, SG-Greffe (2008) D/200640.

<sup>68</sup> See *Commission Decisions* in DK/2017/1993 and PL/2014/1632. See also paragraphs (88) and (89) of the BEREC Common Position on geographical aspects of market analysis (definition and remedies) of 5 June 2014; BoR (14)73.

<sup>69</sup> Paragraph 128 of the BEREC Common Position on geographical aspects of market analysis (definition and remedies) of 5 June 2014; BoR (14)73.

<sup>70</sup> See, for example, *Commission Decisions* in DK/2017/1993, UK/2013/1428 and UK/2008/0747.

## Assessment of significant market power

According to Article 14(2) of the Framework Directive "*an undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors customers and ultimately consumers*". This definition corresponds to the definition that the CJEU case-law ascribes to the concept of dominant position in Article 102 TFEU.<sup>71</sup> In particular, NRAs shall, when assessing whether one or more undertakings enjoy SMP, act in accordance with Union law and take into account the Commission's practice under Article 102 TFEU, Article 2 of the Merger Regulation, Article 7 of the Framework Directive and the relevant jurisprudence of the CJEU.

The designation of an undertaking as having SMP in a market identified for the purpose of *ex ante* regulation does not automatically imply that this undertaking is dominant or has committed an abuse within the meaning of Article 102 TFEU or similar national provisions. It merely implies that from a structural perspective and in the short to medium term the operator concerned has and will have sufficient market power to behave to an appreciable extent independently of competitors, customers and ultimately consumers for the purpose of *ex ante* regulation.<sup>72</sup>

In fact, when assessing *ex ante* whether one or more undertakings have SMP in the relevant identified market, NRAs are, in principle, relying on different sets of assumptions and expectations than those relied upon by a competition authority applying Article 102 TFEU, *ex post*, within a context of an alleged committed abuse.<sup>73</sup>

The fact that an NRA's initial market predictions do not finally materialise in a given case does not necessarily mean that its decision at the time of its adoption was inconsistent with the Framework. In applying *ex ante* the concept of dominance, NRAs must be accorded discretionary powers correlative to the complex character of the economic, factual and legal situations that will need to be assessed. In accordance with EU law,<sup>74</sup> market assessments by NRAs will have to be undertaken on a regular basis. If market developments justify, NRAs may conduct such analysis before the foreseen period for review and take the necessary measures.

## Single SMP

### *Criteria for assessing single SMP*

When NRAs analyse the existence of undertakings having SMP, they should apply the Modified Greenfield Approach and consider whether, absent SMP-based regulation in the wholesale market under assessment, there is a risk of consumer harm on the corresponding retail market(s).

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<sup>71</sup> Case United Brands, *op cit.*, paragraph 65 and Hoffmann-La Roche v Commission, *op. cit.*, paragraph 38.

<sup>72</sup> As the Court has stressed, a finding of a dominant position does not preclude some competition in the market. It only enables the undertaking that enjoys such a position, if not to determine, at least to have an appreciable effect on the conditions under which that competition will develop, and in any case to act in disregard of any such competitive constraint so long as such conduct does not operate to its detriment. Hoffmann-La Roche v Commission, *op. cit.*, paragraph 39.

<sup>73</sup> Case T-336/07, Telefónica v Commission EU:T:2012:172, paragraphs 303 and 341 – 349.

<sup>74</sup> See Article 16 of the Framework Directive.

NRAs are required to apply a number of criteria in order to assess, considering the existing market conditions but also taking into account forward-looking considerations, the existence of undertaking's SMP.

### *Market shares*

The market shares provide a useful first indication of the market structure and the relative importance of the various operators active on the market. However, the Commission will interpret market shares in the light of the relevant market conditions, and in particular of the dynamics of the market and of the extent to which products are differentiated.<sup>75</sup> According to established case-law, a very high market share held by an undertaking for some time - in excess of 50 % - is in itself, save in exceptional circumstances, evidence of the existence of dominant position.<sup>76</sup> Experience suggests that the higher the market share and the longer the period of time over which it is held, the more likely it is that it constitutes an important preliminary indication of SMP.<sup>77</sup>

The Commission's experience also suggests that dominance is not likely if the undertaking's market share is below 40 % in the relevant market. However, there may be specific cases below that threshold where competitors are not in a position to constrain effectively the conduct of a dominant undertaking.<sup>78</sup>

However, even an undertaking with a high market share may not be able to act to an appreciable extent independently of customers with sufficient bargaining strength.<sup>79</sup>

An undertaking with such market share may be presumed to have SMP if its market share has remained stable over time. At the same time, the fact that an undertaking with a significant position on the market is increasingly losing market share can be indicative of the market becoming more competitive, but does not preclude a finding of SMP.<sup>80</sup>

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<sup>75</sup> See point 13 of the Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings.

<sup>76</sup> Case C-62/86, *AKZOChemie v Commission*, EU:C:1991:286, paragraph 60; Case T-228/97, *Irish Sugar v Commission*, EU:T:1999:246, paragraph 70; *Hoffmann-La Roche v Commission*, op. cit., paragraph 41; Case T-139/98, *AAMS and Others v Commission* EU:T:2001:272, paragraph 51. However, large market shares can become accurate measurements only on the assumption that competitors are unable to expand their output by sufficient volume to meet the shifting demand resulting from a rival's price increase.

<sup>77</sup> See point 15 of the Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings.

<sup>78</sup> See *United Brands*, op. cit. and Case COMP/M.1741 – *MCI WorldCom/Sprint*. Furthermore, an undertaking with a market that does not exceed 25 % is not likely to enjoy a (single) dominant position. See Recital 32 of Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation) OJ L 24, 29.01.2004, p. 1-22.

<sup>79</sup> See point 18 of the Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings. Indeed, large market share can function as an accurate indicator only on the assumption that competitors are unable to expand their output by sufficient volume to meet the shifting demand resulting from a rival's price increase. See *Irish Sugar v Commission*, op. cit., paragraphs 97 to 104.

<sup>80</sup> Thus, while it is the case that the relative stability of the leading operator's market share over a period of time is more consistent with a conclusion that a situation of individual dominance exists (*COMP/38.784 WanadooEspaña v Telefónica*), where the dominant firm was held to have had a stable leading position for many years that far surpassed its competitors (affirmed in Case T-336/07 and Case C-295/12 P), it has



Furthermore, significant fluctuation of market shares over time may be indicative of a lack of market power in the relevant market. Also the rapid increase of a new entrant's market share may indicate that the relevant market is more competitive and that entry barriers can be overcome within a reasonable timeframe.<sup>81</sup>

In the recent Article 7 case practice the Commission has recalled that the existence of high market shares (but below 50 %) only means that the operator concerned "might" have SMP and other factors besides market share need to be relied upon to establish single SMP.<sup>82</sup> In addition, according to the recent Article 7 practice, even in presence of a market share above 50 %, NRAs would need to consider also other relevant criteria in order to support a finding of SMP, as the threshold merely sets out a presumption which can be rebutted in exceptional circumstances. In fact, even an undertaking with a high market share may not be able to act to an appreciable extent independently of customers with sufficient bargaining strength.<sup>83</sup>

NRAs should also consider the declining shares of the allegedly dominant operator over time, the market share distribution observed in the market (including the difference with the next competitor) and, in particular, a forward-looking assessment of the likely evolution of market shares over the next review period.<sup>84</sup>

As regards the market share distribution, the precedents have also emphasized the importance of attributing due weight to the fact that a high market share can be correlated with the existence of a large gap between the alleged SMP operator and its largest competitor, consistent with the view that the second operator is unlikely (at least in the context of a relatively mature market structure) to be able to exercise a sustainable competitive restraint on the leading operator if its market volumes, customer numbers and revenues are relatively small compared to those of the leading operator.<sup>85</sup> Nevertheless, NRAs need also to consider if, even though there is such a gap between the leading operator and the first competitor, there are two or more players which compete aggressively, exercising sufficient constraints.<sup>86</sup>

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also been found that an operator identified in an Article 102 TFEU investigation was dominant despite its market share dropping from 90 % to 80 % over the period 2001-2002 given that the overall market shares involved were always high over the relevant period (See COMP/38.233 Wanadoo Interactive affirmed in Case T-340/03 and Case C-202/07).

<sup>81</sup> Case COMP/M.5532 - Carphone Warehouse/Tiscali UK.

<sup>82</sup> See, for example, the Commission's decision in Cases NL/2017/1958-1959 and the Phase II Opening Decision in Case NL/2017/1960.

<sup>83</sup> See point 18 of the Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings. See Case PT/2017/2023.

<sup>84</sup> See Article 7 Cases NL/2017/1958-1959 and Phase II Opening Decision under Case NL/2017/1960.

