

Registry

R-99(b)

CT-94/01

**THE COMPETITION TRIBUNAL**

IN THE MATTER OF an Application by the Director of Investigation and Research under section 79 of the Competition Act R.S.C. 1985 c.C-34 as amended.

AND IN THE MATTER OF certain practices by The D & B Companies of Canada Ltd.

**BETWEEN:**

**THE DIRECTOR OF INVESTIGATION AND RESEARCH**

**Applicant**

- and -

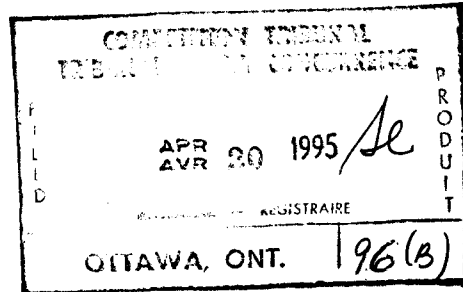
**THE D & B COMPANIES OF CANADA LTD.**

**Respondent**

- and -

**INFORMATION RESOURCES, INC.**

**Intervenor**



**REBUTTAL EXPERT AFFIDAVIT OF MARGARET E. GUERIN-CALVERT**  
(on behalf of the Respondent)

COMPETITION TRIBUNAL  
TRIBUNAL DE LA CONCURRENCE

File No. CT-94/11  
No. du dossier Qu v D & B Companies

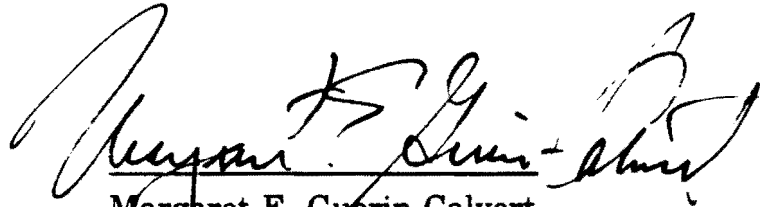
Exhibit No. R-99(B)  
No. de la pièce

Filed on Apr. 20/95; 14h11  
Déposé le

Registrar Shag  
Greffier

I, Margaret E. Guerin-Calvert, in the City of Potomac, in the state of Maryland of the United States of America, MAKE OATH AND SAY:

1. I delivered an expert report in this proceeding on September 20, 1994.
2. Attached hereto as Exhibit "A" to this my affidavit is a true copy of my Rebuttal Expert Report prepared in response to the Expert Reports delivered on behalf of the Director and IRI.



Margaret E. Guerin-Calvert

Sworn before me at the  
City of the District of Columbia in  
the United States of America  
this 4<sup>th</sup> day of October, 1994



**DAWN J. HIGGINS**  
A Notary Public of District of Columbia  
My Commission Expires June 30, 1998

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**REBUTTAL REPORT OF MARGARET E. GUERIN-CALVERT**

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October 4, 1994

**I. Introduction**

1. The purpose of this report is to respond to the issues and analysis presented in the expert reports of Ralph A. Winter for the Director, and John P. Gould and Andrew M. Rosenfield (a joint expert report) and Donald A. Thompson for the Intervenor, IRI. While there are some differences among these reports, they each make the following basic claims:

**Summary of Director's and IRI's Experts' Reports:**

2. Nielsen is a dominant firm which has maintained its dominance by foreclosing or blocking entry into the provision of market tracking services in competition with Nielsen. For entry to occur, a vendor needs to obtain access to scanner data from all major grocery retail chains in Canada and this access must be obtained from all at or about the same time. Historical data from all these retailers is necessary for entry. If any firm, whether Nielsen or IRI, is allowed to offer an exclusive contract to a retailer for scanner data, then competition will be precluded or lessened substantially in the provision of market tracking services.

3. Scanner data are an essential input into the production of scanner-based market tracking services and scanner data are a public good that is produced as a by-product with the implementation of scanning equipment for use by retailers. "Public good" is defined in these reports to mean that more than one user can consume this information without precluding its use by another consumer and there are no investments made through contracts, such as exclusive contracts, that enhance the overall amount or quality of data that are available. Market forces and arrangements, whether from retailers, market research companies (e.g., IRI) or manufacturers, are not sufficient to provide for competition in the market. Only government intervention with the prohibition of exclusive

contracts (and other relief) are both effective forms of relief and will result in the restoration of competition in the market.

## **II. Assessment of these Analyses**

4. The basic theory of these reports is that Nielsen's contracts have foreclosed or blocked entry into the provision of market tracking services in competition with Nielsen and that the foreclosure of entry has lessened competition substantially in the provision of market tracking services. This theory is the underpinning for all of the other conclusions that the experts for the Director and IRI make in their reports concerning product market definition and other issues. As a result, I start with an evaluation of this theory and consider both the economic models and analyses that are developed in the expert reports and the facts available on market conditions and forces in Canada.

5. In order to evaluate this theory, it is useful to break it down into its component parts:

- (1) Entry into the provision of market tracking services requires contracts with all major grocery retailers in Canada; these contracts must be for scanner data. <sup>1</sup>

- (2) Entry into the provision of market tracking services requires that all the retailers be signed to contracts at the same time; that is, it is not possible to enter unless there is certainty that each and every

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<sup>1</sup> For example, Professor Winter states: "Because grocery distributors are regionally concentrated, this means that to compete in the market for scanner-based tracking services, a firm must purchase scanner data from all or substantially all of the distributors." (Winter p. 8) In addition, he states: "Manufacturers value most highly a market tracking service that is based on a wide, nationally representative sample of stores. Aggregate information about product sales based on a narrower sample would be biased for use in national marketing decisions because of regional differences in buying patterns. In addition, a tracking service based on a nation-wide set of stores allows comparison of regional buying patterns. Consequently, to compete successfully with Nielsen any new supplier of a scanner-based market tracking service would have to purchase data from a representative set of stores across the country. Because most grocery chains in Canada are regionally concentrated, this would mean purchasing data from all or substantially [all] of the major chains." (Winter p. 10)

major retailer will be available to sign a contract with the vendor at the same time.<sup>2</sup>

•(3) The ability of any one firm to offer an exclusive to a retailer inevitably leads either to a monopolist providing a national tracking report or to an inefficient outcome where two (or more) firms provide differentiated products, neither of which is a national report.<sup>3</sup>

•(4) Entry requires more than one year of historical data from all retailers.<sup>4</sup>

