# Reply Statement of Robert Willig

#### I. BACKGROUND AND ASSIGNMENT

- 1. My name is Robert D. Willig. I am Professor of Economics and Public Affairs at Princeton University, a position I have held since 1978. My statement dated June 29, 2009 (Willig (June 2009)) has been submitted on behalf of Rio Tinto Iron Ore (RTIO) to the Australian Competition Tribunal as part of this proceeding. A fuller description of my background and experience is contained in a statement I prepared dated May 4, 2005 (Willig (2005)). I understand that Willig (2005) was included in submissions made on behalf of Rio Tinto Iron Ore (RTIO) to the National Competition Council (the NCC) in relation to the application by Fortescue Metal Group Limited (FMG) under Part IIIA of the *Trade Practices Act* 1974 (TPA) for declaration of the use of the Mt Newman railway line (the FMG Mt Newman Application). A copy of Willig (2005) is annexed to Willig (June 2009).
- 2. Counsel for RTIO have asked me to prepare a statement that discusses my responses to the expert reports filed by Professor Gans and Mr. Sundakov.<sup>1</sup> RTIO counsel have instructed me to focus my responses on topics that are directly related to the subjects covered in Willig (June 2009). Any claims in the reports by Professor Gans and Mr. Sundakov on which I do not comment in this statement should not be construed as claims with which I necessarily agree. The next two sections articulate my conclusions about the reports of Professor Gans and Mr. Sundakov.

<sup>&</sup>lt;sup>1</sup> Economic Expert Report of Joshua Gans, August 21, 2009 (Gans Report); and Expert Report of Aleksandr Sundakov to Clayton Utz Lawyers, August 2009 (Sundakov Report).

#### II. ANALYSIS OF CLAIMS MADE BY PROFESSOR GANS

<u>Professor Gans's claim that the appropriate test for the assessment of criterion (b) is the social test has no basis in sound economics.</u>

- 3. Professor Gans argues that the appropriate test for the assessment of criterion (b) is the social test.<sup>2</sup> However, Professor Gans does not offer any compelling economic rationale for this view. Instead, his view about the appropriate test for the assessment of criterion (b) is based on his interpretation of Part IIIA of the Trade Practices Act (TPA) that is not consistent with sound economics.
- 4. Professor Gans argues that the rationale behind Part IIIA of the TPA is "based on a general and long-standing concern in economics regarding the ability of a monopolist or bottleneck owner of critical assets within a vertical chain to take actions that extend that ownership or control to other vertical segments." He explains that Part IIIA addresses this concern by applying a model that "requires a stage of evaluation as to whether there is a baseline problem associated with a monopoly bottleneck before allowing parties to negotiate terms of access in the shadow and then potentially in the reality of a regulatory setting of access terms." Thus, under Professor Gans' interpretation of Part IIIA, it is first necessary to establish the existence of a "baseline problem associated with a monopoly bottleneck" before competition agencies should consider potential remedies. However, Professor Gans's social test is not an appropriate mechanism for identifying the presence of a monopoly bottleneck or any competitive issues associated with monopoly bottlenecks. Instead, at best, the social test addresses how economical would be an access mandate as a potential remedy to a monopoly bottleneck problem. Thus, the assessment of criterion (b) under the social test would analyze the efficiency of an access mandate remedy even before determining that a problem exists.

<sup>&</sup>lt;sup>2</sup> Under Professor Gans's social test, criterion (b) would be a test of whether the social benefit of access to a service would outweigh the social cost of such access.

<sup>&</sup>lt;sup>3</sup> Gans Report at ¶ 9.

<sup>&</sup>lt;sup>4</sup> Gans Report at ¶ 12.

- 5. A facility is not a monopoly bottleneck if private development of an alternative facility is economical. Thus, unlike the social test, the private test does effectively identify a situation where there exists a potential "monopoly bottleneck" problem. Once an analysis demonstrates that an industry is subject to potential competition issues associated with monopoly bottlenecks, it is only then appropriate to consider potential remedies such as an access mandate. As I argue in Willig (June 2009), such consideration should be part of the assessment of criterion (f), which logically follows criterion (b). Professor Gans' framework has it backwards: the remedy is considered even before it is clear that there is a competition issue that warrants government intervention.
- 6. Professor Gans also claims that the social test, as applied under the assessment of criterion (b), "is an appropriate sorting mechanism as it tells us to set aside services for which access is likely to be more costly to the community as a whole than developing another facility." <sup>5</sup> I disagree with this opinion. Given that the social test speaks to how economical are potential remedies, it is inappropriate to use it as a primary sorting mechanism, without first ascertaining whether government intervention is necessary to resolve any bottleneck access issues in the industry. Whether or not a situation warrants government intervention requires assessing a far broader set of considerations than those that arise under the social test interpretation of (b). Moreover, Professor Gans ignores the fact that estimating accurately the social costs and benefits of an access mandate is very difficult and costly in practice. Thus, sound policy principles indicate that it makes good sense for the accuracy of the overall analytic process to defer the social test until the assessment of criterion (f), after and if the analysis has reached the judgment that government intervention is necessary to improve the workings of competition in the industry.