<sup>85</sup> For example, refer to Case COMP/M.1795 - Vodafone AirTouch/Mannesmann, where the new entity post-merger would be over twice the size of its next major competitor; see also Case COMP/M.1741-MCI WorldCom/Sprint, where the merged entity was calculated to be over three times the size of its next competitor, irrespective of the method chosen to calculate market share, *e.g.*, traffic volume exchanged or revenues. In the Opening Phase II decision in case PT/2017/2023 the Commission pointed out that the incumbent market share of approximately 44 % at the end of the regulatory period cannot be considered as "very large" in the meaning of the SMP guidelines, whereas the market shares of the two main competitors (whose shares were, respectively, 35 % and 15 % both in terms of connections and traffic) are considerable.

<sup>86</sup> See also paragraphs 37-38 of Horizontal Merger Guidelines.

As regards the methods used for measuring market size and market shares, both volume sales and value sales continue providing useful information for market measurement.<sup>87</sup> However, the growing practice is to interpret market share data by reference to factors going beyond the traditional measurement of value (*i.e.*, revenues derived from sales) to include volume (*e.g.*, numbers of minutes, capacity) and subscriber numbers where appropriate in accordance with the service being supplied,<sup>88</sup> either in their own right or in combination with one another.<sup>89</sup>

### *Other criteria*

As stated above, NRAs should have particular regard to the following non-exhaustive factors which, in combination, are relevant to a determination of SMP:

- barriers to entry,
- barriers to expansion,
- absolute and relative size of the undertaking,
- control of infrastructure not easily duplicated,
- technological and commercial advantages or superiority,
- absence of or low countervailing buying power,
- easy or privileged access to capital markets/financial resources, product/services diversification (*e.g.* bundled products or services),
- economies of scale,
- economies of scope,
- direct and indirect network effects,<sup>90</sup>

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<sup>87</sup> In the case of bulk products preference is given to volume whereas in the case of differentiated products (*i.e.* branded products) sales in value and their associated market share will often be considered to reflect better the relative position and strength of each provider. In bidding markets the number of bids won and lost may also be used as approximation of market shares (See Case COMP/M.1741 - MCI WorldCom/Sprint, paragraph 239-240). In bidding markets, however, it is important not to rely only on market shares as they in themselves may not be representative of the undertakings actual position, for further discussion, see, also, Case COMP/M.2201 - MAN/Auwärter.

<sup>88</sup> See for example, Case COMP/M.4748 - T-Mobile/Orange Netherlands. See also Case COMP/M.5650 - T-Mobile/Orange. For a recent example where the Commission considered multiple methods of market share calculation, see Case COMP/M.7758 - Hutchison 3G Italy/Wind/JV.

<sup>89</sup> *Ibid.* For example, a consistent pattern of dominance might be clearly substantiated across all relevant market share indicators, whereas its establishment might be a more complex issue if certain indicators are relatively low. Thus, for example, a finding that per subscriber shares are significantly lower than per revenue shares might suggest that the operator has power over price or, in the alternative, might be consistent with a finding that the relevant market is more fragmented than was originally thought to be the case (*e.g.*, the lower subscriber numbers might reflect a more affluent segment or "market" in its own right).

<sup>90</sup> Direct network effects are present when the value of a good or service for a consumer derives from the increased use of such good/service by others. Therefore, individual utility increases with the total number of users. For example, telephone systems and social networks all imply direct contact among users. On

- vertical integration,
- highly developed distribution and sales network,
- conclusion of long-term and sustainable access agreements,
- engagement in contractual relations with other market players that could lead to market foreclosure,
- absence of potential competition.

### ***Barriers to entry***

NRAs should primarily assess whether barriers to entry exist,<sup>91</sup> as they can encourage, in principle, independent anti-competitive behaviour by an undertaking with a significant market share. The entry barriers affect the existing and also the potential competitiveness of the market by rendering potential competition more difficult.

Thus, NRAs should analyse the likelihood that undertakings not currently active on the relevant product market may in the medium term decide to enter the market. Undertakings which, in case of such a price increase, are in a position to switch or extend their line of production/services and enter the market should be treated by NRAs as potential market participants even if they do not currently produce the relevant product or offer the relevant service.

Barriers to entry exist where entry into the relevant market requires large investments and the programming of capacities over a long time in order to be profitable. Indeed, one of the most important types of entry barriers are economies of scale and sunk costs.<sup>92</sup> In electronic communications markets new entrants need to incur the very large sunk costs necessary to deploy a ubiquitous (usually national) network in order to benefit from economies of scale (and, increasingly,

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the other hand, indirect network effects occur when the value of a good or service for a consumer derives from the increased use of a complementary good or service. For example, if an increased number of consumers use the same kind of hardware, the undertakings which produce software will tend to offer an increased variety of products compatible with that hardware.

<sup>91</sup> Barriers to entry in this sector may be structural, legal or regulatory. Structural barriers to entry result from original cost or demand conditions that create asymmetric conditions between incumbents and new entrants impeding or preventing market entry of the latter. Legal or regulatory barriers are not based on economic conditions, but result from legislative, administrative or other measures that have a direct effect on the conditions of entry and/or the positioning of operators in the relevant market. See Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (2014/710/EU).

<sup>92</sup> See *Hoffmann-La Roche v Commission*, op. cit., at paragraph 48. Economies of scale and sunk costs are particularly relevant to the electronic communications sector in view of the fact that large investments are necessary to create, for instance, an efficient electronic communications network for the provision of access services and it is likely that little could be recovered if a new entrant decides to exit the market. Entry barriers are exacerbated by further economies of scope and density which generally characterise such networks. Thus, a large network is always likely to have lower costs than a smaller one, with the result that an entrant in order to take a large share of the market and be able to compete would have to price below the incumbent, making it thus difficult to recover sunk costs.

scope) that are necessary to drive sustainable and effective market entry.<sup>93</sup> Thus, single SMP in the electronic communications sector is often synonymous with the existence of large or geographically ubiquitous networks.

However, barriers to entry may change, for example, due to emergence of new, less costly, technologies permitting new entrants to provide qualitatively different services (*e.g.*, due to increased bandwidth) which can challenge the SMP operator.<sup>94</sup> In electronic communications markets, competitive constraints may come from innovative threats of potential competitors not currently in the market.

The fact that electronic communications services are provided over interconnected networks means that economies of scale and scope are more prevalent than in most other industries, as is the relevance of network effects, the fact that most (but not all) networks require access to scarce resources, and the fact that successful market entry is often associated with very significant sunk costs which are irreversible. These network-specific characteristics mean that the existence of regulatory and economic entry barriers, barriers to expansion and barriers to switching between operators have a material impact on the feasibility and scale of potential entry.

In the regulatory context, the existence of entry barriers is also relevant when NRAs, before starting the SMP assessment, have to verify if a certain market not listed in the 2014 Recommendation on relevant markets is susceptible to *ex ante* regulation.<sup>95</sup> Thus, under the so-called “three criteria” test, a market will be considered as susceptible to *ex ante* regulation where entry barriers are both high and non-transitory, and of a structural, technical or legal nature.

In determining the existence of entry barriers, NRAs need to be cautious so that an entry barrier is not confused with the existence of a relatively mature market. Thus, market developments such as stagnating price levels, reduced market entry and market consolidation are likely not attributable to the existence of entry barriers, but rather to the maturity of the market where competition is likely to

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<sup>93</sup> See, for example, Case C-280/08 P, *Deutsche Telekom v Commission* EU:C:2010:603; Case COMP/39.525 *Telekomunikacja Polska* (affirmed in Case T-486/11, appeal pending in Case C-123/16 P). For a recent discussion on entry barriers in mobile markets, refer to Case COMP/M.7758 - *Hutchison 3G Italy/Wind/JV*. In order to be able to overcome entry barriers faced by those new entrants wishing to become fully fledged network providers, a number of the Commission's merger review cases have emphasized the importance of new entrants being able to benefit from the existing *ex ante* regulation of wholesale inputs which provide entrants with cost-oriented wholesale broadband access. See, for example, Case COMP/M.5532 - *Carphone Warehouse/Tiscali UK*. See also Case COMP/M.6584 – *Vodafone Group/Cable & Wireless Worldwide*.

<sup>94</sup> See, for example, Case COMP/M.5532 - *Carphone Warehouse/Tiscali UK*. See also Case COMP/M.6314 - *Telefonica UK/Vodafone UK/Everything Everywhere/JV*. Telefonica UK, where market share was considered to be an inconclusive proxy for dominance as a new mobile commercial services market had emerged, especially given the fact that the affected market was being constantly disrupted by new technology. Where new potential entry is more certain because of scheduled licensing regimes (*e.g.*, as occurs in relation to prospective broadband satellite offerings), it may be appropriate for an NRA to take into account the imminent deployment of new networks in its dominance assessment (See Case COMP/M.1564 - *ASTROLINK Joint Venture*).