6. The relief sought by the Director and addressed by the experts for the Director and IRI are directly linked to the experts' theory that entry has been foreclosed by Nielsen and that market forces are not sufficient to provide for competition in the market. As a result, their analyses address issues related to the orders that would prohibit any vendor from offering an exclusive, make Nielsen's current contracts with retailers null and void (thereby requiring new negotiations to occur with retailers), make certain provisions of Nielsen's contracts with manufacturers unenforceable<sup>5</sup> and

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<sup>2</sup> For example, IRI's expert, Thompson states: "It appears that in 1985, a decision not to participate by one of the eleven grocery distributors in the Retail Council of Canada's cooperative marketing information project caused the entire RCC project to be canceled. Canada Safeway would not grant IRI access to its UPC scanner data, agreeing instead to an exclusive contract for scanner data with Nielsen. Even though other major distributors had agreed to supply scanner data, IRI would not proceed apparently because of the gap in national coverage left by Safeway's non-participation." (Thompson p. 56)

<sup>3</sup> "The exclusivity restrictions by their very nature limit the number of firms offering scanner-based market tracking to one. The restrictions leave Nielsen with complete control of the market for scanner-based tracking services." (Winter p. 12)

"But when buyers require, or value highly, a national service, then any firm that is to compete successfully in the market must sign up all or substantially all major input suppliers. This effectively reduces the possible supply configurations to three: all suppliers sell exclusively to Nielsen; all sell exclusively to IRI; all or substantially all sell to both Nielsen and IRI." (Winter p. 47)

But Professor Winter also states: "Even if the conclusion (9), on the inevitability of monopoly under exclusivity, is incorrect, the exclusivity restrictions are nonetheless anticompetitive. If used by two competing firms in a market like the relevant one in this application, the restrictions serve to differentiate the two firms products, in an artificial and costly way. This lessens competition, leading to higher prices, and leaves each product less valuable." (Winter p. 5)

<sup>4</sup> Thompson p. 61.

<sup>5</sup> Thompson calls for these exclusives to be "invalidated" as well; page 65

require that Nielsen make available historical data to IRI or any new entrant, where such data are not available from retailers.<sup>6</sup> I address issues related to the need for and efficacy of relief later in this report.

7. I have reviewed the four conditions that are the premise of the experts' reports and the proposed relief in the context of the materials provided by parties to this proceeding and with consideration of the incentives and abilities of market participants, including manufacturers and retailers, to influence outcomes in this industry. Facts and market conditions show that Conditions (1), (2), and (3) do not hold in Canada. Even though condition (4) is couched as an entry requirement in the experts' reports, their claim is actually that historical data are necessary to begin producing reports of certain types. While an entry decision and the timing of production and sale of a product are related, they do not have to be simultaneous for entry to occur. Nonetheless, Nielsen's contracting practices do not keep Condition (4) from being met. In the following, I analyze each of these four conditions.

8. As preface to these comments, it is useful to point out that the experts for the Director and IRI reach the conclusions that they do primarily through ignoring the importance of market participants, such as retailers and manufacturers in affecting market outcomes. In analyzing markets and competition, it is critical to take into account the incentives and abilities of all players to affect outcomes in markets and to take actions consistent with their incentives. In particular, these reports fail to take into account that there are market solutions that can be accomplished by contracts among these participants. By focusing virtually singularly on Nielsen and its actions (actually, on the results of its actions), these reports fail to take into account that there are actions and counter-actions that are available to market participants, such as other rivals (including IRI)<sup>7</sup>

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<sup>6</sup> I understand that the remedy that the Director is now seeking is to compel Nielsen to provide the historical data only if the retailer does not have sufficient historical data to sell to IRI or a potential entrant.

<sup>7</sup> The experts for the Director and IRI do not take into account that a entrant (or a firm engaging in supply-side substitution) by the negotiation of one or more retailer

manufacturers, and retailers, that will drive the market to limit any exercise of market power. It is these forces, for which there is ample factual support in the record, that are capable of providing for any necessary correction to the contracting outcomes in the provision of market tracking services in Canada.

**Condition (1): Entry into the provision of market tracking services requires contracts with all major grocery retailers in Canada; these contracts must be for scanner data.**

9. The central claim of the experts' reports on behalf of the Director and IRI is that entry into competition with Nielsen has been foreclosed or blocked because entry requires access to scanner data from all major grocery retailers in Canada. Careful examination of the materials provided in the proceeding, including documents and materials pertaining to IRI, Nielsen, and other market participants including manufacturers and retailers show that, for a number of reasons, this condition does not hold in Canada.

10. The primary focus of the Director's expert and the IRI experts, is on a single report -- the national grocery market tracking report provided by Nielsen, which is currently based primarily (but not solely) on scanner data. This is but one of several market tracking and other products provided by Nielsen; I consider this product first and then all the others. The claim of the experts is that a national grocery market tracking service based on scanner data cannot be provided without contracts for scanner data with all grocery retailers. This claim is without basis in Canada. This can be demonstrated by an example and then consideration of the facts.

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contracts can place the incumbent (in this case, Nielsen) in the position where it can no longer produce a national tracking report. This circumstance makes entry easier and provides an opportunity for the second firm to negotiate with the incumbent (or other players in the market) for trades of data.

11. I start at the same point as Professor Winter in his report: there are two vendors<sup>8</sup>, each of which obtains contracts with some, but not all grocery retailers for scanner data. I assume as he does that there is a very strong demand for a national report by retailers and manufacturers.<sup>9</sup> If each vendor contracts with at least one major grocery retailer, under Professor Winter's and the IRI experts' models<sup>10</sup>, then the other by definition cannot obtain a national sample by contracting with all the remaining retailers. The Director's expert and IRI's experts ignore the fact that this is a two-way street. If IRI cannot obtain a national sample with all retailers less one, then Nielsen loses its national sample the minute that IRI signs a contract with a single grocery retailer. Nielsen is not in a stronger position than IRI in this situation. Using the model set forth in the Professor Winter's expert report on behalf of the Director, by the act of attempted entry and successful negotiation of a single contract, IRI (or another rival) can disrupt Nielsen's ability to continue producing a national scanner-based market tracking service in Canada.<sup>11</sup>

12. Contrary to Professor Winter's analysis, the market will not tend to "stabilize" at the point where each vendor provides separate and "sub-national" market tracking services, if there is a strong demand for a national service.<sup>12</sup> Each vendor would be better off if it could sell a national

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<sup>8</sup> For convenience, I refer to firms such as IRI as vendors in this report and use the term to refer firms that provide the range of services that are involved in collecting or purchasing data, including scanner data, as well as other information including causal data from its source (e.g., the retail store).