<sup>&</sup>lt;sup>5</sup> Gans Report at ¶ 22.

<u>Professor Gans is incorrect in claiming that the private test would accept situations</u> where, absent an access mandate, average costs in an industry would increase.

- 7. Professor Gans claims that the private test applied under criterion (b) "would accept situations whereby average costs in the industry (i.e., productive inefficiency) would rise relative to a situation where access negotiations were mandated." This claim is misleading. What Professor Gans is referring to in his claim is the possibility that entry (or expansion) in an industry could raise average industry costs. The private test would not encourage or in any way facilitate such inefficient entry. Nor does the private test in any way prevent the access seeker and the owner of the facility from negotiating efficient access arrangements. As I explain in Willig (June 2009), if it is privately economical for the access seeker (or someone besides the facility owner) to develop an alternative facility, the owner of the facility will have the incentive to provide access to the access seeker when it is in their mutual interest to do so.<sup>7</sup> Thus, although the private test would not explicitly forbid inefficient entry, inefficient entry is unlikely to occur if criterion (b) were to be assessed using the private test because the parties would have an incentive to reach an efficient access arrangement if an access arrangement is more efficient than entry.
- 8. It should also be noted that the principal function of Part IIIA of the TPA, at least under Professor Gans's interpretation of Part IIIA, is not prevention of inefficient entry. Inefficient entry, or firm entry that causes industry average costs to increase, may occur in many industries in which the presence of bottlenecks is not an issue. Professor Gans does not suggest that the social test should be applied to forbid entry in these industries. Given the complexity and cost of applying the social test, as well as the possibility that the social test would block efficient entry, using the social test as a general tool for preventing inefficient entry would not be an appropriate government policy. Thus, the argument put forward by Professor Gans concerning the prevention of

<sup>&</sup>lt;sup>6</sup> Gans Report ¶ 25A, emphasis added.

<sup>&</sup>lt;sup>7</sup> In this case, if the facility owner does not grant access to the access seeker, the facility owner would face potentially more intensive competition from the alternative facility.

inefficient entry is not a persuasive rationale for the use of the social test in the assessment of criterion (b).

<u>Professor Gans is incorrect in claiming that the private test would weaken competition</u> between the facility owner and access seekers.

9. Professor Gans asserts that the private test would weaken competition between the facility owner and access seekers because developing alternative facilities would put the access seekers in a weaker competitive position than would an access mandate. Specifically, he claims that the private test would "forgo" the promotion of competition by failing to "use access where that access was likely to promote a material increase in competition in a market." Professor Gans illustrates his argument by describing a situation where failing to grant access would force seekers to "enter a market with an inefficient production technology and be weaker competitors for incumbents, but if they were able to procure services from the incumbent on a cost-reflective basis would be more effective competitors." However, Professor Gans provides no support for the notion that competition under an access regime would be more intense than when the access seeker would develop an alternative facility. In fact, he has it backwards: developing alternative facilities is likely to lead to more intense competition between the facility owner and the access seekers than would an access mandate.

10. There are several reasons why developing alternative facilities is likely to lead to *more* intense competition than an access mandate First, the development of alternative facilities will expand the overall capacity available to the access seekers and the facility owner. Such capacity will impel greater competition between the parties, especially in cases where existing capacity is stretched thin in meeting rising demand. Second, the development of alternative facilities is likely to incorporate technology that was not available when the existing facility was developed. The newer technology may give the entrant a competitive edge in going head-to-head with the owner of the existing facility. Such competition is likely to be more intense than under an access regime where

<sup>&</sup>lt;sup>8</sup> Gans Report ¶ 25B.