<sup>95</sup> See 2014 Recommendation on relevant markets, recitals 11-14.

remain fierce among the established market actors who will continue to compete for market share in order to gain or maintain economies of scale.<sup>96</sup>

Entry can in turn be considered to be more likely when the potential new entrants are already present in related or neighboring markets.<sup>97</sup> With respect to certain markets, however, the ability to achieve minimum cost-efficient scale of operations may be critical in the determination of whether potential entry is likely and sustainable,<sup>98</sup> as will be the ability of new entrants to replicate the putative dominant operator's network.<sup>99</sup>

The costs of switching between network providers might also act in certain circumstances as a means by which a position of individual SMP can be reinforced, effectively insulating the putative dominant network operator from effective competition.

In respect to potential competition and entry barriers, OTT operators may constrain under certain circumstances and in relation to certain services an electronic communications provider in its commercial conduct. The Commission, for example, took into consideration the competitive constraint exercised by OTT services (instant messaging) on classical SMS services in the context of the analysis of the market for wholesale SMS termination on individual mobile networks by the French regulator.<sup>100</sup>

### ***Vertical integration***

Vertical integration remains another important factor to be assessed by NRAs in order to identify SMP. In the electronic communications sector, in the absence of *ex ante* regulation, vertically integrated operators might be facilitated in their ability to exercise their "independence" from competitive constraints by engaging in various anti-competitive or foreclosing practices such as excessive pricing, predatory pricing, margin squeezes and through the discriminatory treatment of competitors and discrete customer segments, either at retail or wholesale level (especially given that the vast majority of incumbents remain vertically integrated).<sup>101</sup>

NRAs have introduced an increasingly "sophisticated" regulation regarding non-discrimination remedies, including by putting in place the Key performance indicators' monitoring system.<sup>102</sup> Even

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<sup>96</sup> See Case COMP/M.5532 - Carphone Warehouse/Tiscali UK, paragraph 66. In this case, the market was saturating or at least growing at a very reduced pace compared to recent years and prices were stagnating and even going down.

<sup>97</sup> See Case COMP/M.6990 - Vodafone/Kabel Deutschland.

<sup>98</sup> See Case COMP/M.1741 - MCI WorldCom/Sprint in relation to the market for Internet connectivity.

<sup>99</sup> See Case COMP/M.1795 - Vodafone/Mannesmann.

<sup>100</sup> See Case FR/2014/1670. The Commission stressed the remarkable increase in smartphone penetration and in usage of instant messaging as alternatives to SMS in France. The Commission also argued that the regulator did not sufficiently consider a Modified Greenfield scenario when analysing the substitution dynamics and resulting need for regulation, *i.e.* does not analyse the market independently of the impact of regulation on the relevant market. According to the Commission there were serious doubts that the competitive constraints exercised by OTT's instant messaging services (*e.g.*, WhatsApp services) would not make the market competitive.

<sup>101</sup> See Case T-699/14 Topps Europe Ltd v Commission EU:T:2017:2, paragraph 93.

<sup>102</sup> The "Key Performance Indicators (KPIs)" are indicators that measure the level of performance in the provision of the relevant wholesale services ensured by the vertical integrated operator to its retail divisions and to third-party access seekers. KPIs are the most appropriate tools to detect potential discriminatory behaviour and enhance transparency with respect to the delivery and quality of the SMP operator's regulated wholesale access products in the relevant markets. See Commission

though these indicators are not SMP criteria as such, they are factors that help NRAs to investigate the vertical integrated incumbent's conduct and consequently to better assess whether vertically integrated SMP operators have obtained advantages in relation to the provision of access services, ancillary services (maintenance, repair services) or other services in favour of their own retail arms. The values of those indicators which show non-compliance with the non-discrimination obligation (based on the measurements of the NRA and/or complaints lodged by the alternative operators) could be considered in the NRA's analysis related to the assessment of the vertical integration criterion with a view to establishing the existence of SMP.

This reasoning applies also in the case where NRAs detect that the vertically integrated operator does practise either excessive or predatory prices (especially in promotional offers with bundles, which may include services that fall outside the scope of *ex ante* regulation in the electronic communications sector).

### ***Commercial and Technological Advantages***

An operator may also enjoy a position of single SMP because, in addition to other factors, it benefits from a range of important commercial or technological advantages vis-à-vis its competitors.

NRAs should consider the ability of an operator to self-supply (either through a portfolio of products generated through vertical integration or through the operation of intra-corporate arrangements with members of a wider corporate group) multiple-play services, in markets where such offers are important and/or where a separate retail market could be defined for bundled offers, when compared to the smaller portfolio offerings of its immediate competitors.<sup>103</sup> NRAs should also take account of the engagement of the potentially SMP operator in a series of multilateral contractual relations which rely on cooperation between operators to achieve common goals (*e.g.*, roaming relationships, network-sharing agreements and co-investment arrangements not opened to third parties), where their effect would be to foreclose smaller entrants or to eliminate an independent trading partner with whom smaller operators could deal.<sup>104</sup> NRAs should also consider the advantages that could be brought by a highly developed distribution and sales network as well as by the existence of long-term and sustainable access agreements for the provisions of the relevant retail input.

### ***Countervailing Buyer Power***

Countervailing buyer power is also a relevant factor that NRAs should take into consideration in their SMP assessment. NRAs should consider whether the exercise of market power by an operator is being constrained by its customers in particular circumstances.

However such factor may not be relevant when assessing SMP on the retail market since individual end users in mass market electronic communications markets have no credible countervailing buyer

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Recommendation of 11.9.2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment, C(2013)5761.

<sup>103</sup> For example, refer to Case COMP/M.6990 - Vodafone/Kabel Deutschland. By contrast, if existing regulatory obligations exist with respect to wholesale inputs for mobile and fixed services, the dominant operator is unlikely to be able to shut out fixed and mobile operators from emerging markets for multiple play services: see Case COMP/M.7231 Vodafone/ONO.

<sup>104</sup> See, for example, Case COMP/M.4035 Telefonica/O2. In many instances, these relationships are unravelled as part of the process of brokering remedies in merger review situations or by reference to Article 101 TFEU infringement actions where the relationships between competitors raise concerns that competition is being restricted either by object or by effect.

power when negotiating contracts with operators, nor is it likely that individual business customers have sufficient size or commercial significance to be able to bargain on matters of price.<sup>105</sup> In addition, many retailers of electronic communications services are likely to be able to pass on price increases to end customers (often working through commissions), which renders them less likely to jeopardize their relations with a dominant operator.<sup>106</sup> Therefore their potential power vis-à-vis the dominant operator would in principle not impact the pricing on the retail market. Large multinational business customers may be in a position to exercise countervailing buyer power in their acquisition of Global Telecommunications Services (GTS),<sup>107</sup> especially given that the market for such services is often global in scope and is usually associated with bidding markets<sup>108</sup> whose terms and conditions lie within the control of the customer.

## Joint SMP

### *Relevant case-law*

Given the equivalence between the concept of joint SMP under the Framework and collective dominance in competition law,<sup>109</sup> the applicable legal tests for joint dominance, as developed by the CJEU, should be applied to determine whether two or more operators should be designated as having joint SMP.

The case-law on collective dominance under Article 102 TFEU has evolved significantly over the past years and, in particular, since the adoption of the 2002 SMP Guidelines. The General Court recognised the concept of collective dominance for the first time in *Italian Flat Glass* case<sup>110</sup> in 1992. The Court further elaborated on these concepts in *Almelo*<sup>111</sup> and *Irish Sugar* cases.<sup>112</sup> It was the *Compagnie Maritime Belge* judgment<sup>113</sup> that established the proposition that: "[A] dominant position may be held

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<sup>105</sup> See Case COMP/M.6497 - Hutchison 3G Austria/Orange Austria. See also Case COMP/M.7758 - Hutchison 3G Italy/Wind/JV. See also AT.39523 Slovak Telekom and Case COMP/39.525 Telekomunikacja Polska.

<sup>106</sup> Ibid, Hutchison 3G Austria/Orange Austria.

<sup>107</sup> See Case COMP/M.JV.15 - BT/AT&T.

<sup>108</sup> For example, refer to Case COMP/M.1564 - ASTROLINK Joint Venture.

<sup>109</sup> Article 16(2) of the Framework Directive.

<sup>110</sup> Joined Cases T-68/89, 77/89 and 78/89, *Societa Italiana Vetro, Fabbrica Pisana and PPG Vernante Pennitalia v Commission* EU: T:1992:38. The Court held in paragraph 358 that two or more independent undertakings may be united by economic links such as through "agreements or licences" affording them the power to behave to an appreciable extent independently of their competitors, their customers and ultimately of their consumers.

<sup>111</sup> Case C-393/92, *Gemeente Almelo and others v NV Energiebedrijf Ijsselmij* EU:C:1994:171, paragraph 42. The CJEU required that for proving an abuse of the collective dominant position under Article 102 of the Treaty "the undertakings in the group must be linked in such a way that they adopt the same conduct on the market."

