

**Unclassified****English - Or. English****12 December 2019****DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS  
COMPETITION COMMITTEE****Cancels & replaces the same document of 28 November 2019****Hub-and-spoke arrangements – Summaries of contributions**

4 December 2019

This document reproduces summaries of contributions submitted for Item 7 of the 132<sup>nd</sup> Competition Committee meeting on 3-4 December 2019.  
More documents related to this discussion can be found at  
<http://www.oecd.org/daf/competition/hub-and-spoke-arrangements.htm>

Please contact Mr Antonio CAPOBIANCO if you have any questions about this document  
[Antonio.CAPOBIANCO@oecd.org]

**JT03456035**

## *Table of Contents*

<b>Summaries of contributions .....</b>	<b>3</b>
<b>Australia .....</b>	<b>4</b>
<b>Austria .....</b>	<b>5</b>
<b>Belgium* .....</b>	<b>6</b>
<b>BIAC/Business at OECD.....</b>	<b>7</b>
<b>Chile* .....</b>	<b>8</b>
<b>Colombia .....</b>	<b>9</b>
<b>EU .....</b>	<b>10</b>
<b>Germany.....</b>	<b>12</b>
<b>Greece .....</b>	<b>13</b>
<b>Hungary.....</b>	<b>14</b>
<b>Japan .....</b>	<b>15</b>
<b>Korea* .....</b>	<b>16</b>
<b>Latvia .....</b>	<b>17</b>
<b>Portugal.....</b>	<b>19</b>
<b>Russian Federation .....</b>	<b>20</b>
<b>Singapore .....</b>	<b>22</b>
<b>South Africa .....</b>	<b>23</b>
<b>Sweden.....</b>	<b>24</b>
<b>Turkey .....</b>	<b>25</b>
<b>United Kingdom .....</b>	<b>26</b>
<b>United States .....</b>	<b>27</b>

## *Summaries of contributions*

This document contains summaries of the various written contributions received for the discussion on hub-and-spoke arrangements (132<sup>nd</sup> Meeting of the Competition Committee on 3-4 December 2019). When the authors did not submit their own summary, the OECD Competition Division Secretariat summarised the contribution. Summaries by the OECD Secretariat are indicated by an \*.

## *Australia*

This submission sets out the Australian approach to dealing with anti-competitive hub-and-spoke arrangements. Hub-and-spoke arrangements occur when an intermediary, such as an industry association or firm operating at a different functional level of the supply chain, facilitates horizontal collusion. For example, the intermediary may act as a common hub to facilitate indirect information exchanges or other anti-competitive restraints between the competitors.

Under Australian law, hub-and-spoke arrangements may constitute a contract, arrangement or understanding containing a cartel provision (a provision with the purpose of restricting outputs, market sharing, bid rigging or price fixing). Alternatively, in some cases, hub-and-spoke arrangements may constitute a contract, arrangement or understanding to which a competition test applies. Based on Australian cases to date, under either provision, it is necessary to first establish that the parties had the requisite awareness and commitment to engage in the impugned conduct. The courts have sometimes been willing to infer the necessary awareness and commitment, but this is not always so. In light of this requirement, the submission notes that the recently introduced prohibition on anti-competitive concerted practices is anticipated to be an important tool to address anti-competitive hub-and-spoke arrangements in Australia.

The Australian Competition and Consumer Commission (ACCC) is the independent Australian Government agency responsible for enforcing compliance with the *Competition and Consumer Act 2010* (the CCA).

The submission outlines the ACCC's approach to detecting and investigating hub-and-spoke arrangements. The Cartel Immunity and Cooperation Policy, compulsory information gathering powers, including search warrants, and intelligence gathering and data assessment techniques are key investigative tools by which hub-and-spoke arrangements are identified.

The ACCC has considerable experience addressing competition issues arising in the context of e-commerce. In particular, the submission notes the ACCC's recently completed Digital Platforms Inquiry. The submission also includes a case study to demonstrate the ACCC's experience taking enforcement action to address anti-competitive conduct in e-commerce in a situation which resembled a hub-and-spoke arrangement.

The ACCC promotes compliance with the CCA by providing guidance on permissible conduct in vertical relationships. Under Australian law there is a clear demarcation between the treatment of horizontal and vertical anti-competitive conduct. Conduct that satisfies the legal test for vertical conduct, including resale price maintenance (RPM) and non-price restraints such as exclusive dealing, would fall out of the scope of cartel conduct. In all such cases, apart from RPM, the conduct would be subject to the competition test of whether or not it has the purpose, effect or likely effect of substantially lessening competition.

## *Austria*

The Austrian Federal Competition Authority (FCA) has investigated numerous RPM cases and since 2011, 51 RPM cases have been brought before the Cartel Court.

