17 November 2017

Competition Promotion Branch
Competition Bureau
50 Victoria Street
Gatineau, Quebec
K1A 0C9

By website submission

Dear Sir/Madam,

DRAFT DISCUSSION PAPER *BIG DATA AND INNOVATION: IMPLICATIONS FOR COMPETITION POLICY IN CANADA*

The Antitrust Committee of the International Bar Association ("**IBA**") hereby encloses for the consideration of the Canadian Competition Bureau (the **"Bureau"**) comments on the Draft Discussion Paper entitled *Big Data and Innovation: Implications for Competition Policy in Canada* on 18 September 2017. The IBA is grateful for this opportunity to submit the views of the Antitrust Committee on these important draft measures and appreciates the willingness of the Bureau to consider its comments and suggestions.

The officers of the Antitrust Committee would be delighted to discuss the enclosed submission in more detail, should that be of interest.

Yours faithfully,

Janet McDavid
Co-Chair
Antitrust Committee

Pieter Steyn
Co-Chair
Antitrust Committee

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ANTITRUST COMMITTEE OF THE INTERNATIONAL BAR ASSOCIATION

SUBMISSION TO CANADIAN COMPETITION BUREAU REGARDING ITS DRAFT DISCUSSION PAPER ON BIG DATA AND INNOVATION

1   The IBA and Purpose of Submission

1.1   The IBA

The IBA is the world's leading organisation of international legal practitioners, bar associations and law societies. It takes an interest in the development of international law reform and seeks to shape the future of the legal profession throughout the world.

Bringing together antitrust practitioners and experts among the IBA's 30,000 international lawyers from across the world, with a blend of jurisdictional backgrounds and professional experience spanning all continents, the IBA is in a unique position to provide an international and comparative analysis in this area. Further information on the IBA is available at http://ibanet.org.

1.2   Purpose of Submission

The Antitrust Committee of the IBA (**Antitrust Committee**) sets out below its submission on the Draft Discussion Paper *Big data and Innovation: Implications for Competition Policy in Canada* (the **Draft Discussion Paper**) issued by the Canadian Competition Bureau (the **Bureau**) on 18 September 2017.

The IBA's Antitrust Committee comprises international antitrust practitioners from multiple jurisdictions around the world. The Antitrust Committee wishes to address only specific issues based on the Antitrust Committee's international and Canadian experience in a manner that the Bureau will hopefully find constructive and helpful.

The Antitrust Committee commends the Bureau for undertaking to 'spark a discussion' about some of the challenges of analyzing big data cases and how they can be addressed to support innovation and competition.

The Antitrust Committee is conscious that the Draft Discussion Paper is intended to outline some of the positions the Bureau may take and to encourage public dialogue and debate on the challenges of big data and innovation and does not contain the full detail of the Bureau's approach to regulation of big data. In the spirit of discussion the Antitrust Committee highlights a few aspects of the draft discussion paper for further consideration based on the experience of the diverse membership of the Antitrust Committee and the laws of the jurisdictions from which they come. The Antitrust Committee appreciates the opportunity to submit these comments regarding the Draft Discussion Paper.

2　Introduction

The Antitrust Committee commends the Bureau for setting out in some detail the likely issues in consideration of big data and the tension inherent in overly-interventionist enforcement in this area.

The Antitrust Committee agrees with the comments in the introduction that:

> *an uninformed or overly interventionist enforcement approach risks chilling investment in the accumulation and use of big data through legitimate means, and losing out on significant benefits to competition and innovation. On the other hand, an approach that is too lax risks turning a blind eye to uses of big data that are harmful to competition and consumers.*

In addition, it is good that the Bureau states:

> *Given this promise, the Bureau is mindful, not only of the risks of "underenforcement" (i.e., not taking action where there is a genuine harm to competition), but also of the risks of "overenforcement" (i.e., taking action where there may be no genuine harm to competition), which risks slowing or even stopping such advances.*

3　Big data and mergers and monopolistic practices

The Antitrust Committee applauds the Bureau's recognition of the need *'to assess the impact of mergers and business practices involving data on a case-by-case basis'*. The Draft Discussion Paper generally adopts the approach that Canada's existing merger law framework and the Competition Bureau's enforcement guidelines[1] are sufficient to address big data issues arising in merger transactions, provided that case-by-case assessments are careful to include attention to distinctive attributes of big data such as non-rivalrous consumption, non-price dimensions of competition, zero-priced services, two-sided markets, challenges associated with predicting future "prevention of competition", and dynamic efficiencies. The Antitrust Committee agrees that this general approach appears to be sound.