<sup>9 11</sup> 

both the access seeker and the owner of the existing facility will compete against each other using the same and possibly outdated technology. Finally, as others have previously observed, <sup>10</sup> forcing rivals to cooperate, as mandated access does, runs the danger of blunting competition between them. Cooperation between competitors provides greater opportunities for the parties to engage in conduct that is detrimental to healthy competition.

<u>Professor Gans is incorrect in claiming that the private test leads to "paradoxical"</u> situations.

- because, if criterion (b) is assessed under the private test, the better are an industry's prospects, then the more likely it is that criterion (b) will not be satisfied and that the service will not be declared. There is nothing paradoxical about the situation that Professor Gans describes. If the alternative facility development is privately economical, new competition will likely occur regardless of whether there is mandated access. However, it is under unfavorable market conditions where the development of alternative facilities is privately uneconomical that enhancing competition may require government intervention such as an access mandate. Therefore, a policy of limiting access mandates to situations where enhancing competition requires government intervention (such as when market conditions in an industry are weak) is not paradoxical but rather is a sound approach for enhancing competition.
- 12. Professor Gans also criticizes the private test by suggesting that it creates perverse incentives. He claims that the private test would lead to "a paradoxical situation that service declaration was more likely if access seekers were less efficient." Thus, Professor Gans argues that the private test rewards inefficient access seekers by making declaration more likely when the access seeker is less efficient. This is a flawed

<sup>&</sup>lt;sup>10</sup> See Dennis Carlton (2001) "A General Analysis of Exclusionary Conduct and Refusal to Deal-Why Aspen and Kodak Are Misguided," Antitrust Law Journal 68, pp. 659-683.

<sup>11</sup> Gans Report ¶ 25C.

<sup>&</sup>lt;sup>12</sup> Gans Report ¶ 125.

characterization of the private test. There is no basis for claiming that the private test would create perverse incentives if the access regime would not force the facility owners to charge access prices that are below the full cost of access, that is, all the costs that the facility owner would incur, including opportunity costs, in providing access to the access seekers. In this case, the fact that the more efficient firm can profitably develop its own facilities would only give it greater leverage in negotiating terms of access with the facility owner. This would benefit the more efficient firms because such firms would have the options of developing their own facilities or obtaining access to the existing facility. The access seekers would choose the lower-cost option, which would not likely inefficiently exceed the full cost of providing access because the ability to develop their own facilities gives the access-seekers the leverage to negotiate a competitive access price. Thus, there would be no disincentives to achieving greater efficiency.

Professor Gans is incorrect in claiming that the social test provides a more "straightforward" approach for generating socially efficient outcomes.

13. Professor Gans claims that the social test provides a more "straightforward" approach for generating socially efficient outcomes than does the application of the private test that I articulate in my original report. He offers the following critique of my arguments regarding the application of the private test in the assessment of criterion (b). <sup>14</sup>

If Professor Willig's argument was accepted, it would require establishing as a matter of fact that private negotiations would indeed generate socially efficient outcomes if development of another facility was privately profitable. However, in my opinion, the more straightforward approach is to investigate social efficiency directly and not run the risk of missing important cases and scenarios. That achieves the same end as Professor Willig is aiming for but without the need to theorise and then establish the mechanics of private negotiations for access.

However, in making this argument, Professor Gans erroneously assumes that those that are not industry participants such as regulators can more accurately assess the social costs and benefits of developing alternative facilities than can the parties assess the costs and

<sup>&</sup>lt;sup>13</sup> I discuss the costs of access to a facility in Willig (June 2009).

<sup>&</sup>lt;sup>14</sup> Gans Report ¶ 135.

benefits to their own businesses. An assessment of the social costs and benefits of an access mandate relative to the social costs and benefits of alternative facility development is likely to entail a number of complex issues that may be very difficult to model and analyze with a sufficient level of reliability. This may be especially difficult for those that are not industry participants, such as regulators, who may not be aware of all the potential costs of implementing a successful access arrangement. Moreover, any actual assessment of the social test is likely to be embroiled in numerous and complex arguments by the parties intended to persuade the authorities about the costs and misincentives pervading implementation details and responsibilities. Such exchanges of arguments are likely to lead to several rounds of litigation-like jousting. Thus, what Professor Gans describes as a "straightforward" assessment of the social test is anything but. On the contrary, the parties are in a better position to reach agreement on the most efficient access arrangement, as they possess the industry knowledge and internal resources to analyze the potential costs and benefits of sharing facilities. In fact, such analyses and business decisions are what firms do in their ordinary course of business.