<sup>112</sup> Case T-228/97, *Irish Sugar Plc v Commission* EU:T:1999:246. The General Court set out in paragraphs 40, 51 and 60 that a position of collective dominance might exist between non-competitors in a vertical relationship if the undertakings in question are found to share parallel interests vis-à-vis third parties and are connected by 'special links' which embraced common governance relationships (especially in the form of shareholdings, board representations, etc.) or direct economic ties such as exclusive supply relationships.

<sup>113</sup> Case C-395/96 P, *Compagnie Maritime Belge Transports v Commission* EU:C:2000:132.

by two or more economic entities legally independent of each other, provided that from an economic point of view they present themselves or act together on a particular market as a collective entity".<sup>114</sup> The CJEU further specified that: "[The] existence of a collective dominant position may therefore flow from the nature and terms of an agreement, from the way in which it is implemented and, consequently, from the links or factors which give rise to a connection between undertakings which result from it; [...] such a finding may be based on other connecting factors and would depend on an economic assessment and, in particular, on an assessment of the structure of the market in question" (emphasis added)<sup>115</sup>. The CJEU clarified that it was the absence of effective competition between oligopolists due to the adoption of a common policy on the market, whether due to links between them or the market structure as such which led the undertakings concerned to behave in a coordinated manner.<sup>116</sup>

In the *Gencor* judgment the CJEU also specified that "the relationship of interdependence existing between the parties to a tight oligopoly within which, in a market with appropriate characteristics, in particular in terms of market concentration, transparency and product homogeneity, those parties are in a position to anticipate one another's behaviour and are therefore strongly encouraged to align their conduct in the market in such a way as to maximise their joint profits by restricting production with a view to increasing prices. In such a context, each trader is aware that highly competitive action on its part designed to increase its market share (for example a price cut) would provoke identical action by the others, so that it would derive no benefit from its initiative."<sup>117</sup>

In 2002, the General Court handed down its seminal *Airtours*<sup>118</sup> judgment, in which it held that a collectively dominant position exists where, in view of the characteristics of the relevant market, a situation would arise, in which each member of the dominant oligopoly would "as it becomes aware of common interests, consider it possible, economically rational, and hence preferable, to adopt on a lasting basis a common policy on the market with the aim of selling at above competitive prices, without having to enter into an agreement or resort to a concerted practice within the meaning of Article [101 of the TFEU][...] and without any actual or potential competitors, let alone customers or consumers, being able to react effectively".<sup>119</sup>

The General Court identified three cumulative conditions are necessary for a finding of collective dominance as defined,<sup>120</sup> namely:

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<sup>114</sup> Supra, paragraph 36.

<sup>115</sup> Supra, paragraph 45.

<sup>116</sup> While the 2002 SMP Guidelines refer to "tacit coordination" and the literature to "tacit collusion", this document uses also the term "common policy" which stems from the case-law of the Union Courts. For instance, in paragraph 61 of *Airtours*, the General Court mentions the adoption on a lasting basis of a common policy on the market, without necessarily having to enter into an agreement or resort to a concerted practice within the meaning of Article 101 TFEU. It should be noted that this does not necessarily exclude explicit coordination, which could be subject to *ex post* enforcement under Article 101 TFEU if it were subsequently uncovered. Evidence of explicit past coordination may also be relevant for an *ex ante* merger or regulatory analysis.

<sup>117</sup> Case T-102/96, *Gencor Ltd v Commission* EU:T:199:65, paragraph 276.

<sup>118</sup> Case T-342/99, *Airtours plc v Commission* EU:T:2002:146.

<sup>119</sup> Paragraph 61. Confirmed by the Court of Justice in Case C-413/06, *Impala II* EU:C:2008:392, paragraph 122.

<sup>120</sup> *Airtours*, paragraphs 62 and 195.



- (i) the undertakings in question must be able to know and monitor each other's behaviour to ensure that each adheres to the terms of the tacit coordination. That means that there must be sufficient market transparency for all members of the dominant oligopoly to be aware, sufficiently precisely and quickly, of the way in which other members' market conduct is evolving;
- (ii) the situation of tacit coordination must be sustainable over time. That is, there must be an incentive not to depart from the common policy on the market. An adequate deterrent mechanism must be in place to ensure that there is a long-term incentive in not departing from the common policy; and
- (iii) there must be no effective external constraints through the foreseeable reaction of consumers or competitors, current or future, that would jeopardise the results of the tacitly coordinated conduct adopted on the market by the oligopolists in question.

As regards the need to resort to the exercise of a sanction, the General Court later clarified in *Impala I* that, "[t]he mere existence of effective deterrent mechanism is sufficient, in principle, since if the members of the oligopoly conform with the common policy, there is no need to resort to the exercise of a sanction. As the applicant observes, moreover, the most effective deterrent mechanism is that which has not been used."<sup>121</sup>

The CJEU later clarified in *Impala II* that in applying these criteria, it is necessary to avoid a mechanical approach involving the separate verification of each of those criteria taken in isolation, while taking no account of the overall economic mechanism of a hypothetical tacit coordination. The assessment of criteria should not be undertaken in an isolated and abstract manner, but should be carried out using the mechanism of a hypothetical coordination as a basis.<sup>122</sup>

## **Tacit coordination in the electronic communications sector**

### ***Methodological guidance***

The legal test for joint dominance and the relevant criteria established by the Court were a result of enforcement decisions in application of Article 102 TFEU as well as merger decisions in accordance with the EU Merger Regulations.<sup>123</sup> Therefore, the revised SMP Guidelines should provide, in particular, guidance to NRAs, on how the legal tests established for the application of competition law and the EU Merger Regulation can be applied in the context of *ex ante* regulation in the electronic communications sector, to further elaborate and clarify the practice that the Commission has developed under Article 7 of the Framework Directive.

The equivalence between the principles of joint SMP and joint dominance, as established by legislation, requires also for regulatory purposes the application of an equivalent legal test as in the case of competition law enforcement and merger control. However, the specific objectives of *ex ante* regulation in the electronic communications sector applied in order to redress the market failure(s)

<sup>121</sup> Case T-342/99, *Impala I* EU:T:2006:216, paragraph 466.

<sup>122</sup> *Impala II*, paragraphs 125 and 126.

<sup>123</sup> Council Regulation (EEC) 4064/89 19972 on the control of concentrations between undertakings, OJ L 395, 30.12.1989, p. 1; corrigendum OJ L 257, 21.9.1990, p. 13 and Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation) OJ L 24, 29.01.2004, p. 1-22.

identified at the retail level require methodological guidance as to the practical application of the test in light of the specific task assigned to NRAs.

In its *ex ante* analysis, an NRA must conduct an assessment of the likelihood of future events, with a view to establish whether regulatory intervention is appropriate and required. In line with recital (26) of the Framework Directive, two or more undertakings can be found to enjoy a position of joint dominance when the structure of the relevant market is conducive to coordinated effects, that is, when it encourages parallel or aligned anti-competitive behaviour in the market. This requires an analysis of the likely market developments, ascertained on the basis of information available at the time on market characteristics, market structure, and likely behaviour. NRAs should envisage expected or foreseeable market developments over the course of the next review period to ascertain whether the tacit coordination is the likely market outcome. The NRAs should discharge the same burden of proof to prove either the existence of joint SMP or the absence thereof. There cannot be a presumption that either outcome is likely, without a credible analysis of the likely market developments that will occur in the next review period, absent regulatory intervention on the basis of SMP.

A distinction must be made between the analysis of markets that are already subject to regulation, and markets that are not regulated. If a market is not regulated, the analysis of the most likely future events will take into account all facts and evidence that are available at the time. On the other hand, if a market is regulated at the time of the analysis, in line with the Recommendation on relevant markets,<sup>124</sup> the NRAs should perform a hypothetical forecast by applying the "Modified Greenfield Approach".<sup>125</sup> This hypothetical analysis will determine the assessment - based on the above-mentioned case-law - of whether tacit collusion is the most likely market outcome in the circumstances at hand and taking also into account market developments in the next review period.

It follows from the above that the available evidence supporting the *ex ante* analysis of the likely developments absent existing SMP regulation, will be different in character compared to an analysis of a market that is not regulated at the time of the analysis. This does not mean that the standard of proof should be considered lighter or less demanding in a regulated market compared to a non-regulated market; indeed, as required by the applicable jurisprudence, evidence must be adduced when justifying why the hypothetical tacit coordination mechanism is likely to arise.

Uncertainty about the future is inevitable in any *ex ante* analysis, including for markets that are not regulated. A forward-looking analysis by the NRA, whether the market is regulated or not, must factor in future events that will change the market landscape, including technological innovation, market entry or exit of certain operators, new business models and commercial arrangements between operators. On the other hand, in a regulated market, the treatment of regulation already imposed on that market with the objective to improve competitive conditions poses specific analytical challenges, because if the impact of existing regulation is not discounted, markets may be assumed to be more competitive than they are, and a significant risk of premature deregulation may arise. An NRA must,

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<sup>124</sup> Commission Recommendation 2014/710/EU of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, OJ L 295, 11.10.2014, p. 79.