<sup>9</sup> "A substantial number of buyers have a strong preference for buying from a firm that has contracted with the entire set of input suppliers, i.e. with all major national grocery distributors in Canada." (Winter p. 45)

<sup>10</sup> Under the experts' analyses, failure to acquire all retailers leads to an inability to produce a national tracking report. Hence, under these models it must be the case to win even one major retailer contract is sufficient to make the other vendor's sample (even if from all other retailers less one) insufficient for a national report.

<sup>11</sup> It is important to note that the primary factor in this analysis is the relative number and size of retailers in Canada. In areas where no one individual retailer (or small group of retailers) is so important to the development of a national sample, the winner of a single contract (including a new firm or entrant) could not impose this result on the incumbent.

<sup>12</sup> Professor Winter appears to reach two separate and inconsistent conclusions about the results of a contracting process such as this. First, he suggests that



report (as well as the other reports); neither can do so unless it can obtain the data the other is using. It is a stand-off initially, but one that all players in the market, under the assumption of strong demand for a national tracking service, have the incentive to undo. If retailers or manufacturers, or both, want a national service, then they will be willing to take steps to induce or enable the vendors to provide this report and to get a more complete sample. This might happen immediately after the contracting through additional contracts in the market or it could occur through subsequent contracting with retailers. The incentive and ability of retailers and manufacturers to influence the direction of the market are completely ignored in Professor Winter's model. This exclusion leads him to the incorrect conclusion that market forces are not sufficient to affect competition in the market.<sup>13</sup>

13. At least three market solutions exist: (1) the vendors sell each other the "missing" data and each produces a national report<sup>14</sup>; (2) each

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the result may be for there to be two incumbents with differentiated (but not national products) (Winter p. 5)

Alternatively, Professor Winter at page 48 says: "With substantially similar products, monopoly -- one firm or the other winning the right to the exclusive supply of *all* sellers -- is the inevitable outcome of competition for the right to each supplier's data when exclusivity is allowed. The maximum that either firm would bid for the *nonexclusive* use of the essential input in a (hypothetical) duopoly would be the revenue that the firm earns in the duopoly. (Label this revenue "A"). This is because the firm would not bid more for the input than the return it earns from the input. But the other firm, to gain *exclusive* use of the data would be willing to increase its payment by (B) the difference between the return it would earn as a monopolist and the return that it earns as a duopolist. It is a basic economic principle that B exceeds A. (footnote 20 omitted) A duopoly will not emerge in the market because one of the firms will willingly bid higher for exclusive use of suppliers' data than the maximum possible sum of payments by both firms for nonexclusive use of the data." (italics in the original)

The first would suggest that the market would reach and stay at a point where two firms co-exist, but neither produces a national report. The above analysis shows this is not a stable outcome. The second conclusion is dependent on the ability of a vendor to reach contracts with all retailers simultaneously. Absent simultaneity (or collusion on the part of retailers), Professor Winter's second conclusion also does not hold.

<sup>13</sup> Note that if there is no strong demand for a national product, there is no foreclosure claim at all in the experts' reports; their reports address only the provision of a national tracking service.

<sup>14</sup> Even if this alternative were precluded in the contracts written with retailers, if each retailer has a strong demand for a national tracking report, they will

sells the data and reports to manufacturers and the manufacturers either integrate the data themselves to produce a national report or contract with a vendor to integrate and process the data; and (3) in the next round of contracting, retailers negotiate for non-exclusive contracts or contracts with options for sale to two vendors so that they can opt for sale to two providers. Any one of these individually or in combination is sufficient to provide in the market the availability of a national report from each vendor, even when each vendor contracts with fewer than all major retail grocery chains.

14. In addition, it is important to note that for any period of time during which these market mechanisms are operating to move the market to this point, each vendor can sell the non-national reports that it has generated to meet the demands for these other reports, both generally, and as an input into the larger report. Moreover, if each vendor can obtain at least one retailer under the Director's expert's model, then neither vendor is able to charge a monopoly price to the other for the data. No one vendor will dominate.

15. These three solutions are not just theoretical.

15 Option (2) is a variation on market contracting practices that I understand are used currently by manufacturers in Australia and is consistent with manufacturers indicating they will buy from two suppliers and integrate the data. Option (3) is evidenced with recent contracting practices of major retailers,

In addition,

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have the incentive to re-negotiate this term of the contract to enable their vendor ex post to sell their data in exchange for purchase of other data that would enable the production of a national report. It clearly would be in the interest of the vendor to re-negotiate in this way, because by so doing it can begin production of a national report.

Applying this analysis to the period 1986-to-the present demonstrates that Nielsen's contracts did not foreclose entry into the provision of market tracking services in the grocery, confectionery, drug, mass merchandiser or other channels of distribution. Even if one focuses on a single service, such as the national tracking service in the grocery channel based on scanner data, entry was not impeded because entry did not require access to all retailers' scanner data in order for there to be more than one national tracking service produced in Canada.

16. Looking at other products and channels of distribution, it is clear that entry into the provision of market tracking services to consumer packaged goods manufacturers in Canada in competition with Nielsen can occur without contracts with major grocery retailers, whether scanner-based contracts or otherwise. There are several channels of distribution, such as drug, confectionery, and mass merchandiser, for which Nielsen is currently providing, among other services, market tracking services to consumer packaged goods manufacturers.<sup>16</sup> There are a large number of consumer packaged goods manufacturers who distribute products through these channels of distribution.<sup>17</sup> These products include, among others, health and beauty aids, over the counter medications, and tobacco and confectionery products. These products are ones in which the consumer packaged goods manufacturer is interested in tracking both generally and in determining the effects of specific promotions. It is possible to enter and provide these products without contracts with major grocery retailers.

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<sup>16</sup> Undertakings 19 and 20 show that Nielsen is providing market tracking services in these channels of distribution and has done so since at least 1988. These products are also reflected in the summaries of consumer packaged goods manufacturers provided by the Director and my understanding of the marketing practices in Canada. Moreover, IRI's documents show that it regards some of these channels of distribution as important ones.

<sup>17</sup> These consumer packaged goods manufacturers include some of the largest companies in Canada that manufacturer and sell consumer packaged goods.

17. Entry into these channels of distribution does not require entry into the grocery channel of distribution.<sup>18</sup> These channels can be entered independently of the grocery channel of distribution. The retailers in these channels are not limited in their ability to negotiate contracts with a market research firm by the existence of contracts written with major grocery retailers.