### HIL ANALYSIS OF CLAIMS MADE BY MR. SUNDAKOV

Mr. Sundakov fundamentally misunderstands the rationale for applying the private test.

14. Mr. Sundakov's critique of the private test articulated in my original report suggests that Mr. Sundakov fundamentally misunderstands the rationale for applying the private test. Mr. Sundakov asserts:<sup>15</sup>

In my view, Professor Willig's approach does not take into account the policy logic and the economic rationale of the access regime. If applied, it would ignore the situations when vertically integrated owners of existing infrastructure refuse access because they would suffer competitive losses in dependent markets. Yet, these situations are precisely what the access regime is all about. Moreover, this may occur even if the owners of existing infrastructure can capture the full rents from granting access within the relevant infrastructure services market.

<sup>&</sup>lt;sup>15</sup> Sundakov Report ¶ 22.

This statement suggests that Mr. Sundakov misunderstands my analysis. <sup>16</sup> My analysis specifically considers the situations where vertically integrated owners of existing infrastructure may be unwilling to grant access due to potential profit losses in dependent markets. <sup>17</sup> The flaw in Mr. Sundakov's argument is that he ignores the key element of the private test: whether it is privately economical for the access seeker (or someone other than the facility owner) to build an alternative facility. While it may be the case that the vertically integrated facility owner would rather not face any competition from the access seeker, if it is privately profitable for someone to develop an alternative facility, the options for the facility owner are: (1) grant access to the access seeker; or (2) face new competition created by the construction of the alternative facility. Thus, by refusing to grant access, the facility owner would not shield the dependent markets from new competition, and profits earned in dependent markets would not likely affect the facility owner's access decision.

- develop an alternative facility, the parties will have an incentive to reach a socially efficient access arrangement (or not to agree to access if access is inefficient) even if the facility owner would prefer to protect dependent markets from new competition. Thus, the application of the private test would not lead to inefficient entry or loss of social welfare, as Mr. Sundakov appears to argue. Rather, if the private test finds that alternative facility development is privately economical, the parties will have the incentive to reach the most efficient access arrangement. That is, alternative facilities will be developed only if doing so is more efficient than providing access to an existing facility. Therefore, Mr. Sundakov's argument does not establish a persuasive rationale for rejecting the assessment of criterion (b) under the private test.
- 16. Mr. Sundakov further discusses how competition for iron ore tenements may be affected by access to existing rail lines. <sup>18</sup> He then argues that the relationship

<sup>&</sup>lt;sup>16</sup> Mr. Sundakov's other comments (Sundakov Report ¶¶ 38-43) similarly reflect his apparent misunderstanding of my analytical framework.

<sup>&</sup>lt;sup>17</sup> Willig (June 2009) ¶ 9.

<sup>&</sup>lt;sup>18</sup> Sundakov Report ¶ 23 - 28.

between iron ore tenements competition and access to rail lines is an illustration of why the assessment of criterion (b) under the private test would fail to yield efficient outcomes. 19 Again, Mr. Sundakov misunderstands the argument for why the assessment of criterion (b) under the private test would lead to efficient outcomes. The argument considers the possibility that access to rail would enhance competition in dependent markets (such as competition for iron ore tenements). Suppose it were the case that granting access to rail lines would enhance competition for iron ore tenements and as a result RTIO and BHPBIO would be paying higher prices for the iron ore tenements. For this reason, RTIO and BHPBIO may not grant access to the access seeker even if the revenues from granting access exceed the cost to the rail line of granting such access. This is precisely the type of situation that I consider in my analysis. <sup>20</sup> If it is uneconomical for the access seeker (or anyone other than the facility owner) to build an alternative facility, access may not occur without government intervention because considerations related to competition for iron ore tenements may create disincentives for the rail line owner to grant access to the rail line. However, if it is privately economical for the access seeker to build an alternative rail line, the competition for iron ore tenements will be enhanced regardless of whether the facility owner grants access to the rail line. In this case, iron ore tenements should not be a consideration in the facilityowner's decision to grant or not to grant access. The access decision will be made on the basis of costs and benefits to only the rail line. Therefore, assessment of criterion (b) under the private test would lead to an efficient outcome even if competition for iron ore tenements is affected by access to the existing rail line.

Mr. Sundakov's arguments about the benefits of mandated access are inconsistent with sound economics.