<sup>125</sup> See section "regulatory principles." In particular, the Commission as recognised the validity of the Modified Greenfield Approach in Joint SMP analysis in the Commission decision in Case SI/2009/0913. The Commission clarified that this approach is well suited to assess a market's conduciveness to tacit coordination in the presence of existing regulation based on a single SMP, when it set out in its serious doubts letter that "what counts here is the situation which would prevail absent obligations imposed on Mobitel in this specific market (modified greenfield approach)."

on the basis of evidence available to it, conduct a hypothetical analysis of cause and effect of the regulatory measures envisaged to remain in place, or to be potentially withdrawn, and conclude what likely market characteristics, including structure and behaviour, arise as a consequence.

NRA should consider the likely development of the market, including its structure and the behaviour of market participants, on the basis of an evidence-based hypothetical scenario. Some examples of the types of evidence that an NRA may be able to consider include, for example, evidence of existing market conditions that, despite regulation being already in place, are not effectively competitive. Evidence may thus be adduced that absent regulation, the observed existing collusive mechanism could only become stronger. Conversely, in some circumstances, regulation in place may not play a significant role, in particular in cases where the regulation in place may not have fully redressed the observed market failures. For example if take-up of regulated products has been very low and stagnant and/or most competitive pressure is exercised by alternative infrastructures that are not regulated at present.<sup>126</sup> In this case, the conditions of tacit collusion may be present and observable, and the analysis will be able to rely on current market data without significant adjustments to be made in view of existing regulatory measures.

Further, an analysis over time, as regulation evolves, may in some cases highlight the effect of regulatory measures, which can support the analysis of the likely market characteristics in their absence. Evolving regulatory obligations related to wholesale price control, and a corresponding analysis of retail price developments may provide a basis for assessing the most likely evolution of prices in a situation where regulation was no longer a factor. In reviewing price levels and assessing whether they may be excessive, benchmarking of other Member States can be an appropriate methodology, as confirmed by the CJEU,<sup>127</sup> provided the reference Member States have been selected in accordance with objective, appropriate and verifiable criteria.

In this respect, it is also essential to underline that any readily available evidence of past practice does not automatically suggest that this practice is likely to continue in the next review period. A separate analysis has to be made in this respect. However, past practice is relevant if the market's characteristics have not appreciably changed or are unlikely to do so in the next review period.

In some markets the structure may be such that operators would consider it possible, economically rational and hence preferable, to adopt on a sustainable basis a course of action on the market aimed at selling at increased prices.<sup>128</sup> In the *Kali&Salz*<sup>129</sup> and *Gencor*<sup>130</sup> cases, the Court also highlighted that the undertakings are able to adopt a common policy on the market "*in particular because of factors giving rise to connection between them.*" In *Impala II* the CJEU stated that a market structure conducive to tacit collusion, besides market transparency, can be characterised by the following

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<sup>126</sup> This phenomenon is observed in a number of EU markets *e.g.* in Latvia, despite the lack of LLU take-up and only marginal take-up if regulated bitstream service, there is an increasing roll-out of alternative (mainly FTTx) infrastructure, predominantly in urban areas, most notably in Riga.

<sup>127</sup> Case C-177/16, *Autortiesību un komunikāciju konsultāciju aģentūra/Latvijas Autoru apvienība v Konkurences padome*, EU:C:2017:689.

<sup>128</sup> See also Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 031, 05.02.2004 p. 5, paragraph 39.

<sup>129</sup> Joined Cases, C-68/94 and C-30/95, *French Republic and Société commerciale des potasses et de l'azote (SCPA) and Entreprise minière et chimique (EMC) v Commission*, EU:C:1998:148, paragraph 221.

<sup>130</sup> *Gencor*, paragraph 163.

characteristics: market concentration and product homogeneity, which can put parties in a position to anticipate one another's behaviour and strongly encourage them to align their conduct.<sup>131</sup>

Similarly, markets in the electronic communications sector can exhibit other characteristics that result in that market being conducive to tacit coordination. The characteristics that may lead to such a conclusion can be extrapolated from case case-law or prior regulatory decisions. Such characteristics can be used by the NRAs to establish that a tacitly collusive behaviour is a likely market outcome if (i) they are consistent with the economics of the tacit coordination theory advanced by the NRA in the specific circumstances and (ii) they are assessed within and are found to be conducive to the described hypothetical outcome on the basis of an integrated analysis, based on the criteria set out in the *Airtours* case and later confirmed in the *Impala* cases. These parameters can also be extrapolated from case practice or prior regulatory decisions. Some of these specific parameters are outlined in the following sections. However, no exhaustive list is suggested. In addition, the significance of these parameters should be established and assessed on a case by case basis, with account being taken of the national circumstances. If NRAs wish to use parameters inspired by *ex post* competition enforcement or merger review, they should do so taking account of the specificities of *ex ante* regulation in the electronic communications sector, such as the predictive and forward-looking nature of the exercise, and the duration of the next review period, which is the reference for the hypothetical considerations of the market analysis.

#### ***Market failures at the retail level***

The Commission also underlined in its previous decisions<sup>132</sup> that retail market conditions may inform an NRA of the structure of the wholesale market, but they may and need not in themselves be conclusive as regards the finding of SMP at the wholesale level. According to established practice under Article 7 of the Framework Directive,<sup>133</sup> there is no need to prove a collective SMP at retail level, in order to establish that the undertakings are jointly dominant in the relevant wholesale market.

This analysis should be based on a functional understanding of links between the relevant wholesale and underlying (and if the NRAs deems it appropriate, also other related) retail market(s). In order to avoid over-regulation it should be pointed out that the wholesale regulation can only be imposed in order to redress identified retail market failure(s).

The CJEU identifies certain examples of common policy on which the alleged oligopolists can align their future behaviour.<sup>134</sup> Accordingly, the tacitly colluding oligopolists "*maximise their joint profits by increasing prices, reducing output, the choice of quality of goods and services, diminishing innovation or otherwise influencing parameters of competition.*" Other forms of common understanding, particularly relevant for the retail electronic communications markets could include, as examples,<sup>135</sup> (i) a refusal to conclude commercial agreement(s) for wholesale access to its network while, based on the assessment of the competitive situation at retail level, an access seekers could build a commercially viable case, or (ii) the conclusion of commercial agreements that do not allow for the long-term viability of the access seeker at the retail level (*e.g.* due to the presence of a margin

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<sup>131</sup> *Impala II*, paragraph 121.

<sup>132</sup> Cases FI/2004/0082, ES/2005/0330 and NL/2015/1727. See also Case CZ/2012/1322.

<sup>133</sup> See Cases IE/2004/0121, ES/2005/0330, SI/2009/0913 and NL/2015/1727.

<sup>134</sup> *Impala II*, paragraph 121.

<sup>135</sup> This list is provided by way of example and does not represent an exhaustive list.

squeeze), so that the latter cannot disrupt the alleged tacit coordination by becoming a maverick; (iii) an increased bundling of retail services accompanied by an excessive retail pricing policy<sup>136</sup> pursued by the oligopolist; (iv) holding back capacity (including by not upgrading its own network) thereby merely to satisfying the needs of the present consumer base, instead of increasing it so as to acquire new customers; or (v) pursuing a network deployment model which frustrates or makes wholesale access less likely. All these behaviours have a common denominator: that the oligopolists are (likely) to pursue a long-term anticompetitive conduct since it outweighs any benefits of the short-term gains resulting from resorting to a competitive behaviour, the result of which is distortion or restriction of competition at the retail level.

As regards examples of a common policy of maintaining high and potentially excessive prices at the retail level, the Commission has set out in its Article 7 case practice that there must be a rent to protect at the retail level.<sup>137</sup> This criterion can be observed in an analysis of the market. However, one could also envisage a situation where, due to efficient regulation, especially in the longer term where the market under review is already regulated based on a past SMP finding,<sup>138</sup> such rents can be relatively low or non-existent. This does not mean that in a market structure conducive to tacit coordination higher prices will not be reintroduced by the tacitly collusive oligopolists if the regulation based on (joint) SMP is lifted.

It has to be noted that an overall evaluation of consumer welfare is not limited to price as the quality of service (network deployment and upgrades resulting in higher bandwidths) should also be considered. The relevant question that an NRA will have to ask itself in this respect is whether this is an outcome that benefits consumers, or whether the allegedly tacitly colluding oligopolists together only take advantage of their joint existing consumer base, which is *e.g.* substantially locked in bundled contracts, by charging excessive prices.<sup>139</sup>

In addition to the above, and depending on the extent that existing regulation addressed the underlying retail market failures, the NRA may observe relative stability of prices over time (indicating little competitive dynamics) together with considering whether the Average Revenue per User (ARPU) levels<sup>140</sup> are reflective of the scope and quality of service and the investments made.<sup>141</sup> Any complaints or dispute settlements between alleged oligopolists and (actual or potential) access seekers that took place in the current review period could also be an indication of ongoing retail market failure(s) despite wholesale regulation. Moreover, as stated above, a benchmarking exercise against comparable

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<sup>136</sup> NRAs are familiar with the assessment of the risk of excessive pricing, as this is one of the possible reasons for imposing price regulation under the Access Directive. Without prejudice to the individual determination of excessive pricing on a case by case basis, it is useful here to remind of the jurisprudence in *United Brands*, *op. cit.*, paragraph 250, which defines a price excessive because it has no reasonable relation to economic value of the product supplied.