3.1　Challenges with market definition and market power

The Draft Discussion Paper talks about the challenges of market definition and the use of the "hypothetical monopolist test". The Antitrust Committee agrees that one of the key issues with the use of this test is that for many products and services the provision of the service is effectively "free" for consumers. The discussion in relation to the quality of service on page 12 of the Draft Discussion Paper is important in this respect. The Bureau indicates that faced with such difficulties it may rely on other evidence of substitutability "such as views expressed in consumer surveys, business documents, or evidence of switching". This is a useful discussion. So too is the discussion about the two-sided nature of platforms and the impact of one side on the other.

At the end of section III.A ("Challenges with market definition") — which contains a very helpful discussion of the potential limitations of the "hypothetical monopolist" methodology in contexts such as zero-priced data and non-price dimensions of competition as well as two-sided markets — the Discussion Paper suggests that in certain cases "*it may be appropriate to rely on alternative methods to assess market definition or to forgo market definition as an initial step and focus on direct evidence of competitive effects*". While market power is addressed briefly in the following section of the

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[1] *Competition Act*, RSC 1985, c. C-34, ss. 91-96; Competition Bureau, *Merger Enforcement Guidelines* (2011), http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/03420.html#s5_2.

Discussion Paper, it would be useful to elaborate on what alternative market definition and direct competitive effects methodologies the Bureau has used or would contemplate using in big data and other technology cases. This appears particularly appropriate in relation to fast-moving markets such as those involving big data so as to avoid adopting market definitions that would very quickly become obsolete.

At the end of section III.B ("Challenges with assessing market power"), the Discussion Paper contains a short commentary about market shares. It includes an example which suggests that "*when assessing the acquisition of a firm with low market share but troves of valuable data, agencies should assess post-acquisition incentives and the importance of the data being acquired as these factors may impact future barriers to entry and likely competitive effects from the transaction*". This suggestion appears to be inconsistent with the "safe harbour" in the Bureau's Merger Enforcement Guidelines which indicate that a merger will not be challenged when the parties' combined post-merger share in a properly defined market is below 35%.[2] No support is provided for the different proposed approach in a big data context, and the Antitrust Committee does not see any basis for adopting such an approach. The fact that a firm with "troves" of data has a low market share would be strong evidence that such data was not able to be used as a barrier to entry or a basis for exercising market power. The Antitrust Committee therefore suggests that the market share discussion be reframed in a manner which is consistent with the Bureau's general enforcement guidelines related to market share safe harbours in merger cases.

3.2   Substantive assessment of mergers (including remedies)

The Discussion Paper includes helpful discussions of various issues that may arise when assessing the competitive effects of mergers and monopolistic practices. Section III.D.4 ("Dynamic competition and non-price effects") recognizes some of the most notable dimensions of non-price competition that are likely to arise in big data environments and the need to address these through qualitative analysis in situations where they cannot readily be quantified. However, it also postulates an example involving "two mobile apps that compete for downloads on the basis of restrictions on the use of consumer data" and goes on to assert that a "merger of these two app businesses may substantially lessen competition by giving the merged entity the ability to exercise market power by reducing privacy assurances post-transaction". In practice, it is highly unlikely that privacy protection would be the sole or even primary basis on which two mobile apps compete. By ignoring other dimensions of competition that would also be important to customers, the example seems to suggest that a reduction in competition along a single, likely subordinate, dimension of competition would be sufficient to meet the "substantial lessening or prevention of competition" test applicable to mergers in the Competition Act. The Antitrust Committee does not believe that the example provides a credible illustration of whether and how a merger involving big data could result in "substantial" anti-competitive effects and suggest that an alternative example be provided.