Amongst them, there were cases where hub-and-spoke arrangements were suspected but the FCA dealt with all of them as RPM, since legal requirements are less difficult and there is no difference as to the investigation tools (dawn raids and applicability of leniency programme). In the De'Longhi Kenwood case, the FCA fined the electronic goods manufacturer for RPM that included minimum price setting and restrictions of online and cross-border sales. The Cartel Court upheld the decision and explicitly referred to hub-and-spoke.

In 2014, the FCA published a “Standpoint on Resale Price Maintenance” to provide guidance to suppliers and retailers and in particular to SMEs. Although it focuses on vertical agreements, hub-and-spoke arrangements are also covered.

## *Belgium\**

Although not explicitly qualified as a hub-and-spoke cartel, in 2015 the Belgian Competition Authority (BCA) reached a settlement in a hub-and-spoke-type case involving 18 suppliers and retailers that, through a “cluster of agreements”, co-ordinated price increases for national brand products in drugstore, perfume and hygiene products market.

In such cases, the BCA applies the same standards as for other types of infringements, and the case law on information exchanges between competitors can be relevant for the assessment. The requisite legal standard consists in proving that each undertaking participated in an agreement or concerted practice that aimed at or resulted in a restriction of competition.

Hub-and-spoke agreements can contain RPM clauses but so far, such cases in Belgium were all bilateral arrangements.

---

## *BIAC/Business at OECD*

*Business at OECD* strongly supports robust and effective enforcement of competition laws to detect and sanction hardcore cartels among competitors. Hardcore cartel behaviour harms other businesses as well as consumers and the markets concerned and is generally categorised and prosecuted as criminal or quasi-criminal conduct. Business would be most concerned, however, if the scope of allegedly hardcore cartel behaviour subjected to such serious sanctions were to be expanded so as to include, or risk including, less clearly harmful activities or less clearly articulated scenarios. This would undermine the fundamental right of defendants to know the scope of legal prohibitions and to avoid violations, as well as risk undermining efficient, pro-competitive initiatives.

Hub and spoke theory and enforcement against such arrangements should, in *Business at OECD's* respectful submission, be examined in this light. To the extent hub and spoke theory is used to make clear that horizontal collusion will be treated as such even when it is achieved without direct contact between competitors but is shown to be implemented via a common (vertically-related) hub, the theory is unobjectionable. Grave concerns would arise, in contrast, were hub and spoke theory to be applied to prosecute as a cartel vertical communications or restrictions, even in a network with some indirect horizontal impact, without clear and compelling evidence that proves horizontal collusion. Such proof should be subject to appropriately exacting standards and be evidence-based. Absent clear and compelling evidence of horizontal collusion, vertical agreements are generally efficiency-enhancing and should be prosecuted only on the basis of a full rule of reason-type review of their actual effects.<sup>1</sup>

This contribution examines key concepts and concerns in relation to hub and spoke cartels, to then identify the factors emerging from the developing application of the theory in various jurisdictions. Next, the paper examines whether e-commerce developments may drive the need for enhanced enforcement or a new approach and conclude they should not. The challenges for both a business wishing to implement effective compliance in the face of hub and spoke concerns, as well as those of enforcers in terms of prosecuting hub and spoke violations, are also examined.

Please click [here](#) to download the full paper

**Business at OECD lead drafters:** Luis Gomez, Partner, Baker & McKenzie LLP and Lynda Martin Alegi, Of Counsel, Baker & McKenzie LLP

---

<sup>1</sup> Whilst we accept that certain vertical restraints, such as resale price maintenance, are still treated as hardcore violations.

## *Chile\**

There is one precedent in Chile on hub-and-spoke arrangements concerning the establishment of a minimum resale price through agreements concluded individually by each upstream supplier with the three downstream supermarkets involved. When upholding the National Economic Prosecutor's complaint, the Chilean Competition Tribunal explicitly acknowledged the qualification as hub-and-spoke cartel and clarified the legal standard. This consists of two elements:

1. A vertical component, i.e., the mode of behaviour, which in the case under scrutiny consisted in the prohibition of selling fresh poultry meat below the established resale price; and
2. A horizontal component, i.e. the observance of the agreement to the extent that each cartel member is assured that the others do the same.

For the first time, the Tribunal granted a 15% fine reduction to one supermarket as it had an antitrust compliance programme in place.

## *Colombia*

The starting point of this contribution is that Colombian competition regime does not explicitly classify “Hub and Spoke Arrangements” as agreements that restraint competition. It does, however, recognize as unlawful some of the horizontal and vertical relations that put together the “Hub and Spoke” scheme. The degree to which the exchange of information and/or the restraints between vertically related players might constitute an unlawful practice under Colombian competition law provisions is analyzed through the approaches of the competition authority to unilateral conducts such as “acts of influence” and the Resale Price Maintenance (RPM). In addition, the question regarding the burden of proof demanded to establish a coordination among horizontal players resulting from an anticompetitive agreement sponsored or enabled by a vertically positioned agent will be assessed through the notion of concerted practices.