17. Mr. Sundakov argues that facility owners should be compelled to provide access even in cases where the facility owner has no economic interests in dependent markets. Such a view is not consistent with sound economics because, in such cases, the facility owner has every incentive to make an efficient deal with an access seeker who

<sup>&</sup>lt;sup>19</sup> Sundakov Report ¶ 29.

<sup>&</sup>lt;sup>20</sup> Willig (June 2009) ¶ 9.

will employ the access to operate in the dependent market at issue. Mr. Sundakov explains why good social policy may compel facility owners to grant access to access seekers even if the facility owners have no economic interest in the relevant dependent markets.<sup>21</sup> Specially, Mr Sundakov states: <sup>22</sup>

I believe it is also important to emphasise that even if it can be shown that BHPBIO and RTIO have no economic interests in dependent markets, the refusal to grant access voluntarily cannot be interpreted as evidence of inefficiency of access.

Mr. Sundakov explains that in some cases refusal to grant access is a departure from "profit maximizing" behavior for the facility owners, and that in these cases good policy should mandate access so as to improve social welfare. <sup>23</sup> He further states that: <sup>24</sup>

It is the purpose of regulation, and in particular Part IIIA, to align private and social interests. Hence, setting the test under criterion (b) so that the access regime can never apply to situations when a voluntary private agreement is hypothetically (but is not forthcoming) possible appears to run counter to any common understanding of access policy.

Thus, Mr. Sundakov argues that good policy should force firms to take actions that are in their own interest. This argument is inconsistent with sound economics or good social policy. The argument presupposes that competition agencies are somehow more informed about what is profitable for a firm than the firm itself. Mr. Sundakov provides no basis for this view. Although firm managers are not always perfectly informed about the expected profits of the various actions that their firm can undertake, that does not mean that competition agencies are better informed. If one were to take Mr. Sundakov's suggestion to its logical conclusions, competition agencies should override investment decisions by firms' managements because doing so will increase returns on investment. There is no basis for this view in sound economics.

<sup>&</sup>lt;sup>21</sup> Sundakov Report  $\P$  33 – 36.

<sup>&</sup>lt;sup>22</sup> Sundakov Report ¶ 33.

<sup>&</sup>lt;sup>23</sup> Sundakov Report  $\P$  33 – 36.

<sup>&</sup>lt;sup>24</sup> Sundakov Report ¶ 36.

18. Moreover, a facility owner's refusal to grant access may be the byproduct of the parties' negotiations over access price. Government policy that intervenes in private negotiations over the terms of access may actually be impeding such private negotiations. For example, the access seeker may delay reaching an access agreement with the facility owner in the hopes that forced access will provide the access seeker a better price. Thus, the policy advocated by Mr. Sundakov of forcing access even in cases where there are private incentives to reach efficient access arrangements may harm rather than improve efficiency.

Mr. Sundakov is incorrect in claiming that assessment of criterion (b) under the private "economical to develop" test is indistinguishable from criterion (a).

19. Mr. Sundakov claims that criterion (b) under the private test would be "almost indistinguishable" from criterion (a).<sup>25</sup> This claim has no valid basis. Criterion (a) tests whether "...access (or increased access) to the service would promote a material increase in competition in at least one market (whether or not in Australia), other than the market for the service."<sup>26</sup> It is possible for the analysis to find that access to a facility would promote a material increase in competition in a dependent market, and that it would also be privately economical for someone to develop an alternative facility. This would happen, for example, if increased access to an existing facility or development of an alternative facility would cause an increase in competition in a dependent market. Thus, it is logically possible to satisfy criterion (a), but not satisfy criterion (b) assessed using the private test. Likewise, it is possible to find that the development of an alternative facility is privately uneconomical, but access to the existing facility would not lead to a material increase in dependent market competition. In this case, criterion (b), assessed using the private test, would be satisfied, but criterion (a) would not be. The different potential outcomes under criterion (a) and the private test demonstrate that the two tests are logically distinct. One might ask, how can access increase competition in a dependent market if alternative facility development is privately economical? The answer is that just because it is privately economical to develop an alternative facility, it does not

<sup>&</sup>lt;sup>25</sup> Sundakov Report ¶ 41.1.

necessarily follow that such development of a facility should have already occurred. For example, the access seeker may be deferring the development of an alternative facility until the Minister's declaration decision. Therefore, whether access would cause a material increase in competition in a dependent market is logically distinct from assessing whether it is privately economical to develop an alternative facility.