The Antitrust Committee recognizes that the efficiency defence for merger transactions in the Competition Act is different from the approach used in most other jurisdictions, and commends the Bureau for including in the Discussion Paper (section III.E ("Efficiencies") a strong affirmation of the potentially important role of dynamic efficiencies as well as guidance to merging parties regarding the challenges they will face in meeting their burden of proof to show that such claimed efficiencies outweigh the likely anti-competitive effects of a merger in a big data environment (which may be similarly challenging for the Bureau to establish, if they involve concerns about reductions in

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[2] Competition Bureau, *Merger Enforcement Guidelines*, at para 5.9.

innovation or other non-price dimensions of competition, as the Discussion Paper recognizes in section III.D). To the extent that the Bureau has had experience with such claims in prior cases, it would be useful to add a brief summary of how such issues have been dealt with. Alternatively, a hypothetical example would be useful to more concretely illustrate how these types of assessments will be undertaken.

The Discussion Paper sets out in section III.F ("Remedies") a strong preference for structural remedies. This approach is consistent with the Bureau's own prior general guidance on remedies, and it would be useful to cite that prior guidance[3] and indicate its general relevance in big data contexts (assuming the Bureau does consider it to be generally applicable). However, like many other competition agencies that express a preference for structural merger remedies, the Bureau in fact has a lengthy track record of using an array of behavioural remedies in respect of mergers (as well as for monopolistic practices, where behavioural remedies rather than divestitures are the norm). Elsewhere in the Discussion Paper, the Bureau discusses the McKesson/Katz Group transaction in which it concluded that a vertical merger between a major wholesaler and a major retail chain in the healthcare sector would be likely to lessen competition substantially by facilitating coordinated behaviour.[4] It would be useful for the Discussion Paper to discuss this and other examples of situations in which behavioural remedies may effectively address issues arising in mergers that involve big data.

3.3   Quasi-structural and behavioural remedies

In the discussion about licensing of intellectual property remedies being a quasi-structural remedy, there is an acknowledgement that data can be considered to be an "*essential facility*" in some instances. There is a sentence that the "*Bureau is mindful that mandating licensing of data can potentially chill incentives to innovate*". It is important that intellectual property rights are considered on a case by case basis. The Antitrust Committee respectfully suggests that it would be helpful to expand the discussion of this point and to move it higher up in the draft to avoid an implication that mandatory intellectual property licensing would be required readily.

The Antitrust Committee is also of the view that the Bureau's view of data as "*factual information*" may mislead readers to believing that it will rarely constitute intellectual property. In our view that conclusion is not self-evident; data may well constitute IP in the traditional sense or proprietary know-how or trade secrets. Ownership over data in these circumstances (or privacy/data protection) may (rightly) make mandatory licensing of data a challenging or inappropriate remedy in many cases. An expanded discussion of this point that recognizes these limits (as the White Paper currently does to an extent) would be useful.

4   Big data and cartels

4.1   Big data and hard-core cartels

The Antitrust Committee agrees with the finding that big data introduces "*more efficient and powerful ways to implement and manage a cartel*' such as increasing the power to instantaneously communicate, and the capacity to manipulate large amounts of information to either monitor

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[3] See Competition Bureau, *Information Bulletin on Merger Remedies* (2006), http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/02170.html.

[4] See Competition Bureau, "Competition Bureau Statement Regarding McKesson's Acquisition of Katz Group's Healthcase Business", 16 December 2016, http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04174.html.

(transparency) or effect (immediately adjust) a cartel. However the Antitrust Committee notes that it is not the data as such but any problematic use of the data (e.g. via an algorithm or other technology on the basis of an illicit agreement) that can result in concerns.

In this respect the Antitrust Committee welcomes the Bureau's recognition that the mere assembly and/or use of big data does not constitute a new prohibited activity. Rather, *'there must be an agreement or "meeting of the minds" among co-conspirators' as 'the offence is still rooted in the agreement itself'*.

However, a key question not addressed currently in the paper is how will traditional fundamental concepts of "agreement", "arrangement", and "meeting of the minds" be interpreted when the "minds" that matter are not human? There is no acknowledgement or discussion of this question, even if only to say that the discussion is beyond the scope of the White Paper.