This contribution addresses aspects of relevance to the discussion concerning the role of vertical restraints in facilitating horizontal collusion. The main purpose is to contribute to the development of practical and legal standards for the assessment of the “Hub and Spoke” scheme. We propose to consider for the discussion the cases in which an agent (e.g. an Association), different from a retailer, manufacturer or service provider, occupies the role of a “hub” in facilitating horizontal collusion. Also, as to the problem of the standard of proof and liability for the infringement, we propose to apply the rules applicable to concerted practices.

This work can be divided into three parts. In the first part we point out some of the key characteristics of a hub-and-spoke collusion in order to identify them later in the Colombian Competition regime. In the second part, we interpret the scheme by analyzing relevant cases undertaken by the SIC in respect to RPM and agents that influence market conditions and contractual terms. Finally, in the third part, we list our concerns regarding the detection and enforcement of hub-and-spoke schemes and our conclusions.

## EU

In EU competition law, hub-and-spoke arrangements are mentioned in the section of the Horizontal Guidelines<sup>2</sup> related to information exchange, as well as in the Vertical Guidelines<sup>3</sup>. In this context, the main competition concern raised by hub-and-spoke arrangements is collusive price-fixing between competitors (or other forms of horizontal coordination). So far, the European Commission (“Commission”) has not taken any specific enforcement action with regard to hub-and-spoke arrangements. However, recent cases investigated by the Commission included some elements of indirect coordination between competitors through a third party (commitment decisions in the e-books case<sup>4</sup>) whereas others pointed to links between retail price maintenance (“RPM”) and horizontal collusion (RPM cases<sup>5</sup>).

The main competition concern regarding hub-and-spoke arrangements is that the exchange of strategic information may reduce the uncertainty about the action of competitors and thus lead to a collusive outcome on the market. In hub-and-spoke arrangements, however, collusion is achieved indirectly through the hub, who acts as a facilitator and sometimes also as the enforcer of anticompetitive horizontal conduct.

Increased price transparency, mass-data availability and the rapid development of Artificial Intelligence have fostered new potentially anticompetitive practices in the digital sector. In particular, the increasing use of algorithms has raised concerns of horizontal coordination. The outsourcing of IT services to specialized third-party providers offering these types of automated processes can also create hub-and-spoke situations when competitors adopt the same algorithm or exchange sensitive commercial information through a common provider. Moreover, the use of online platforms can create digital environments that might facilitate interactions between business users even without direct contact among them since platform operators can easily organize and enforce coordination between undertakings using their platform. The assessment of hub-and-spoke arrangements, including in the online context, depends on the facts of each case, with particular attention being paid to the overall context in which the information exchanges take place.

Enforcement against hub-and-spoke arrangements presents a number of challenges. The practice involves vertical information exchanges, which may often be legitimate business practices when seen individually. Moreover, the presence of a vertical element and the changing roles of retailers and suppliers may lead to situations in which horizontal collusion may be difficult to distinguish from RPM. The indirect nature of the contacts between the spokes makes it more challenging to prove horizontal collusion. This includes

---

2 Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements Text with EEA relevance. OJ C 11, 14.1.2011, p. 1–72, para 55.

3 Guidelines on Vertical Restraints, OJ C 130, 19.5.2010, p. 1–46.

4 Case COMP/AT.39847 E-books, 12/12/2012 (addressed to Hachette, Harper Collins, Georg von Holtzbrinck, Simon & Schuster and Apple - OJ C 73, 13.3.2013, p. 17–20) and 25/07/2013 (addressed to Penguin Random House - OJ C 378, 24.12.2013, p. 25–28).

5 Cases COMP/AT.40182 Pioneer (OJ C 338, 21.9.2018, p. 19–21); COMP/AT.40181 Philips (OJ C 340, 24.9.2018, p. 10–11); COMP/AT.40465 Asus (OJ C 338, 21.9.2018, p. 13–15) and COMP/AT.40469 Denon & Marantz (OJ C 335, 20.9.2018, p. 5–6), all dated 24/07/2018.

the need to show that the spokes were aware or could have reasonably foreseen that their commercially sensitive information would be passed on to other spokes. Recent EU case law may help determine the requisite standard of proof in such a scenario, but ultimately, the assessment will rely on the well-established legal framework for horizontal collusion, which can properly capture the specificities of hub-and-spoke arrangements.

## Germany

The concept of hub and spoke captures forms of indirect collusion. Hence, the important question is whether the communication between companies on different levels of the distribution chain establishes a link that leads to a horizontal dimension of the communication trail. Hub and spoke agreements typically denote a process of information exchange and alignment without the existence of a direct contact between competing companies.

In the classical hub and spoke scenario, the intermediary (the “hub” enabling the information flow) is not itself part of the agreement between the competitors (the “spokes”). However, in the Bundeskartellamt’s decisional practice, mixed forms of vertical agreements (mostly RPM) and hub and spoke agreements have occurred. In such mixed forms, the hub not only serves as an intermediary, but also actively joins or even enforces the agreement between the spokes, creating an overall three-party agreement with both vertical and horizontal elements of coordination.