<sup>137</sup> Case ES/2005/0330.

<sup>138</sup> Markets that are currently regulated on the basis of joint SMP in particular may observe that price levels charged by all regulated operators are affected by regulation. A similar consideration may also apply, however, in markets where a single SMP operator is regulated, because regulated prices at the wholesale level may result in lower retail prices across the sector, including for non-regulated operators.

<sup>139</sup> See footnote 136.

<sup>140</sup> Including a comparison of their absolute levels with other (similar) sectors of the economy.

<sup>141</sup> In Case ES/2005/0330, the Commission recognised that the Spanish market appeared to be characterised by a number of structural features, such as the high level of prices, the limited evolution of prices and most importantly the high level of profitability sustained by three operators claimed to be jointly dominant in the relevant market. See also Case FI/2004/0082.

competitive markets can be performed. EU averages, in particular as a starting point and an element in an integrated analysis, are also relevant in this respect, provided they take into account national variations and characteristics. A comparison with deregulated markets can be an indication, provided that they show comparable market dynamics.

The *Airtours/Impala* jurisprudence suggests that both functional levels of the market, wholesale and retail should be assessed in an integrated manner as the test links appropriate market characteristics to conduct that diminishes or otherwise influences parameters of competition<sup>142</sup> at retail and wholesale level.<sup>143</sup>

## **An integrated assessment**

The Court of Justice recalled in *Impala II* that an analysis of tacit coordination does not come down to "*a mechanical approach involving the separate verification of each of the criteria taken in isolation, while taking no account of the overall economic mechanism of a hypothetical tacit coordination.*"<sup>144</sup>

Therefore, it is one that is based on fulfilling all criteria set out by the EU Courts, however, in a way in which the interaction between them as well as the evidence underpinning them will present one coherent picture pointing to the likelihood of the tacit collusion, in other words, market conduciveness to the tacit collusion. Available evidence and hypothetical considerations must all together underpin a "*plausible theory of tacit coordination.*"<sup>145</sup>

In order to prove the possibility of a common policy, it is necessary to identify the focal points for such tacit coordination.<sup>146</sup> This exercise has to take account of specificities of the electronic communications sector, in particular the fact that due to the inevitable links between the wholesale and retail markets, the economic mechanism of tacit coordination is not limited to the wholesale level but should be assessed in the interaction of both levels. In this respect, focal point(s) can be identified at either retail or wholesale level and retaliation can take place within the functionally connected wholesale and underlying retail market(s) as well as coordinated retail markets or even outside those markets provided the oligopolists are present there and their interaction takes place in those markets. Structural or other types of links between the undertakings concerned can make it easier to identify a credible focal point. This may be of particular relevance in markets that are not as such conducive to coordination and where the monitoring of compliance with the focal point as well as identifying a credible threat of retaliation is more difficult due to the opacity of the market. In such circumstances, the existence of structural links between the undertakings concerned may nonetheless allow for a finding of collective dominance by creating the necessary transparency around the focal point and by establishing the retaliation mechanism required to make the adoption of a common policy sustainable over time.

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<sup>142</sup> *Impala II*, paragraph 121.

<sup>143</sup> *E.g.* for the third condition of the *Airtours* test to be established the NRA has to assess whether "the foreseeable reaction of current and future competitors, as well as consumers, would not jeopardise the results expected from the common policy." (emphasis added)

<sup>144</sup> *Impala II*, paragraph 125.

<sup>145</sup> *Impala II*, paragraph 130.

<sup>146</sup> Which is understood as the tacit understanding of the terms of the coordination between the jointly dominant undertakings, a solution that tacitly colluding operators will tend to adopt in the specific market circumstances and which requires market transparency to become established. See paragraph 123 of the *Impala II* judgement.

In this respect, it should also be clarified that, as underlined by the CJEU, a check-list approach should be avoided.<sup>147</sup> Annex II of the Framework Directive should be interpreted and applied in view of the *Airtours/Impala* judgements.

It should be noted that an accurate understanding of the retail market failures is not only relevant for the joint SMP finding but also at a later stage of imposition of regulatory obligations.

## **Criteria for collective dominance assessment**

This section provides guidance on the market characteristics that NRAs should consider when making an assessment of whether two or more undertakings can be identified as having joint SMP. Coordination is more likely to emerge in markets where it is relatively simple to reach a common understanding on the terms of coordination. The analysis must identify - through the application of the criteria provided in the relevant case-law - the mechanism of coordination, the incentives for the parties to follow it, its feasibility and sustainability.

For each of these characteristics, on the other hand, the NRA's analysis must consider with the same robust approach, whether their weakness, absence, or interaction with other market characteristics leads to the conclusion that joint SMP is unlikely. In other words, there cannot be a presumption that, in the presence of certain market characteristics joint SMP is present, without an equally thorough assessment of the converse market mechanisms and characteristics that may lead the NRA to conclude that joint SMP is unlikely.

### ***Sufficient transparency***

A starting point for finding a joint SMP is the establishment of a common policy on which to align future behaviour.<sup>148</sup> Given the absence of explicit coordination, it must be relatively easy for operators to reach a common understanding on the terms of coordination.<sup>149</sup> Coordination is more likely to emerge if competitors can easily arrive at a common perception as to how the coordination should work. Coordinating operators should have similar views regarding which actions would be considered to be in accordance with the aligned behaviour and which actions would not.<sup>150</sup>

The most common coordination strategy assessed under Article 7 cases in the past was a (constructive) wholesale refusal of supply (denial of wholesale access).<sup>151</sup> As regards the merger control, focal points of maintenance of exiting market shares<sup>152</sup> as well as retail/wholesale prices<sup>153</sup> were identified by the Commission.

In addition, capacity choice (related to *e.g.* a choice of not upgrading the network where this would be a technically and commercially viable solution) can also be envisaged. This focal point of coordination

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<sup>147</sup> See footnote 144.

<sup>148</sup> See also footnote 134.

<sup>149</sup> See Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 031, 05.02.2004, p. 5, paragraph 41.

<sup>150</sup> See Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 031, 05.02.2004, p. 5, paragraph 44.

<sup>151</sup> See *e.g.* Case ES/2005/0330, Case IE/2004/0121, Case SI/2008/0806.

<sup>152</sup> Case COMP/M.7758 - Hutchinson 3G Italy/WIND JV.

<sup>153</sup> Case COMP/M.3333 - Sony/BMG and COMP/M.7758 Hutchinson 3G Italy/WIND JV.

aims at artificially restricting supply in order to raise prices, and can be present at retail and wholesale level.

In view of above, tacitly collusive behaviour can be identified where based on a focal point or various focal points which can be at the wholesale or retail level. The existence of such focal point(s) is consistent with an understanding that some limited competition can take place between the tacitly collusive oligopolists, even in the presence of tacit collusion. In the same vein, the Court has set out in the *TACA* case that although competition between undertakings in a collective dominant position was necessarily restricted, this did not imply that competition between them would have to be entirely eliminated.<sup>154</sup>

In *Hutchison 3G Italy/WIND JV*,<sup>155</sup> the Commission considered that existing market shares at the retail level could be used as a focal point with a view to ensuring that each MNO would seek to stick to its current customer base on the retail mobile market. In electronic communications markets with near complete mobile and fixed penetration, demand volatility tends to be low and new customers can only be acquired from other market players, increasing transparency in relation to market shares.<sup>156</sup>

Operators may find it easier to reach a common understanding on the terms of coordination if they are relatively symmetric especially in terms of cost structures, market shares, capacity levels and levels of vertical integration. Structural links such as cross-shareholding or participation in joint ventures may also help in aligning incentives among the coordinating operators,<sup>157</sup> if the terms of such arrangements are closed to outside participation by new-comers.

In general, when evaluating the level of market transparency, the key element is to identify what undertakings can infer about the actions of other undertakings from the available information. Coordinating undertakings should be able to interpret with some certainty whether unexpected behaviour is the result of deviation from the terms of coordination.

Each member of the dominant oligopoly must have the ability to monitor whether the others are implementing the terms of coordination.<sup>158</sup>

It follows from the above that market transparency contributes both towards the identification of a common understanding of coordination as well as its (internal) sustainability. Indeed, for the common policy to be sustainable, the market transparency must be sufficient in order to enable each oligopoly member to monitor how the market conduct of the other participants is evolving and to check whether they are complying with the common understanding or whether they are deviating from it, thus

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<sup>154</sup> Joined Cases T-191/98 and T-212/98 to T-214/98, *Atlantic Container Line AB and others v Commission*, EU:T:2003:245.