19 The drug channel alone represents over \_\_\_\_\_ in revenues for its market tracking products, which is \_\_\_\_\_ of what Nielsen earned in 1993 for the MarketTrack service in the grocery channel.

18. In addition, there are a large number of consumer packaged goods manufacturers with sales in Canada that are interested primarily in these channels of distribution, either individually or collectively.<sup>20</sup> For these customers, in particular, but also for any consumer packaged goods manufacturers interested in tracking products in these channels of distribution, it is possible to enter and develop a wide variety of reports in competition with Nielsen without contracts with major grocery retailers.<sup>21</sup>

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<sup>18</sup> The expert reports do not claim that entry into the grocery channel must occur prior to entry into the other channels of distribution. There would be no basis for this claim. Because the grocery channel of distribution represents the largest source of revenues for market tracking services, it may be the place where some entrants would choose to start. However, contrary to Professor Winter's claims, these other channels account for very substantial revenues and can be entered independently. Professor Winter cites Undertaking 20 at page 9 of his report and indicates that the second largest service after grocery is \_\_\_\_\_ in revenues. Undertaking 20 shows that the drug channel of distribution represents \_\_\_\_\_ in revenues in 1993. Collectively, these other channels accounted for substantial revenues in 1993. It is possible to develop the necessary UPC dictionary, work with data processing and development, and undertake necessary investments in these channels without entering the grocery channel of distribution.

<sup>19</sup> The revenues from these channels are shown in Undertaking 20.

<sup>20</sup> For example, it is my understanding that there are substantial revenues that are derived just from customers purchasing market tracking services in these non-grocery channels of distribution.

<sup>21</sup> The experts imply in their reports that manufacturers interested in these channels may not want to buy separate reports from a competitors for these channels of distribution. This assertion is inconsistent with the underlying premise to these experts' reports, namely, that manufacturers seek and will take advantage of competitive bidding. If there are two reports, say on the drug channel, that are available from two companies, the

These reports are already produced and sold as discrete items from which a manufacturer can choose; they are not part of the grocery market track product.

19. Given the current state of technology in these channels of distribution, it could well be that the preferred method of collecting data to develop representative samples for market tracking reports such as those provided by Nielsen would be through store audits and warehouse withdrawal methods. It is my understanding that there are certain stores within some of these channels that are equipped with scanners, such that scanner data could be developed for some samples or uses. Alternatively, an entrant may choose to develop data from the consumer side, such as is currently done by ISL, as well as by Nielsen with the development of its new Homescan service. Nielsen's contracting practices in these channels of distribution do not preclude any of these forms of entry and competition with Nielsen. I have reviewed available information on retailer contracts in the drug, confectionery, and mass merchandiser channels of distribution, among others. Based on that review, I conclude that only the contract is exclusive with respect to scanner data, during the term of that contract.<sup>22</sup> Entry into the drug channel of distribution is not foreclosed by this contract. There is no evidence that an entrant would face substantially higher costs to enter into this or the other non-grocery channels of distribution than Nielsen incurs to provide products in competition with Nielsen.<sup>23</sup>

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manufacturer is likely to seek and evaluate bids from both in order to reach the best deal. It may be the case, that the manufacturer prefers to buy from a single supplier, all else equal, but this does not preclude the manufacturer from choosing from two. Moreover, Nielsen's contracts with manufacturers do not preclude them from contracting with more than one firm.

<sup>22</sup> The most recent contract is not an exclusive, either generally or by the definition of the Director's and IRI's experts. My review of this contract leads me to conclude that if it chooses, can negotiate to sell its data to a second vendor. The contract specifies the changes in the terms and conditions of the contract (including compensation) if chooses to exercise this option.

<sup>23</sup> This is contrary to the assertion in the joint report of IRI's experts Gould and Rosenfield who indicate at p. 9 that use of technology comparable that of Nielsen in the collection of data from store audits and warehouse withdrawal makes entry by IRI via this

20. Entry into the provision of market tracking services to consumer packaged goods manufacturers in competition with Nielsen in the grocery channel, more generally, (i.e., with products other than a national report) also can occur without contracts with all major grocery retailers. It is useful to consider this from a number of perspectives. First, consumer packaged goods manufacturers as well as retailers demand a number of different market tracking or research products in the grocery channel of distribution. These include: key account, city, regional, and national reports, as well as specialized reports to assess the effects of promotions or other manufacturer-specific strategies. These reports are ones that Nielsen has provided to manufacturers, either under contracts or on an ad hoc basis. Entry into the production of many of these reports does not require contracts with all major grocery retailers for scanner data. For example, to produce a city report, it may be sufficient to contract with only one or a few grocery chains for data from a selected number of stores to provide a report comparable to that provided by Nielsen. Key account reports can be produced without access to all major grocery channels scanner data.<sup>24</sup> Entry into competition with Nielsen can also occur without obtaining scanner data from retailers, but rather by access to household data and price and causal data from the retail store. These reports in the retail channel collectively account for important sources of revenue to Nielsen.

21. There is no evidence to suggest these reports could not be sold separately to manufacturers from a national grocery report. The U.S.

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method unattractive. This implies that even in perfectly competitive markets there are significant barriers to entry. For example, this is the equivalent of saying that a new entrant considering getting into wheat farming that has costs comparable to the incumbents would be impeded from entering because it has comparable costs and can only sell a product that is comparable in price and quality to the incumbents. Their assertion about entry barriers in this circumstances highlights the fact that they focus more on whether IRI has actually entered than whether entry has been foreclosed. In perfectly competitive markets, there would by definition be no barriers to entry, but there may be limited actual entry, depending on the choices and alternatives available to the potential entrants.

<sup>24</sup> IRI Document 122 includes discussion of key account data pertaining to the 1991 Loblaws negotiation.

experience shows that companies such as IRI were successful in entering through the provision of scanner-based reports in the grocery channel that were other than a national report. Even if it is alleged that these reports represent a substitute only for city or regional reports, these are reports currently purchased by consumer packaged goods manufacturers in Canada.