Infringements going beyond mere vertical price fixing are of priority for the Bundeskartellamt. Recent cases associated with mixed hub and spoke elements illustrate that mixed forms of hub and spoke agreements induced by a supplier with a strong market position indeed tend to result in compliance by the downstream retailers and could thus cause serious negative effects on price competition down the distribution chain.

In 2017, the Bundeskartellamt issued a Guidance Note that provides a framework to assess the legality of commercial behavior. It identifies several conditions where the information exchanges between the supplier and retailer raise concerns and can be used to monitor the retailers’ retail prices.

With the arrival of the digital era, coordination among competitors may also take place through online platforms or AI algorithms as intermediaries for the information flow. A certain degree of alignment in the use of algorithms may arise due to a common third party providing similar services to competitors. A concern is that it may achieve similar negative market outcomes to a hardcore price-fixing cartel without the horizontal competitors ever having exchanged information directly.

In their recent joint conceptual project, the Autorité de la concurrence and the Bundeskartellamt studied potential competitive risks that might be associated with algorithms. The study elaborates *inter alia* on different scenarios of algorithm-driven collusion between competitors involving a third party.

## *Greece*

The term ‘hub-and-spoke cartels’ refers to collusive arrangements whereby parties entrust a common trading partner with the task to police the cartel and monitor compliance with its rules. The common trading partner may contribute to the cartel in different ways: (i) by acting as the vehicle for the indirect exchange of sensitive commercial information between competitors; (ii) by enforcing certain types of vertical restraints which may give rise to horizontal effects, such as resale price maintenance (‘RPM’), minimum advertised prices (‘MAP’) or retail most-favoured-nation (‘MFN’) clauses; or (iii) by implementing a common pricing algorithm or otherwise facilitating the cartel by digital means. The investigation of hub-and-spoke cartels is particularly pertinent to the e-marketplace, given that the common use of digital platforms by competing undertakings increases price transparency and may facilitate direct or indirect communications for anti-competitive purposes, enhance monitoring and, ultimately, stabilise cartels.

The Hellenic Competition Commission (‘HCC’) acknowledges that, due to their triangular structure, hub-and-spoke arrangements may present an enforcement agency with substantial analytical challenges. More specifically, allegations concerning indirect information exchanges through a vertically-related firm may be unsuccessful, unless the anti-competitive intent of all parties involved is established. The same applies to vertical agreements whereby several competitors, each acting individually, assign the development of a pricing software to the same service provider. In addition, when assessing the ability of vertical restraints to foster collusion, the enforcement agency must, first, examine the extent to which the restraint produces horizontal effects and, second, determine whether the vertical restraint under scrutiny facilitates tacit collusion or forms part of a hub-and-spoke cartel, in which case it must be shown that the hub knowingly participates to the scheme or can reasonably be expected to be aware of it.

The HCC has limited experience in handling cases of hub-and-spoke collusion. To date, the authority has challenged the collective enforcement of RPM by a number of competing suppliers on two occasions. However, there are already indications that the expansion of e-commerce will increase the number of complaints and ex officio investigations concerning the implementation of certain forms of vertical restraints giving rise to horizontal effects in the digital environment. The HCC has not, as of yet, investigated cases involving indirect information exchanges or the use of common pricing algorithms.

## *Hungary*

In the GVH's practice so far there has only been one competition supervision proceeding relating to a "quasi" hub and spoke arrangement, but due to the lack of decisive contemporaneous evidence, the GVH did not find it proven that the wholesalers had indirectly coordinated their behavior with the assistance of the manufacturer. In the view of the GVH specific, contemporaneous written evidence is needed to prove the infringement, which, according to the hub and spoke theory, can prove the objective and conscious elements of the infringement as well. The test set out by GVH is elaborated in this document.

The GVH's Notice on the leniency programme was modified at the same time as the case was initiated and thus it covers "hub and spoke" behaviours as well. Despite the modification of the leniency programme, no immunity/leniency applications have been submitted yet.

The GVH observes that qualification issues emerge when both vertical and horizontal elements are present in price-fixing scenarios. In a recently closed RPM case, active participation of the retailers in the monitoring of compliance with vertical price fixing was detected; however, the core element of the conduct was RPM. The findings of the GVH in the cited case may provide some guidance concerning these qualification issues; therefore, the GVH's contribution elaborates certain elements of the decision. The GVH notes that e-commerce has put RPM in the interest of certain type of retailers and manufacturers, and facilitated the monitoring of RPM. The GVH puts emphasis on raising the awareness of undertakings concerning competition law compliance, and advocated the inclusion of vertical price fixing in the scope of leniency.