The Antitrust Committee recommends that the Bureau consider at least posing this question in the paper and starting the discussion about the boundaries in this regard. If, for example, every human competitor started using a pricing AI and set it to profit maximisation, over time the AIs might all learn that the best way to maximise profits is to communicate. They would communicate, not the way humans do, but through the prices that they and the other AIs set and monitor instantly. They would learn that when they followed price increases or when they signaled a price and then pulled back, only to move to that price a few minutes (or seconds later), others would follow and everyone would earn greater profits. They would learn who should lead when. They would learn what price changes might mean about a competitor's cost (since they might have databases of information on their own costs, public information about input costs, etc.). That is in one sense no different from what could be done in industries with price transparency; but the existence of AI may make possible what is now only theoretical.

The Bureau's paper does not address the question of whether the Bureau would consider this kind of conduct to amount to a cartel or conscious parallelism.

It would be useful for the Bureau to consider what position it would take in these types of circumstances. Is it criminal or some other violation of the Act, for a human to program an AI to "*profit maximization"* mode? Would the Bureau consider they could (and should as a matter of competition policy) seek to order humans to turn off certain functionalities within the AI or create other safeguards?

Similarly, the Bureau's White Paper does not address the question whether algorithms could be construed as anti-competitive when used in classic "hub-and-spoke" scenarios, which involve competitors colluding through a third party intermediary. It would be useful for the paper to consider this issue as well.

4.2 Conscious parallelism

The Antitrust Committee welcomes the Bureau's finding that the use of data to monitor competition can have procompetitive effects. Therefore, as recommended by the Bureau, a wholesale change in the way conscious parallelism is viewed in cartel enforcement should not be pursued. However, the Bureau has stated that big data may aggravate the degree of conscious parallelism, and that this may result in severe anticompetitive effects.

The Antitrust Committee notes that the Bureau's statement that: *"Ultimately, big data is likely to introduce a difference of degree rather than a difference of kind when it comes to conscious parallelism"* may be true, but that it does not explicitly recognise that the "*difference of degree*" might

be so significant that authorities may be feel compelled (or be pressured) to act – for example, if there is a public outcry regarding the use (or misuse) of big data for collusive purposes. Hence the importance of the debate around conscious parallelism as flagged above.

In the paper there is a statement that:

> *Given the status of purely unilateral conscious parallelism as a practice not subject to criminal liability in many jurisdictions, including Canada, it would be difficult to carve out the use of big data as a prohibited activity in the monitoring of one's competitors. That is to say, there is a broad consensus that the unilateral monitoring and responding to data collected on one's competitors is legal. To alter this framework in such a way as to cast the use of big data as illegal in performing the same activity that is otherwise legal through the use of just data is likely unworkable as it would require that some bright line be drawn to identify at what point data transforms into big data.*

> *Failing that change, a wholesale change in the way conscious parallelism is viewed in cartel enforcement would be required. That option, however, is not attractive because it would radically change enforcement for a significant size of the economy and would likely chill innovative, procompetitive uses of big data.*

The Antitrust Committee agrees that the framework should not be altered in such a way to cast the use of big data as illegal (criminal or civil) when performing the same activities is otherwise legal through the use of data. To do so would hinder innovation and advancement, not least because, as the Bureau identifies above, the distinction between data and big data is unclear. The Antitrust Committee would encourage the Bureau to make a stronger statement that it will not seek to get in the way of pro-competitive effects of data/big data and pro-competitive and innovative market dynamics and that it does not support alteration of the framework. The need for that reassurance is even more acute in the facilitating practices section (where the Bureau takes the position an agreement can be inferred).

4.3 Facilitating practices

The Bureau acknowledges that it is difficult to distinguish conduct that is the result of interdependence and conduct that transgresses into criminally unlawful conduct. The Antitrust Committee thinks that it would be useful if the Bureau could be more forceful in confirming that, without compelling evidence of the agreement and the other requirements for a cartel, the Bureau would stay on the deferential side and, at most, examine conduct under the civil provisions of the Act.