**Condition (2) Entry into the provision of market tracking services requires that all the retailers be signed to contracts at the same time; that is, it is not possible to enter unless there is certainty that each and every major retailer will be available to sign a contract with the vendor at the same time.**

22. Condition (2) is an addition to Condition (1), namely, that all the major grocery retailer contracts must be available at the same time. In addition, the experts imply that there must be certainty that all contracts can be obtained before a firm will enter. This condition is also not necessary for entry. First, as shown above, even with uncertainty and an outcome where a vendor ends up with fewer than all contracts, entry is not precluded. Even in the models set forth in Professor Winter's report, the vendor knows that if it gets less than all retailers, it can negotiate for the other's data by several means. Moreover, documents concerning IRI's entry efforts in bidding on, for example, the Loblaws and Shoppers contracts, show that IRI has undertaken entry without certainty of being able to sign up all or without all being available. This is because successful signing of a single major retailer in the grocery channel, under Winter's model and IRI's documents, is believed to be sufficient to undermine Nielsen's ability to offer a national tracking product. This analysis is directly pertinent to claims that staggered contracts serve to exacerbate the foreclosure of entry.<sup>25</sup> Hence, both economic analysis and the evidence

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<sup>25</sup> Contrary to the allegations in the reports, it appears that differences in the timing of contracts are explained by external events and negotiations by the retailers. For example, the

concerning entry demonstrate that differences in timing of contract dates and dates at which retailers become available is not an entry impediment.

23. The experts also seem to find a connection between the timing of contract expiration and the availability of historical data. Namely, that if a contract expires one year hence, the new vendor will likely have to wait an additional two years to develop historical data before producing a report.<sup>26</sup> This ignores an array of contracting practices that are not precluded by Nielsen's current grocery retailer contracts. First, retailers are free to sell their historical data for appropriate compensation at the end of their contracts. Second, the potential entrant can encourage the production and storing of such historical data during the remaining term of a contract by committing to pay for those data once the contract has expired. This can commence immediately and would provide the vendor with one or more year's of historical data at the termination date of the existing retailer contract.

**Condition (3) The ability of any one firm to offer an exclusive to a retailer inevitably leads either to a monopolist providing a national tracking report or to an inefficient outcome where two (or more) firms provide differentiated products, neither of which is a national report.**

24. Professor Winter asserts that there are only two possible market outcomes when any firm has the ability to offer exclusives: there will be a single monopolist providing a national tracking report or two firms will provide a sub national report, which is an inferior product. The market will tend toward monopoly, he claims, because retailers will have the incentive to choose a single vendor who will be a monopolist. The monopolist, it is argued, will pass some or all of the monopoly profits from the sale of a single market tracking service back to the retailers in the form of monopoly rents. For this condition to hold true, however, one of the following conditions must be met:

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<sup>26</sup> Thompson, p.65



(i.) retailers are coordinating their bidding strategies, such that no one retailer will choose a different vendor from that chosen by the other.

As long as retailers have different incentives and choices or make their decisions without full knowledge of what all other retailers are choosing, then absent coordination and collusion among retailers in the choice of vendor, the outcome can be more than one vendor with contracts. As long as there are differences among retailers and no coordination, a retailer will have no certainty about the choices that other retailers are making. In addition, retailers can make different assessments of the products offered to them by the vendors and can differ in their choice of contract. Some may prefer exclusives, others may prefer non-exclusives or contingent contracts. Uncertainty about the ultimate choice of each retailer exists because contracts are negotiated independently and not collectively by retailers. The Director's expert's report does not provide any arguments or evidence that there is collusion among retailers.<sup>27</sup>

(ii.) no vendor will bid for any contract without the certainty that it can get all contracts.

Practical experience in Canada shows that this condition does not hold true; IRI in 1991 actively embarked on this strategy.<sup>28</sup> In their undertakings and in recent letters to retailers, IRI asserts that it will not bid on individual contracts now, but will wait for the outcome of this proceeding. These statements are still consistent with the evidence that IRI has actually embarked on a sequential strategy in contracting. If the Director were to obtain the relief sought, it would enable IRI to enter into the Canadian marketplace at virtually no cost. In principle, under the proposed relief, IRI would avoid having to pay retailers for data that these

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<sup>27</sup> An alternative assumption that the Director's expert appears to be making is that the vendor is able to contract simultaneously with all retailers, such that each retailer knows precisely the terms and conditions and choices available to all other retailers. Regardless of the form or term of the contracts (i.e., exclusive or non-exclusive), it appears that the method used to obtain contracts with retailers in Canada has been and will likely continue to be sequential and independent.

<sup>28</sup> More recent evidence is shown in

retailers otherwise would obtain substantial compensation for (this is the case if Nielsen is forced to provide the data not available from retailers). It likely also avoids investment expenses for developing a dictionary and a sample, because by getting the data from Nielsen it can discern the sample. It is not clear whether the Director is seeking the dictionary. Avoiding the normal costs of entry (which are not higher than those incurred by Nielsen) would clearly provide sufficient incentive for IRI to postpone undertaking a strategy comparable to what it did in 1991 pending the Tribunal's decision.

25. In the case where there are two vendors with sub-national reports, the above analysis shows this is not a stable outcome. The market will work to correct this outcome, if there is sufficient demand for a national sample. Moreover, even in Professor Winter's model there is an additional correction. If the primary incentive for choosing a vendor is to get a monopoly return, the outcome where two vendors are providing sub-national reports does not even produce a national report in Winter's model to earn those returns. In the next round of contracting, the retailers will have the incentive to write non-exclusive contracts to get a national report, if they demand one, knowing that there is no certainty (absent collusion) that they could get a single vendor to produce a national report. Once one vendor succeeds in getting a single large contract in Professor Winter's model, the market will self-correct, including efforts by retailers to seek bids on a non-exclusive as well as exclusive basis.<sup>29</sup>

**Condition (4) Entry requires more than one year of historical data from all retailers.**

26. While the opposing experts claim that historical data are necessary for entry, they actually are claiming that historical data are necessary to produce a trended report. The date of production and entry do not have to be coterminous for entry to be feasible.<sup>30</sup> Certain types of reports

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<sup>29</sup> Note that in this situation, Nielsen does not have any inherent advantage due to its status as an incumbent. IRI (or another rival) can affect Nielsen's ability to produce a national sample by bidding and winning a contract.

<sup>30</sup> In this, as in many industries, there is a lag between entry and production. In this industry, there are some reports that can be produced virtually immediately after

can be developed without historical data. More importantly, vendors that are considering entry can also buy historical data from retailers and can contract in advance of their contract expiration for a retailer to be creating and saving data tapes for the vendor at the point of contract expiration.<sup>31</sup> None of these options are barred by Nielsen's contracts. In addition, the experience in this industry is that firms have entered and have entered different channels without historic data. This simply affects the timing at which they produce the first of certain reports, not the entry point or decision.