## *Japan*

Anticompetitive arrangements, of which participants form an appearance of a hub-and-spoke are also seen in Japan. Although, there is no rule that specifically regulates hub-and-spoke type arrangements themselves as cartel conducts, the Japan Fair Trade Commission (JFTC) has been applying some provisions of the Antimonopoly Act (AMA) and a related law to tackle this type of arrangements, taking into account the nature and the characteristic of each case, such as degree of strength of horizontal connection.

Under the current legal framework, hub-and-spoke type arrangements with a strong horizontal connection such as cartels and bid riggings are regulated by the second half of Article 3 of the AMA as “unreasonable restraint of trade”.

On the other hand, hub-and-spoke type arrangements with a weak or no horizontal connection are regulated either by the first half of Article 3 as “private monopolization” or by the Article 19 as “unfair trade practices”.

The JFTC has been vigorously and effectively enforcing the AMA, utilizing various provisions, against hub-and-spoke type arrangements which have adverse impacts on competition in the market, and the JFTC will continuously make every effort to tackle this problem.

## *Korea\**

While interactions between suppliers and buyers are generally pro-competitive, competition concerns arise when a third party (e.g., a common buyer or supplier) acts as an intermediary or facilitates information exchanges among competitors, thus giving rise to a hub-and-spoke cartel.

In Korea, there have not been any hub-and-spoke cases, i.e. acts that have the same effects as horizontal agreements without any horizontal communications or information exchanges. This is mainly due to two reasons.

First, the KFTC and the courts have adopted a strict and conservative approach to collusion through information exchanges. However, an amendment to the MRFTA (Monopoly Regulation and Fair Trade Act) was submitted to the National Assembly in 2018 in order to add information exchange to the list of potentially unlawful agreements.

Second, RPM practices (that can also be a means to facilitate horizontal agreements between suppliers and retailers) are prohibited as unilateral conducts, thus in light of the current legal framework it is not possible to sanction downstream distributors that may have taken advantage of such practices.

## *Latvia*

### *Hub-and-spoke case<sup>6</sup>*

In April 2015, the CC initiated case against 6 undertakings based on materials previously gathered in the case of abuse of dominant position. In the abuse case CC found that the KNAUF has dominant position in plasterboard market in Latvia territory and that loyalty rebates applied by the KNAUF/NORGIPS<sup>7</sup> created essential barriers for other competitors to sell their production to the retail chains who were selling building materials. During inspection of the abuse case CC gathered evidences which contained signs of prohibited agreement from KNAUF/NORGIPS and retailers communication. This infringement was implemented by regular information exchange between Knauf and retailers of building materials (gypsum (including plasterboard), lime cement mixture and other products). Communication revealed efforts to maintain retail resale price not lower than selected minimum level in the market. Although communication predominantly was vertical the aim of such communication was to influence through the supplier KNAUF/NORGIPS prices at horizontal level.

Information which was collected during inspections was mostly email correspondence which also served as main evidence in this case but also other accounting documents (bills, etc.) was analysed to check the prices applied. It may be concluded that proofs of the hub-and-spoke case may differ from traditional cartel as this case may require analysis of additional indirect evidences to prove the common understanding between competitors. Evidences that proof buyers' interest or object to maintain retail prices at fixed or minimum level in the market may follow from communication with supplier when the latter is asked from retailer to stop pricing done by another competitor that is below agreed price level. Scheme of hub-and-spoke infringement may involve different steps what are relevant to prove such infringement:

- regular information exchange between supplier and retailers regarding resale price level for goods (such as plasterboard, glue and other building materials);
- recommendation of resale prices by supplier and monitoring how it is being respected by retailers. Also, retailers monitor may engage in monitoring of competitors prices;
- benefits in the form of rebates is provided by the supplier if minimum price level is respected;
- retailers report to supplier about non-compliance and supplier usually intervene requiring other retailers to adjust prices. Also, supplier may affect with threats to deny the rebate to this retailer.

In this case information was exchanged and prohibited agreement was formed using supplier as intermediary nevertheless retailers knew or ought to know of each other's role in the horizontal price fixing. Retailers who follow to Knauf requirements received monthly bonuses at the end of the month (this was approved by accounting invoices). But if a

---

<sup>6</sup> Press release, 13.10.2017 (in English); decision of 31 August 2017 (in Latvian).

<sup>7</sup> KNAUF and NORGIPS forms one single economical unit belonging to the same holding of companies.

retailer did not comply with the set price level it was reported to Knauf by other retailers (because they do not contact each other directly, only information exchange by Knauf). And then Knauf forwarded that e-mail (which contain a complaint) to the retailer who have a problem with the discipline/noncompliance.

## Portugal

In this note, the Portuguese Competition Authority (Autoridade da Concorrência – hereinafter “AdC”) aims to provide an overview of its experience regarding hub-and-spoke cases. It covers the existing legal framework in Portugal regarding these type of arrangements (Section II) and provides a summary of the relevant elements of some of the proceedings that are currently under investigation (Section III). In addition, the note discusses a number of issues related to investigating this form of collusion (Section IV). Section V refers to an *Issues Paper*<sup>8</sup> recently published by the AdC, which addresses *inter alia* the use of algorithms as a means of implementing hub-and-spoke arrangements, providing some guidance in this respect. Section VI concludes with final remarks.