<sup>155</sup> Case COMP/M.7758 - *Hutchinson 3G Italy/WIND JV*.

<sup>156</sup> In practice, such a market-share based coordination mechanism requires that participating operators refrain from any price decreases, and stop or slow down the promotional efforts aimed at attracting each other's customers. More specifically, the Commission found in the case at hand that MNOs were likely to implement the following actions to ensure compliance with the focal point: stopping or significantly slowing down activities to win back customers lost to other MNOs, increasing the prices of mobile tariffs or reducing the amount of data and voice minutes available at a given price (standalone or through a combination of the two), or reducing dealers' commissions for the acquisition of new customers with a view to increasing the profitability of the colluding MNOs and maintaining the existing market share.

<sup>157</sup> See *Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings*, OJ C 031, 05.02.2004, p. 5, paragraph 48.

<sup>158</sup> *Impala II*, paragraphs 123 to 126.



allowing them to distinguish cheating from mere adjustments deriving, for example, from the volatility of demand.

In addition, the transparency need not be proven in the abstract but in relation to both the establishment of common policy (focal point) and monitoring and sustainability of such common policy.

Moreover, the transparency must be "*sufficient*" for "*each undertaking concerned to be aware, sufficiently precisely and quickly, of the way in which the market conduct of each of the other participants in the coordination is evolving.*"<sup>159</sup>

As regards the transparency, it should be noted that the General Court stated in *Impala I* in relation to the parameters of identifying the existing collective dominance that "*in particular, close alignment of prices over a long period, especially if they are over competitive level, together with other factors typical for a collective dominant position, might, in the absence of an alternative reasonable explanation, suffice to demonstrate the existence of dominant position, even where there is no firm direct evidence of strong market transparency, as such transparency may be presumed in such circumstances.*"<sup>160</sup>

The investigation of such circumstances must be carried out with care, and, above all, it should adopt an approach based on the analysis of plausible coordination strategies that may exist in the circumstances.<sup>161</sup> For the purpose of *ex ante* regulation in the electronic communications sector, a finding of pre-existing coordination as described above may be relevant in particular if the market's characteristics have not appreciably changed or are unlikely to do so in the next review period.

Where past behaviour can inform the NRA's forward-looking assessment of likely market dynamics in the next review period, NRAs should be conscious of the fact that even in the presence of regulation, the mere imposition of price-controlled wholesale access products may not be a sufficient explanation of an observed alignment of prices over a long period at the retail level. Indeed, as long as retail pricing is not regulated, the setting of a regulated wholesale price will not be the only factor determining how retail prices are set. For example, a wholesale price determined through a "retail minus" mechanism, or a cost-oriented wholesale price for a product that has little or no take-up, may not be sufficient to explain price patterns at the retail level.

Further, for the purposes of assessing the transparency criterion, in the specific circumstances of *ex ante* regulation of electronic communications markets, where barriers to entry for new entrants are typically high, a refusal by network owners to provide wholesale access on reasonable terms may be a potential focal point of a common policy adopted by members of an oligopoly. Such a refusal by network operators may therefore point towards the existence of a common policy, which is taken into account alongside other factors when carrying out a joint SMP analysis. A focal point based on the denial of access can either be observed in the case of operators that are not subject to *ex ante* access obligations, or foreseen in the case of operators that are subject to such obligations at the time of the analysis, provided certain conditions are met. Such conditions include a shared incentive in sustaining significant or abnormally high rents (profits) on downstream or related retail markets, which the NRA finds to be out of proportion to investments made and risks incurred,<sup>162</sup> or other non-price related types

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<sup>159</sup> Impala II, paragraph 123.

<sup>160</sup> Impala I, paragraph 252.

<sup>161</sup> Impala II, paragraph 129.

<sup>162</sup> Case ES/2005/0330.

of common policy in a market conducive to tacit coordination incompatible with a well-functioning retail market as set out by the Court in the *Impala II* judgment,<sup>163</sup> that can also be adduced as evidence that refusal of access is a credible focal point. It is also relevant to assess whether the operator in question has a sufficient scale to justify the provision of a wholesale service to third parties.

In general, the electronic communications sector can be considered to enjoy a high level of transparency, especially at the retail level and for mass market products aimed at consumers (underlying market for wholesale local and central access market). In particular, transparency of prices can be more easily assumed for retail mass markets, as prices are publicly available, and homogeneity of products can increase the level of transparency, but even product and tariff complexity can be reduced by establishing simpler pricing rules, such as the identification of a small number of flagship reference products, which can exist also in niche business-focussed markets. In fact, this sector, unlike other network industry sectors, is characterised by a need to interconnect at the wholesale level of all network actors, even those that are vertically integrated, and the availability of a wide range of wholesale and retail market data close to real time is generally present and facilitates transparency. As regards retail tariffs, they can typically be available on the operators' web sites, online forums, specialised price comparison web sites or through multi-branded resellers.<sup>164</sup> As regards network deployment/upgrade decisions, these are typically public due to accountability of network operators to their share- or stakeholders. Moreover, the fact that these investments are as a rule undertaken for a long period (with possibly even longer payback period) can further encourage (rather symmetrical operators) with a significant position in the market to monitor each other's investment plans when making commitments for future deployments. At wholesale level, a focal point consisting in the denial of wholesale access was identified by the Spanish NRA. The Commission considered that this focal point is transparent and that non deviator MNOs can easily detect any deviation resulting in the entry of a new competitor at retail level.<sup>165</sup>

In the framework of finding joint SMP, every NRA has to provide evidence that this criterion is met in the national circumstances. In order to support their transparency findings, the NRAs can, *inter alia*, make an assessment of whether network operators in a mature market pursue business strategies which allow them to generate similar profit and ARPU levels from their average customer base.

Implementing and sustaining tacit coordination is facilitated by certain market characteristics which can make a particular market more prone to coordination.

In this respect, if the market power of individual operators is rather asymmetric as regards their market share, then it is *prima facie* less likely that they have similar incentives and they will easily achieve a common understanding. As set out by the General Court in *Gencor* "*the market structures which encourage oligopolistic conduct most are those in which two, three or four suppliers each hold approximately the same market share.*" (emphasis added)<sup>166</sup>. On the other hand, symmetry of market shares is not essential. In fact, in its 2005 decision, the Spanish NRA identified three MNOs active in

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<sup>163</sup> Impala II, paragraph 121. See also this Explanatory note, section "market failures at the retail level."

<sup>164</sup> In addition to the above the Commission found in the merger Case COMP/M.7758 - Hutchinson 3G Italy/WIND JV that dealers may be an important source of information themselves as MNOs regularly sent them new or updated schemes to incentivise acquisition of new customers. The dealers seems to forward the update the terms received from one MNO to other MNOs.

<sup>165</sup> Case ES/2005/0330.

<sup>166</sup> Gencor, paragraph 134.

ex-market 15<sup>167</sup> (with the market shares of 53.4%, 28.7 and 17.9 % respectively) as being jointly dominant since their market shares were relatively stable over time.<sup>168</sup>

As regards market concentration, in principle coordination is simpler with fewer players.<sup>169</sup> It should be pointed out that concentration eases the identification of a focal point (for instance in terms of prices and market shares); second, it eases the detection of deviation and the identification of the specific market participant responsible for the deviation; and third, it increases the expected cost of punishment because the fewer firms there are, the more profitable collusion is for each participant (hence, the more costly a reversal to competitive outcomes would be).

In order to measure concentration within this context, aside from making reference to the market shares of the market participants, concentration can be measured using the Herfindahl-Hirschman index (HHI). This index combines two factors which have opposite effects on collusion: concentration facilitates collusion while asymmetry makes collusion more difficult. Other means such as the concentration index<sup>170</sup> avoid this problem because they do not vary on the basis of an asymmetry of market shares.

An important clarification in this respect is that the market should be transparent for the tacitly colluding oligopolists, not the consumers. Hence, the existence of bundled offers at retail level does not in itself undermine a transparency finding. As regards commercial secrets within commercial agreements concluded,<sup>171</sup> they likewise do not in themselves lead to low market transparency as long as there are other indicators of transparency, leading to the conclusion that other conditions of the *Airtours/Impala* test are met.

In this respect, in a market structure conducive to tacit collusion the oligopolists could also, but not exclusively, exhibit certain market symmetries, such as: vertical integration,<sup>172</sup> market shares, cost and output compatibilities, capacity including comprehensive network coverage, profitability and ARPU levels, similarity of retail operations. In this respect it should be considered that high and stable market shares reflecting their combined market power towards the rest of the market, parallel pricing (ARPU levels in case of bundled offers), similar profitability levels and comparable retail product scope are all factors to be taken into consideration.

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<sup>167</sup> Access and call origination on public mobile telephone networks.

<sup>168</sup> Case ES/2005/0330.

<sup>169</sup> This principle is also recognised in the context of mergers, Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 031, 05.02.2004, p. 5, paragraph 44.