### **Conclusions on Entry Foreclosure:**

27. Based on careful examination of the economic theories and evidence underlying the Director's expert's and IRI's experts' reports, I conclude that they have not demonstrated that Nielsen's contracts have foreclosed entry and competition with Nielsen in the provision of market tracking services. Because this was their fundamental premise for asserting that Nielsen had market power in a relevant market, their market definition and market power analysis is subject to the same flaws. In the following, I briefly address some specific claims made by these experts, including: the public goods aspect of scanner data, price difference, innovation and market definition. Then, I turn to an evaluation of relief sought by the Director and analyzed in the expert reports on behalf of the Director and IRI.

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entry. In addition, by contracting for the production and storage of data prior to entry, the lag can be shortened considerably.

### **III. Nature of the Product: The Public Goods Claim**

28. The Director's and IRI's experts claim that scanner data is a public good. On the basis of this claim, Professor Winter also draws some conclusions as to the manner in which scanner data should be priced. The features that make scanner data a public good according to Professor Winter are that:

“Scanner data, the essential input, are a “public good.” That is, the data have no inherent excludability in that their use by one firm does not preclude their use by another.” (Winter p. 46)

“Second and more fundamentally, the input that is being sold through exclusive contracts is a public good, that is a good with no inherent excludability. Scanner information can be copied and used many times; the supply of scanner data cannot be made more secure through exclusivity restrictions that ensure it is not “used up” by another buyer. On this point, it is important to note that if a public good such as information is valuable to two parties, efficiency requires that both parties use it; zero marginal cost is attached to the second user.” (Winter p. 61)

29. In addition, IRI's experts claim that scanner data are only a by-product of the investments that retailers have made in developing the scanning equipment; essentially they are claiming that the data would be produced (and produced in the same amounts) regardless of whether there were purchasers interested in the data:

“The scanning data purchased by Nielsen are merely a byproduct of activities that the grocery stores would undertake even if no one was interested in buying the data. Indeed, grocery stores installed scanners in the United States and Canada before any research firm was buying scanner data.”(G/R p. 18)

30. Contrary to the Director's and IRI's experts assertions, scanner data are not a public good. The Director's and IRI's experts are doing no more than noting the fact that scanner data, like many private

goods such as books, records, compact disks, and software including that produced by Nielsen and IRI, share a feature in common with many goods that are called public goods. This feature is referred to in Professor Winter's report as "non-excludibility," and is the feature that the product is one that can be used or consumed by one consumer without the good being depleted or used up.<sup>32</sup>

31. Finding that scanner data have one feature in common with many goods that are labeled public goods does not make scanner data a public good. The vast array of products produced in Canada that are often referred to as intellectual property would be labeled "public goods" under this definition. An important distinguishing feature between a public good and a private good is that an unregulated market can function to provide the efficient amount of the good in the case of a private good.<sup>33</sup> In these private goods, producers of these goods have found ways to use market mechanisms to keep the second (and subsequent) consumer from obtaining the benefits of the product without paying for it. Providing for ways in which payments can be made in exchange for the use (consumption) of the product is necessary for efficient operation of markets.

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<sup>32</sup> The Director's expert mistakenly labels this feature non-excludibility. The public finance literature generally refers to this feature as non-exhaustibility or non-rival consumption. Non-excludibility refers to a second feature of many public goods, namely, the inability to keep a second (or subsequent) consumer from receiving the benefits obtained from a first consumer's purchase of the product. (See, for example R.A. Musgrave and P.B.Musgrave, **Public Finance in Theory and Practice**, 2nd ed. (1976) McGraw-Hill at p. 52) National defense is a public good that has both features: non-exhaustibility and non-excludibility.

<sup>33</sup> "The market can function only in a situation where the 'exclusion principle' applies, i.e., where A's consumption is made contingent on his paying the price, while B, who does not pay is excluded. Exchange cannot occur without property rights and property rights require exclusion.....This process can function in a market for private goods --for food, clothing, housing, automobiles, and millions of other marketable private goods--because the benefits derived therefrom flow to the particular consumer who pays for them. Thus, benefits are internalized and consumption is rival. A hamburger eaten by A cannot be eaten by B. At the same time, the nature of the goods is such that exclusion is readily feasible. The goods are handed over when the price is paid, but not before. But budgetary provision is needed if consumption is nonrival and/or if exclusion can not be applied. Musgrave and Musgrave pp 50-51.

32. The experts for the Director and IRI provide no support for a conclusion that scanner data cannot be sold subject to contracts with consumers of the data. Indeed, the experience in the U.S. and elsewhere is that the producers of these data -- the retailers -- are using a wide array of contracting mechanisms to make sure that the consumer of the data is made to compensate the retailer for the investments made to produce the data.<sup>34</sup> These market mechanisms are fundamental to the operation of private markets. Without the ability to be compensated for the investments made (or if one consumer will end up having to pay for all the investments because the first consumer cannot keep the second and subsequent ones from obtaining the benefits of consumption due to the first consumer's purchase), the good will either not be produced at all or will be produced amounts less than socially optimal in an unregulated market.<sup>35</sup> Goods that meet these characteristics, e.g., national defense, are appropriately labeled public goods. Scanner data, just like books, records, and software are not public goods by this definition.

33. The experts for the Director and IRI, however, have done more than simply mislabel scanner data as a public good. Professor Winter, in particular, uses the public goods analogy to reach conclusions about efficient pricing of scanner data, relief issues, and the appropriateness of payments (including any payments) to retailers for their data. Professor

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<sup>34</sup> Goods that are private goods, but have the feature of non-exhaustibility, are those in which producers have found market mechanisms to exclude the second and subsequent purchasers from benefiting or "free-riding" on the willingness of the first consumer to buy the product. This is often accomplished by prohibitions on the first customer's ability to resell or replicate the product. Alternatively, the product may be sufficiently customized to the needs of the first customer that it cannot be practically re-sold to a second. In addition, the producer tends to charge a non-zero price to the second and subsequent consumers. This is because the costs of producing the product for the second customer were not just the costs of replicating the tape or disk but rather the share of the investment costs that went into the production of the product that resides on the tape or the disk.

<sup>35</sup> Clearly, the second and subsequent consumers have the incentive to wait and see if the first consumer can be forced to pay the full amount (value) of the product; i.e., a sufficient amount to induce the producer to provide the product in amounts that the society would want. That is, the second and subsequent consumers have the incentive to "free-ride" on the purchase and payment by the first. Yet, if this is the case, every customer will want to be second customer (or at least not first). In that case, no customer will be willing to pay and the good will not be provided.