In the Portuguese legal framework there is no provision referring specifically to hub-and-spoke arrangements. Similarly to any other type of collusion, in order to find that a hub-and-spoke arrangement constitutes an infringement under Article 9 of the Portuguese Competition Act, there must be (i) an agreement or concerted practice between undertakings, or a decision by an association of undertakings; (ii) which has as its object or effect the prevention, restriction or distortion of competition; (iii) with an appreciable effect on competition; and (iv) the verification of that appreciable effect on the Portuguese market.

The AdC has a number of ongoing investigations which relate to hub-and-spoke arrangements regarding markets for fast-moving consumer goods.

In particular, the AdC is investigating whether several supermarket chains resorted to the vertical relations with their suppliers to promote the horizontal price fixing of their own retail prices regarding each of the supplier’s products, in what could be classic hub-and-spoke arrangements.

With respect to algorithms, in its *Issues Paper* the AdC has noted that the use of the same algorithm or of a common provider of pricing algorithms, in particular in markets more susceptible to coordinated behaviour, may indicate the existence of a hub-and-spoke arrangement.

Hub-and-spoke arrangements present a number of issues relating, for example, to (i) the assessment of the various types of evidence, (ii) **the hybrid nature of the arrangement**, which combines vertical and horizontal elements, and the impact on its legal nature, (iii) the absence of direct contact between the colluding undertakings or (iv) the use of RPM as an instrument to implement the anti-competitive practice.

Nevertheless, based on the AdC experience regarding hub-and-spoke arrangements, these issues should not deter enforcement, but rather call for increased robustness of the analysis of the underlying evidence and theories of harm.

---

<sup>8</sup> Issues Paper on Digital Ecosystems, Big Data and Algorithms (July 2019).

## *Russian Federation*

The complexity of relations among the participants of this collusion creates objective difficulties in legal qualification of such relationships and their effective proof in antimonopoly proceedings.

Russian law does not allow a single qualification of a “hub-and-spoke” arrangement.

Firstly, such arrangement cannot be qualified as cartel. Part 1 of Article 11 of Russian Competition Law qualifies as cartel only agreements between competing business entities, that is, between business entities selling or purchasing goods on the same market. A “hub” and “spokes” operate on different markets, respectively, their single arrangement cannot be qualified as cartel, even if it leads to the consequences that constitute a cartel, in particular, price fixing or refusal to contract with certain entities.

Secondly, the whole arrangement cannot be qualified as vertical, though an agreement between a “hub” and “spokes” falls under respective definition. The relationship between the “spokes” is horizontal, and, thus, not captured by this qualification.

One of the possible options is to qualify this arrangement as “other” agreement that leads or may lead to restriction of competition (Part 4 of Article 11) that does not limit its participants only to competitors or supplier/distributor. However, such agreements are subject to “rule of reason” and are not prohibited per se, that will require proof of their impact on competition.

The other option is separate qualification of horizontal relations and vertical relations. In this case, horizontal relations may be treated as cartel, and vertical relations – either as “vertical” agreement or as coordination of economic activity.

Qualification of arrangement between a “hub” and “spokes” as unlawful vertical agreement is possible not in all scenarios. Such arrangements assessed separately from the horizontal relations can be either lawful from antitrust point of view or permissible due to, e.g., low market shares of their participants. In addition, “spokes” can in certain cases be in indirect contractual relationship with the “hub”.

Qualification of the arrangement as coordination of economic activity is more suitable as it can capture all relations between the “hub” and the “spokes” and does not fall under specific exceptions for vertical agreements. In addition, coordination of economic activity requires existence of the same consequences of the arrangement as that of cartel that does not require assessment of impact on competition to prove the violation and can be done in complex with analysis of horizontal relationship.

There is also the possibility to qualify these actions simultaneously under Part 1 of Article 11 of the Law on the Protection of Competition, that is the conclusion of a cartel, and Part 4 of Article 11 of the Law on Protection of Competition - the conclusion of another agreement.

Concerning the issue of the investigation of hub-and-spoke agreements, as at present almost all economic processes have moved or are moving into the digital space, the ways of interaction between business entities are changing. In this regard, the methodology for investigating anticompetitive agreements and other actions aimed at restricting competition is changing. Such methodology shall include review of websites, extraction and review of electronic communication and potential involvement of e-discovery tools, including those

allowing restoration of deleted correspondence, review of software used in a particular case, its technical tests and engagement of technical specialists. Some of these methods were already used by the FAS Russia in investigation of anticompetitive behavior.

## Singapore

Hub-and-spoke cartels are atypical cartels with vertical elements, and competition law in this area remains a developing one. Market dynamics that offer opportunities not only for information exchanges between competitors, but also for the formation of relationships with third parties who are both positioned and incentivised to serve as conduits for indirect information exchanges, should be examined.