<sup>170</sup> (C2, C3, C4 which adds the market shares of the 2, 3, 4 ... largest firms).

<sup>171</sup> Arguably under the threat of regulation, as the details of these agreements are known, at the very least, to the party that has concluded it (typically the incumbent operator in case of the wholesale broadband markets).

<sup>172</sup> Tacit collusion is also more likely to be found in a market between players that are vertically integrated and are able to provide products which feed into a relevant retail bundle (even if the bundles market was not defined at retail level) due to possible cross-subsidisation and implementation of cross-markets retaliation schemes. In this respect, BEREC states in its "Report on oligopoly analysis and regulation", p. 46, that if one of the parties involved in the coordination is vertically integrated while the other party is not, this might lead to diverging incentives.

The above-mentioned criteria must be assessed against the overall maturity of the market. More mature markets are more prone to coordination. In the same vein, stagnant market or moderate growth markets facilitate collusion.<sup>173</sup>

In addition, the links between the parties, such as co-investment agreements, can facilitate coordination unless they are open to third parties and thus unable to provide a basis for coordination. The same applies to other comparable contractual links, even if establishment of such links is not indispensable to conduciveness of a market to tacit collusion.

In case of inelastic demand, it might be more profitable to coordinate and pass on the price increase to customers. Therefore, when demand elasticity is low, companies can afford to keep prices high without losing too many customers.<sup>174</sup>

Parameters such as a small number of competitors, inelasticity of demand, and relative symmetry of competitors were factors assessed by the Commission in *Holcim/Cemex*.<sup>175</sup>

### ***Credible deterrent mechanisms***

In order to make the common policy sustainable over time, there must be an incentive for each member of the oligopoly not to depart from the terms of coordination. This derives from the fact that it is only if all members of the dominant oligopoly maintain the parallel conduct that all can benefit. The existence of a credible threat of retaliation by the non-deviating members is inherent in this condition. This means that "*there must be adequate deterrents to ensure that there is a long-term incentive in not departing from the common policy, which means that each member of the dominant oligopoly must be aware that highly competitive action on its part designed to increase its market share would provoke identical action by the others, so that it would derive no benefit from its initiative*".<sup>176</sup>

It is typically difficult to stabilise a common policy over time due to the tension between the group incentive to maintain the common collusive understanding in order to collectively profit from the imposition of supra-competitive prices and the individual incentive of each oligopoly member to deviate from this understanding by undercutting the collusive price in order to benefit from higher sales volumes and to increase its market share. In those circumstances, the presence of an adequate deterrent mechanism serves as a means to punish deviations and is therefore a necessary condition for coordination to be sustainable over time. It constitutes a disciplinary measure towards the members of the coordinated group persuading them to comply with certain collusive market behaviour and

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<sup>173</sup> In Case COMP/M.7758. In Hutchinson 3G Italy/WIND JV the Commission considered that the Italian retail mobile market was saturated as far as the penetration rate of SIM cards was concerned, and the total number of mobile subscribers was not expected to grow, whereas the monthly data traffic had been increasing in the preceding years and was projected to continue increasing steadily in the subsequent years. Moreover, the growth of data traffic was not expected to lead to significant fluctuations in the level of revenues, especially if compared to the past years. In addition, the new MNO entry was not expected to take place at least within the foreseeable future. Although MVNO entry was more frequent, MVNOs played a marginal role in the market. This meant that MNOs could only have expanded their respective consumer bases by stealing each other's customers through competitive prices which would have probably triggered an aggressive price war and resulting loss of profit.

<sup>174</sup> COMP/M.4980 – ABF/GBI BUSINESS, paragraph 156 and COMP/M.2097 - SCA/METSA TISSUE, paragraph 148.

<sup>175</sup> COMP/M.7009 – Holcim/Cemex, paragraph 126 et seq.

<sup>176</sup> Airtours, paragraph 62, second indent.

ensuring that there is a long-term incentive among the coordinating undertakings not to depart from the common policy.

As suggested by the CJEU in the *Impala II* judgement, the most efficient retaliation is the one that is not used. In the case of the electronic communications sector, retaliation can take various forms, such as through reduction of price, and, as stated above, is not limited to the wholesale and retail markets under assessment. The possibility of retaliation consisting in concluding a long-term commercial access agreement with an access seeker should also be considered, and the effect of such agreements will depend on the terms that are offered and on the identity of the access seeker. While a pro-competitive long-term agreement may result in a long term disruption of the collusive equilibrium, this may not be the case for all agreements. Indeed, in some cases the terms may limit or control access seekers' ability to compete at the retail level, or the disruptive risk posed by the agreement may be circumscribed because of the access seeker's limited market power, thus creating the conditions for a possible continuation of the tacitly collusive behaviour, once the retaliatory action has been taken. This clarification is particularly relevant where an NRA considers that the focal point of tacit coordination at the wholesale level consists of a (constructive) refusal of wholesale access, *i.e.* access that would enable an access seeker to effectively compete at retail level, and where typically wholesale transactions are scarce.

In addition, as outlined above, NRAs need not establish that the retaliation would consist of the conclusion of another access agreement by the other tacitly colluding operator(s), if the NRA identifies a different credible retaliatory mechanism (such as short-term price wars) on the underlying or related retail market(s).<sup>177</sup> Considerations related to portability and churn in the specific circumstances could help the NRA to predict the likelihood of retaliation at the retail level being effective.

Accordingly, various forms of temporary retaliation schemes can be put in place, both at wholesale and retail level, which facilitated by market transparency, force the other participating oligopolists to stick to the long-term mutually beneficial tacitly collusive behaviour.<sup>178</sup>

On the other hand, some seemingly retaliatory actions, such as observed retail price wars, temporary discounts taking place at the retail level might be means through which the alleged oligopolists try, rather than maintaining the tacitly collusive behaviour by internal sanctions, to limit the ability of other market players to compete on the market, knowing that the participating oligopolists can temporarily absorb any losses or offset them by cross-subsiding from other services.

### ***No effective external constraint***

To prove the existence of a collective dominant position to the requisite legal standard, it must also be established that the "*foreseeable reaction of current and future competitors, as well as consumers, would not jeopardise the results expected from the common policy*".<sup>179</sup>

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<sup>177</sup> This is important because a sanction against oligopolist 1 for its grant of access to a competitor through grants of access by oligopolist 2 to other competitors could have long-term effects on the market, further undermining profits of the retaliating party, and thus not be a credible deterrent of opportunistic behaviour.

<sup>178</sup> In Case ES/2005/0330, the Commission pointed out that a reduction of retail prices through specific offers (be it through effective reduction of the nominal prices or through a more aggressive promotion policy) and also a deviation from the common principles of the commercial strategy is likely to have a disciplinary effect on the deviating firm.

<sup>179</sup> Airtours, paragraph 62, third indent.

As in the case of single dominance, this requires an analysis of: (i) the market position and strength of rivals that do not form part of the collective entity operating in the market or potential competitors, (ii) the market position and strength of end consumers.

In the framework of the *ex ante* regulation in the electronic communications sector, the market position and strength of the rivals can be assessed based on various factors, related to barriers of entry for potential competitors and competitive situation of and barriers to expansion for existing market players. The relevant parameters in this assessment will include market share in the market under assessment, related economies of scope, potential to provide input to all products requested by the customers at the retail level, its membership in a transnational group, its relative strength in the major area of activity, existence of adequate access product under the regulated offer, the existence of fringe or maverick competitors, etc.

The General Court has clarified in *Airtours* that "[...] *the issue here is not whether a small tour operator can reach the size necessary for it to compete effectively with the integrated tour operators by challenging them for their places as market leaders. Rather, it is a question of [...] whether they can thereby counteract the creation of dominant position.*"<sup>180</sup> As set out in a previous Commission decision<sup>181</sup> the NRAs should include in their analysis an assessment of whether fringe competitors have the ability to challenge the anti-competitive coordinated outcome. In fact, as the Court has stated, a finding of a dominant position does not preclude a finding of some competition on the market. It only enables such undertaking, or arguably undertakings, to act in disregard of any competitive constraint so long as such conduct does not operate to its or their detriment.<sup>182</sup>

The assessment of countervailing buyer power includes economic considerations as to whether commercial customers, including downstream electronic communications operators as well as business end users, can endanger the mechanism of coordination, for example forcing one or more players in a particular market to depart from the common policy. As regards mass/residential markets such as the retail residential broadband access market, final customers are unlikely to exercise sufficient countervailing buying power.

In particular, high barriers to entry stemming from high sunk costs incurred upon entry are likely to increase the stability of the tacit collusion.<sup>183</sup>

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<sup>180</sup> *Airtours*, paragraph 213.

<sup>181</sup> Case IE/2004/0121.

<sup>182</sup> Case T-394/15, *KPN BV v Commission* EU:T:2017:756, paragraph 70.

<sup>183</sup> Spanish case ECN No 2349 of 2012; a decision of the National Competition Authority.