Winter asserts that efficient pricing (and efficient markets) require that the second and subsequent consumers pay a zero price for the good in the case of a public good.<sup>36</sup> This is not true, regardless of whether the product is a public good or a private good. The very essence of the vast literature in public finance is the search for mechanisms that will induce consumers to pay a non-zero price for consumption, precisely because all consumers will have the incentive to pay zero (i.e., to be second). Efficient production of both public and private goods requires that a non-zero price be paid.

34. In the case of true public goods, the concept that the marginal cost of producing the second unit is zero can be true. In this particular fact circumstance, however, it is unlikely that the marginal cost of producing a second data set for another purchaser is zero. As long as there are differences among consumers of these data (whether they are manufacturers, retailers themselves, or market research companies such as Nielsen or IRI) there will be differences in the specific data in which the companies are interested. For example, a retailer may be interested in only limited identification of products by UPC code (e.g., soup, large can), while a market research company may want identification by name of product, fat content, flavor, and size. There can well be differences among market research consumers in their desired level of detail. Responding to these demands requires more than replication of a tape, but time and resources to augment the store dictionary. This is just one example of the ways in which the data needs among consumers could vary. In addition, there could be substantial fixed costs associated with the development of scanner equipment that need to be covered.

35. The argument made by the Director's and IRI's experts, however, goes well beyond the argument that efficient allocation of

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<sup>36</sup> "Second and more fundamentally, the input that is being sold through exclusive contracts is a public good, that is a good with no inherent excludability. Scanner information can be copied and used many times; the supply of scanner data cannot be made more secure through exclusivity restrictions that ensure it is not "used up" by another buyer. On this point, it is important to note that if a public good such as information is valuable to two parties, efficiency requires that both parties use it; zero marginal cost is attached to the second user." Winter p. 61

resources require that the second and subsequent purchasers of scanner data should pay a zero price for the data. They base this claim in large part on the assertion that the scanner data is a by-product of scanner use by retailers and hence will exist and be provided regardless of payments made by market research companies or others. This is equivalent to saying that in private markets, one of a joint product should never be sold for a positive price. While the pricing of joint products requires analysis of the costs of producing each product and the value attached to it, efficient allocation of resources requires that the producer be able to compensated for both relative to their value to society.

36. Scanner data are generally a joint product with the decision by retailers to invest in scanner equipment. However, the key point is precisely that retailers have invested in scanner equipment and should be allowed to achieve a return on that investment. It may be the case that it is profitable for a retailer to invest in scanner equipment for its own use because of the substantial returns it gets in the form of avoided costs or reduced costs of labor or better inventory tracking. If by doing so, it creates data that have an independent value to manufacturers, for sufficient amounts of that data to be sold to manufacturers, the retailer must be able to be compensated for the data. This can be done by direct sale to the manufacturer or indirect sale through a broker (such as Nielsen or IRI.) Moreover, as in most joint product situations, it may be the case that the amount of scanner equipment to provide the first product (inventory management and scanning use for the store) is not the same as the amount needed to produce the optimal amount of the second product. If this is the case, then the retailer needs to be compensated to undertake the additional investments to provide the larger distribution or number of scanners or amount of scanning data that are needed to meet demands in the second market.<sup>37</sup>

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<sup>37</sup> In addition, if the incentive of the vendor is to promote the more rapid development of scanner data than the amount or rate needed by each retailer (because retailers may differ in their use of scanner data), then payments to retailers can induce more rapid development of scanner data. Payments to several retailers in different parts of a country can lead to more even development of scanner data and a higher overall level of quality of scanner data. Hence, payments and investments made in response to



37. All of the foregoing indicates that in a competitive market where resources are efficiently allocated one would expect positive payments to retailers by all purchasers of that data. In a competitive market, one would not expect to see, as Professor Winter asserts, zero payments (or tape replication fees only) for scanner data from retailers. Indeed, in the U.S. which the IRI's and Director's experts say is a competitive market, scanner payments are above the costs of tape replication and are higher than payments made for audit data. Thus, it is incorrect to claim, as Professor Winter does, that all payments above the tape replication level represent monopoly returns to the retailers.

#### **IV. Product Market, Market Power, and Innovation**

38. While the central claim to the Director's and IRI's experts' reports is that Nielsen has foreclosed entry into competition with Nielsen in scanner-based market tracking services, they address as well issues related to market power (in the context of a relevant market) and the alleged effects of market power, namely, reduced innovation and higher prices. The market power and market definition analysis in these reports, however, is contingent on the conclusions the experts reach concerning entry foreclosure. For example, if entry is not foreclosed into the supply of a market tracking report (e.g., city, regional, or national) in the grocery channel, then the fact that Nielsen is the only current supplier of that product does not mean that Nielsen has market power. In addition, in evaluating market definition and market power, the Director's and IRI's experts ignore the issue of supply side substitutability, i.e. the ability of firms to provide the relevant product without incurring substantial sunk costs. These firms and products should be included as market participants and products in the relevant market.<sup>38</sup>

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payments would be consistent with increases in the rate of scanner penetration in a channel of distribution and in the overall level of quality of such data.

<sup>38</sup> IRI may have to incur relatively little in the way of additional investment to get into Canada because it has the capability to process the data in the U.S. and already has the technology in place. See, for example, IRI Document 143 from January 30, 1994 at pages beginning "Production Requirements" and G. Eskin "POS scanner data: The state

39. Gould and Rosenfield provide as the basis for their conclusion that the relevant market is scanner-based market tracking services the finding that Nielsen charges higher prices for this service in Canada than prevail in the U.S. with competition. They make this assertion despite the fact they concede they have not been able to conduct any specific price comparisons by product category and line. In addition, they completely ignore that in competitive markets, differences in costs can explain differences in prices. Higher cost production of scanner data alone could account for higher prices in Canada.

40. In addition, Gould and Rosenfield claim that the rate of product innovation has been substantially slower in Canada than in the U.S. Their analysis ignores the substantial differences in the rate of scanner penetration and development in Canada as compared to the U.S., which would affect any company's ability to develop a scanner-based product. Some of their statements are simply incorrect. For example, they assert that scanner data are not available on a weekly basis in Canada. My understanding is that Nielsen produces such data and it is available for purchase by manufacturers. In addition, they make comparisons between audit products produced by Nielsen in 1988 and products produced by IRI in 1993. This comparison shows nothing other than two dissimilar time periods are being compared. More importantly, the comparison avoids two fundamental points: first, the rate of scanner data product development is determined largely by factors outside of the market research company's control and IRI is not foreclosed from entering and providing a "better" product in Canada.