A common agency set up through a joint venture between competing firms may facilitate such hub-and-spoke collusion through the indirect exchanges of commercially sensitive and strategic information between these firms, notwithstanding the potential pro-competitive effects arising from such joint ventures.

In the e-commerce context, increased price transparency in dynamic markets, and digital tools that automatically monitor competitors' prices have made it easier for firms to engage in collusive behaviour. Such pricing algorithms could facilitate hub-and-spoke collusion, where there is an industry-wide use of a single algorithm to determine prices, and competitors rely on that same third-party-owned hub (i.e. a pricing algorithm) to coordinate their pricing strategies.

In Singapore, vertical agreements are excluded from the section 34 prohibition of the Competition Act (Chapter 50B) ("the Act") enforced by the Competition and Consumer Commission of Singapore ("CCCS"), which prohibits agreements between firms that have the object or effect of preventing, restricting or distorting competition within Singapore.<sup>9</sup> However, the fact that firms are in a vertical relationship and/or have a vertical agreement, *does not* preclude the finding of a horizontal concerted practice amongst them which has as its object or effect the prevention, restriction or distortion of competition within Singapore. Consequently, a horizontal concerted practice can be found in agreements of a hub-and-spoke nature.

This paper highlights CCCS's experiences in hub-and-spoke cases. In the competition assessment of the formation of Singapore's first poultry slaughtering hub that was notified to CCCS for a decision, CCCS considered the potential facilitation of the sharing of confidential and commercially sensitive information between the joint venture parties through the slaughtering hub. Further, CCCS also completed a market study on the online travel booking sector in Singapore, which considered that price parity clauses that are part of a network of agreements to facilitate horizontal collusion, could be caught under the section 34 prohibition of the Act.

---

<sup>9</sup> Paragraph 2.1 of the *CCCS Guidelines on the Section 34 Prohibition 2016*.

## *South Africa*

Hub-and-spoke arrangement presupposes that an upstream supplier has imposed price or market restrictions on its downstream wholesalers/retailers. Cases of these nature would always present evidential challenges for the Commission if it decides to prosecute downstream wholesalers/retailers for price fixing or market division, because the law requires the Commission to prove ‘consensus’ between wholesalers/retailers.

In light of these evidential challenges, the Commission would prefer to prosecute hub-and-spoke arrangement as a form of resale price maintenance, especially if the instruction to sell at a particular price is accompanied by sanctions for non-compliance.

Resale price maintenance in the Act is treated the same way as hardcore price fixing and market division. The only difference is that in a resale price maintenance case, only a manufacturer (hub) is liable for a fine, whilst in a price fixing case, both parties are liable for a fine. The only exception is when one of the parties has successfully applied for leniency in terms of the Commission’s leniency policy.

Moreover, the Commission’s leniency policy is aimed at hardcore cartels, and does not apply to resale price maintenance cases. i.e. a manufacturer can’t blow a whistle against itself.

Lastly, the world of digital economy presents opportunities and challenges for competition authorities. Fourth Industrial Revolution encourages innovation by firms. However, these innovations are not without some challenges for competition authorities. i.e. online travel agencies such as Booking.com presents hub-and-spoke challenges with their price parity arrangements with the hotel industry. E-hailing market presents same challenges for competition authorities.

It remained to be seen whether these possible challenges would be resolved by competition authorities through “per se” or “rule of reason” provisions.

## *Sweden*

The experience of the Swedish Competition Authority (SCA) concerning enforcement of hub-and-spoke arrangements is still rather limited. However, the SCA has fairly recently investigated a case where suspected RPM and the suspected indirect exchange of strategic information between retailers (via the supplier) were at issue.

The SCA's experience is that the emergence of e-commerce, price monitoring tools and price comparison websites, as well as the pressure that this has put on traditional (brick-and-mortar) retailers, has likely led to an increase in practices of an RPM-like nature by suppliers. In scenarios where a supplier's practice of fixing a minimum price is appreciated and supported (or perhaps even requested) by its retailers as a way of protecting their margins, such practices share many similarities with horizontal hub-and-spoke coordination. Depending on the way the practice is implemented by the supplier and its retailers, it may even be more accurately characterised as a hub-and-spoke arrangement.

Enhanced methods for distinguishing situations in which anti-competitive horizontal coordination may occur in otherwise beneficial vertical relationships are important in the pursuit of ensuring effective competition to the benefit of consumers. This roundtable discussion is to be welcomed in this regard.

This submission discusses briefly the legal standard for hub-and-spoke arrangements and make a few remarks regarding the gathering of evidence in Sweden with relevance to hub-and-spoke arrangements. The submission continues with a description of some recent case experience of the Swedish Competition Authority where issues relating to hub-and-spoke arrangements were considered and ends with a few concluding remarks.