20. Mr. Sundakov appears to argue that the private test should be part of criterion (a) because he claims that dependent market competition would be affected by whether it is privately economical to develop alternative facilities. Specifically, Mr. Sundakov claims that: <sup>27</sup>

Whether it may be privately profitable to construct an alternative facility is a useful initial test to see how downstream and upstream markets would be affected. While, as I argued above, competition in upstream and downstream markets could be affected even if it were profitable to use alternative facilities, it is clear that if it were privately unprofitable to replicate the existing facility, there would be a strong effect on competition. If we interpreted "uneconomical to duplicate" as a private profitability test, criterion (b) would again simply inform us whether lack of access is preventing access seekers from participating in upstream and downstream markets. It is not obvious to me why two distinct criteria would be necessary to ask essentially the same question from an economics point of view.

But in a situation where dependent market competition would be affected by whether it is privately economical to develop an alternative facility, the two tests may be quite distinguishable.<sup>28</sup> Furthermore, Mr. Sundakov does not explain how the private test would fit in the assessment of criterion (a). Suppose it were the case that the development of an alternative facility is privately economical. Would criterion (a) not be satisfied in this case under Mr. Sundakov's framework? The fact that the answer to this question is not obvious is precisely why criterion (a) and the private test are two distinct tests.

<sup>&</sup>lt;sup>27</sup> Sundakov Report ¶ 41.1.

<sup>&</sup>lt;sup>28</sup> As I explained above, it is possible to find that access to a facility would promote a material increase in competition in a dependent market, and that it would also be privately economical for someone to develop an alternative facility.

Mr. Sundakov's assertion that an access regime would not adversely affect the facility owner's incentives to invest in new infrastructure has no valid basis.

- 21. Mr. Sundakov claims that the facility owner "always has the option to proceed with investment for its own need without any consultation with the access seeker" and that "the only risk [to such an investment] may arise if investments undertaken for the owner's own need cause disruption to the existing access." <sup>29</sup> He further claims that the infrastructure owner "would have an incentive to anticipate such situations in negotiating the terms and conditions of access, and develop appropriate rules." 30 However, Mr. Sundakov ignores the fact that the access user may have an incentive not to accede to any changes in access arrangements necessary to accommodate new infrastructure in order to extract additional surplus from the facility owner. This would create a further disincentive for investment in new infrastructure. Nor does Mr. Sundakov explain how negotiating the terms and conditions of access would resolve this issue. In addition, mandated access may weaken owners' incentives to invest in new infrastructure if the access regime would require the owner to provide access at a cost that is below the owner's full cost (including the risk adjusted opportunity cost of capital). Mr. Sundakov's claims ignore this possibility.
- 22. Mr. Sundakov makes further assertions about the "hold-up" problem, which is one of the factors that may reduce the facility owner's incentives to invest in new infrastructure. Specifically, Mr. Sundakov claims that: <sup>31</sup>

It would also be reasonable to assume that the ACCC would be aware of the hold up problem, and hence would be likely to address the risk of hold up in arbitrating on the terms and conditions of access. Modern literature on game theory and on transactions cost economics has made economists focus on the problem of hold up. As a result, many solutions exist for dealing with the problem, including, for example, proposal and response time limits.

<sup>&</sup>lt;sup>29</sup> Sundakov Report ¶ 77.

<sup>30</sup> Id

<sup>31</sup> Sundakov Report ¶ 79.

These assertions are not consistent with current economic literature. Mr. Sundakov is mischaracterizing the existing modern literature on the "hold up" problem. There is no basis in this literature for claiming that mandating "proposal and response time limits" would resolve the "hold up" problem. In fact, the literature shows that the "hold up" problem is endemic in market transactions between firms negotiating at arm's length (because of incompleteness of contracts), and that in many circumstances the only way to resolve the "hold up" problem is through vertical integration.<sup>32</sup>

## IV. DECLARATION TO THE TRIBUNAL

- 23. Set out in Annexure C to this statement is a copy of the "Guidelines for Expert Witnesses in Proceedings in the Federal Court of Australia" as provided to me by AAR. I have read these guidelines and prepared this statement to comply with these guidelines.
- 24. I have made all the inquiries that I believe are desirable and appropriate and that no matters of significance that I regard as relevant have, to my knowledge, been withheld from the Tribunal.

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<sup>&</sup>lt;sup>32</sup> See Oliver Hart (1995) Firms Contracts and Financial Structure, Oxford University Press.