41. Finally, the Director's and IRI's experts claim that lengthening of manufacturers contracts was intended as a barrier to entry. My understanding of the contracting practices in use in the U.S. and in Canada, as well as my review of the Director's summaries of interviews

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of the art, in Europe and the world," *Marketing Research Today*, May 1994 at p. 115, where he states: "And much of the technical development that has already been done in the U.S. applies directly to the European situation."

with consumer packaged goods manufacturers, provides an alternative and pro-competitive explanation. It is my understanding that there is a general movement, particularly in the U.S., on the part of manufacturers to seek longer term contracts, so as to avoid annual or frequent contract renegotiations on large contracts. This lengthening of contracts is, hence, consistent with ongoing practices in an area that the Director's and IRI's experts claim is a competitive market.

#### **V. Implications of Director's and IRI's Experts Analysis for Relief**

42. The Director seeks a number of orders in the Application; several of these are addressed directly by the Director's and IRI's experts in their reports. Professor Winter's report deals with these orders only indirectly. The only affirmative statement concerning relief in his report is that no firm should be allowed to offer an exclusive. This could refer to IRI and Nielsen as well as to manufacturers or other companies that could offer exclusives to a retailer for their data. He makes no direct statement about the point or stage at which this should occur. As indicated above, however, the result of his analysis of scanner data as a public good is that Professor Winter would expect that retailers should not be able to charge the second consumer for their data more than the tape replication costs. The logical result of this position is that any payments made to retailers by a purchaser of data that are above replication costs, would likely be regarded as in violation of the "no financial incentives to restrict availability of data" order sought by the Director. Yet, if retailers cannot receive adequate compensation for their data (which includes a return on their investment in scanning equipment and a measure of the value of the data created), then no retailer will have the incentive to sell the data.

43. The public goods analysis of the Director's and IRI's experts has direct and immediate implications for relief. Based on their analysis, they would recommend that retailers should only be able to charge a second and subsequent purchaser of their data (whether historical or current) an amount sufficient to cover tape replication fees. This, contrary to their assertions, will lead to gross market inefficiency and free-riding. Two types of problems will occur. First, retailers have made investments in their

historical data; they will not be able to recoup those investments from IRI under the proposed relief proposed as analyzed by the Director's expert. Because these investments are already made, the data will not be "un-created" by the sale at essentially zero price. Any effort by retailers, however, to obtain the appropriate value for their data could be subject to the claim that they are trying to extract monopoly profits from IRI; this likely will result in protracted claims and related burden of resolution or price regulation. If the price is set at zero, IRI will have been allowed to free-ride on Nielsen and the retailers' investments in the data.

44. This has especially important implications in the next round of negotiations for the current data. In essence, under the Director's and IRI's experts analysis, the second purchaser should get the data for free from all retailers (but for the replication costs). In theory, neither IRI nor Nielsen will want to be the first consumer. There could well be no sale of data from retailers to either Nielsen or IRI under this approach. Retailers would likely opt for selling the data directly to manufacturers. If one marketing research company were to decide that it was, for some reason, willing to pay sufficient amounts to induce sale, and the second and subsequent ones were not willing to pay more than tape replication costs, I would expect that retailers would only sell to the one company. The result would be *de facto* exclusives brought about by competitive market forces. This market situation, however, would not look very different from today. It could be the case that IRI or another potential entrant would claim that Nielsen has exclusives and has paid more for the data and that retailers should be forced to sell the data to IRI and the other potential entrants at zero price. Alternatively, under the proposed relief, they could argue that Nielsen should be forced to provide the data at "fair market value." It is the case, however, that the Director's and IRI's experts are implicitly claiming that fair market value to the second consumer is zero (plus tape replication fees). This is certain to lead to protracted regulation and inefficient allocation of resources.

45. The foregoing demonstrates that, even if the relief were necessary to remedy a problem (which, in my opinion is not the case), the

proposed orders are unworkable and likely to lead to substantial regulation of all aspects of contracts among retailers, manufacturers, and purchasers of data. The outcome of the relief, as proposed, is substantial inefficiency in resource allocation.<sup>39</sup> More importantly, the relief as proposed, if workable, even under the Director's expert's model, will lead to outcomes that are not different than the market can accomplish on its own. Moreover, given the analysis and recommendations on pricing provided by the Director's expert for the sale of data, the market outcomes under the relief sought will likely be substantially worse than that which the market can provide. These outcomes will also require substantial and continued regulation by the Tribunal for them to be enforced, precisely because they are contrary to the basic workings of a market economy, which is to enable producers (and ultimate consumers --the manufacturers) of valued products, such as scanner data, to control the terms and conditions of sale of the data in an unregulated market.

46. This also suggests that the relief is not likely, even if ultimately workable, to get the market to the desired outcome any more quickly than the unregulated market. Many of Nielsen's contracts with retailers come up for renewal within the next few years. Some retailers in some channels are not bound by exclusive contracts. Successful negotiation with even one of these large retailers by IRI (or another rival) could preclude Nielsen from continuing to produce a national scanner-based market tracking service. This would set in motion efforts to produce two such services. Investments could be made by an entrant now to start acquiring the data and to induce retailers to start on the contracting process well in advance of the contract termination date. Some of these efforts are, for example, already underway by IRI, which appears to have contacted or planned to have contacted every major grocery retailer in person. These are all

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<sup>39</sup> Among other factors, the relief sought fails to take into account that retailers may have independent (and pro-competitive) reasons for seeking to deal with only one vendor. If, for example, a retailer is concerned about data handling and data integrity, as well as protecting the value and secrecy of its data, it may prefer to contract with just one vendor. I understand that there are large retailers in Canada who have these concerns.

mechanisms by which entry can occur in relatively short order and production commenced on some reports.

## **VI. Conclusion**

47. The central point of the reports provided by the experts for the Director and IRI -- that Nielsen's contracting practices foreclose entry and competition -- have not been proven by their analyses or facts. Instead, review of facts and market conditions show that entry has not been foreclosed, even if one accepts the basic model advanced by the Director's expert. His analysis of scanner data as a public good and the accompanying analysis of efficient pricing in a market economy are fundamentally flawed. This analysis would lead one to conclude that all forms of intellectual property that are produced in Canada, whether books, records, compact disks, software, or scanner data, should be sold to a second and subsequent purchaser at no cost (other than simple replication costs of the product). To establish and enforce this claim in Canada would result in either the absence of production in vast areas of the economy or constant price and contract regulation. This "solution" is not necessary in this instance, because the market is capable of reaching competitive outcomes by itself.