## Turkey

There are basically two cases that Hub-and-Spoke Arrangements are cited as a suspicion/allegation in Turkish Competition Authority TCA's caselaw practice. In *Aral* the hub and spoke suspicion was between retailers (spoke) through suppliers (hub) whereas in *LSID* the suspicion was between suppliers (spoke) through retailers/association/research company (hub). However, in none of these cases the Turkish Competition Board (Board) decided that the law is breached due to Hub-and-Spoke Arrangements.

In *Aral* case, which started with the Hub-and-Spoke allegations, the Board said that the communication in the market could not be called as a horizontal agreement since the causality between retailers' requests and other retailers' price adjustment was not clear. As a result, the Board concluded that the parties in computer and video game consoles market are in a vertical price fixing agreement and imposed fine against both parties (supplier level: Aral and retailer level: Teknosa, Kliksa, Bimeks, Vatan, D&R, Gold) in this vertical relationship. In other relevant market in this case (consumer electronics market) the Board stated that there were two kind of violations of the Article 4 of the Act 4054 Competition Law: vertical price fixing agreement between supplier LG and its retailers (Teknosa and Mediamarkt) and RPM conducted by Philips Turkey (supplier) and Vestel (supplier) to their retailers.

In *LSID* decision, which was adopted after a result of preliminary investigation was about the information exchange between competitors (major tire suppliers: Brisa-Bridgestone, Good Year, Pirelli) through retailers, association (LSID), a research company (an independent auditor-BDO Denet) about the sales volume and the price increases. The Board rejected the claims and did not proceed to open an investigation after its object and effect based analysis

If the connection between vertical relationship and horizontal effect is obvious and provable than it is easy to say that there are hub and spoke cartels but based on the TCA experience and Turkish jurisdiction's point of view it is hard to prove the intention of the parties. For this reason, some hub and spoke cases in reality may be interpreted as RPM case or other price fixing agreements since causality between vertical and horizontal components of hub and spoke cartels cannot be found out.

## *United Kingdom*

Hub and Spoke (or A to B to C) infringements arise where anti-competitive behaviour between two competitors or ‘spokes’ (A and C) is co-ordinated or facilitated by a third party ‘hub’ (B) which typically acts at a different level of the supply chain.

The experience in the UK has been that the ‘spokes’ are generally competing retailers while the ‘hub’ will be a common supplier and that there is a risk of these infringements occurring when steps are taken to mitigate margin pressures in the supply chain.

Where established, hub and spoke infringements constitute breaches of the Chapter I prohibition of the UK’s Competition Act 1998 as either anticompetitive agreements and/or concerted practices. In the UK experience, the OFT (the CMA’s predecessor) reached infringement decisions in three hub and spoke investigations. After the conclusion of all relevant appeals these cases have resulted in aggregate fines of over £80 million.

Although the UK authorities have not reached an infringement decision in respect of this form of behaviour since 2011, both the OFT and the CMA have conducted several other investigations which have uncovered evidence consistent with hub and spoke contacts. However, neither organisation decided to prioritise enforcement action. These decisions were taken for a number of reasons. In some cases, there was insufficient evidence to meet the legal test necessary to demonstrate the infringement with enforcement action instead addressing other infringing behaviour (such as RPM).

Despite the lack of recent enforcement activity in this area, the CMA is committed to investigating and, where appropriate, taking enforcement action against hub and spoke conduct which it believes meets its prioritisation criteria. Accordingly, any such decision will principally rest on the strength of the evidence in any such investigation, the harm to consumers and the likely impact of any CMA intervention.

The key challenge the courts and enforcers in the UK have faced in establishing a test to demonstrate an indirect anti-competitive agreement and/or concerted practice is which distinguishing between legitimate, robust vertical discussions between suppliers and their retailers and discussions which cross the line into some form of horizontal behaviour. This issue has been resolved by the introduction of intent requirements on the part of both retailers in a hub and spoke arrangement. In particular, when disclosing its future pricing intentions to its supplier, evidence must be adduced to demonstrate that the disclosing retailer may be taken to have intended or did in fact foresee that its supplier would make use of its information to influence conditions on the retail market by disclosing the information to its competitors.

The combination of a relatively stringent legal test and the issue of the typically fragmentary evidence chains that generally exist in hardcore infringements may make hub and spoke infringements difficult to demonstrate to the requisite legal standard. However, in these circumstances evidence gained from investigating the hub and spoke behaviour may provide the basis for establishing other forms of anti-competitive agreement – such as RPM.

## *United States*

Hub and spoke conspiracies have been recognized in American antitrust jurisprudence for eighty years. The basics of the conspiracy are well established. The conspiracy requires a central hub participating in or orchestrating a horizontal agreement among the spokes (the rim), often by coordinating vertical restraints to up-or-downstream spokes. To enforce the antitrust laws against a hub and spoke conspiracy, the horizontal agreement must be proven. This can be done through direct or circumstantial evidence of agreement, such as inferences from the vertical arrangements and the circumstances under which those arrangements were entered.