## Considerations by which major international corporations site their R&D investment

6.1 The committee was told that there are a number of considerations by which major international corporations site their R&D investment, of which the most important are cost and control concerns:

Multi-national corporations are rationalising operations driven by cost and control concerns... [and are pulling back] to a few centres closer to major markets and centres of management or locations with compelling cost advantages (that is, China).<sup>1</sup>

Increasing competition and market pressure for cost reduction is expected to result in the paper industry reducing its R&D investment in Australia and overseas... For most companies, R&D investment must be sharply focused and with shorter-term returns than may have been the case in the past.<sup>2</sup>

A second consideration for major international corporations is the extent to which a country is 'innovation friendly'.<sup>3</sup> This involves factors such as the availability of university/government/commercial research institutions, 'the availability of a world-class telecommunications infrastructure' and 'the capacity for IT

- 1 Ericsson AsiaPacificLab Australia, Submission 14, p. 4.
- 2 Australian Paper Industry Council, Submission No. 44, pp. 4-5.
- 3 Dr Mark Tennyson (Merck, Sharp & Dohme (Australia) Pty Ltd, Transcript, pp. 330-331.
- 4 Nortel Networks (Australia) Pty Ltd, Submission No. 70, pp. 8-9.

- enablement',<sup>5</sup> the presence of 'leading-edge customers to stimulate demand [and] innovation', 'world-class skills availability with a focus on excellence in vocational training/teaching/research', 'culture training in entrepreneurship'<sup>6</sup> and the availability of companies 'that can function as partners when the R&D project requires the use of outside resources'.<sup>7</sup>
- A major pharmaceutical company summed up these factors by saying that, in Australia, 'cost here is very positive [and the] quality [of research] is phenomenal'. Similarly, a global telecommunications equipment supplier said that 'increasingly, Australia is an internationally competitive location for cost and quality'.
- 6.4 Holden stated that it is the innovative nature of R&D conducted in Australia that is:
  - ... the essential means by which Holden can compete against larger manufacturers with greater resources [and which enables Holden to] adapt more quickly to market changes and capitalise on the opportunities that change presents.<sup>10</sup>
- 6.5 This suggests that the capacity to foster 'important seed ideas [and] niche areas of research'<sup>11</sup>—as well as the capacity to develop niche products with relatively small production runs (and to quickly adjust those production runs)<sup>12</sup>—is an important consideration for where major international corporations site their R&D activity.
- 6.6 The standard of 'pre-competitive research support' is another consideration for major international corporations, since they can tap into that research base and utilise its outputs, both intellectual property (IP) and personnel. 'We source the best R&D wherever we

<sup>5</sup> Ms Jenny Johnston (Bristol-Myers Squibb Pharmaceuticals), Transcript, pp. 611-612.

<sup>6</sup> Ericsson AsiaPacificLab Australia, Submission No. 14, pp. 5-6.

<sup>7</sup> Nortel Networks (Australia) Pty Ltd, Submission No. 70, pp. 8-9.

<sup>8</sup> Miss Catherine McGovern (GlaxoSmithKline), Transcript, p. 603.

<sup>9</sup> Mr James Clarke (Nortel Networks (Australia) Pty Ltd), Transcript, p. 609.

<sup>10</sup> Holden Ltd, Submission No. 57, pp. 8-9. Also Federal Chamber of Automotive Industries, Submission No. 73, p. 5.

<sup>11</sup> Dr Bill Ketelbey (Pfizer Pty Ltd), Transcript, p. 369.

<sup>12</sup> Mr Paul Armarego (Intelligent Manufacturing Systems), Transcript, p. 324: 'One of the reasons Australian companies have often been quite attractive in the IMS field... is their ability to do very highly effective short production runs'.

<sup>13</sup> Ericsson AsiaPacificLab Australia, Submission No. 14, pp. 5-6.

- can', said BHP, because 'we are a global company'<sup>14</sup>—and Australia does the world's best R&D in the minerals and mining sector.<sup>15</sup>
- 6.7 A further consideration for major international corporations is an 'empathetic legal/financial/taxation environment'. International companies like a legal system that does not act as 'a disincentive for bigger companies and other players overseas to want to do business or make an alliance with us'. The international corporations look for a legal system that can 'harmonise' with the legal system they are most familiar with.
- An important aspect of the legal system is the adequacy of the IP regime which, in Australia's case, was said to be 'the fourth best country in the world in terms of its IP protection... [and] that gives us an element of security about IP'.¹8 Also, international companies find it attractive 'if the legal system for acquisitions and takeovers [is in] line with overseas standards'.¹9
- 6.9 Similarly, major international corporations look for a financial, taxation and regulatory environment that is familiar to them. In relation to the latter, major international corporations stated that 'there are significant impediments to investment by pharmaceutical companies in the Australian economy... [including] issues of access to market, and pricing and reimbursement processes'.<sup>20</sup> The combined effect of:

... the Pharmaceutical Benefits Scheme process and price outcomes... mean that we are not in a strong position to lobby our parent company for further R&D investments as we are unable to be confident about the return on that investment.<sup>21</sup>

<sup>14</sup> Dr Edwin van Leeuwen (BHP Billiton; and member of Intelligent Manufacturing Systems), Transcript, p. 315.

<sup>15</sup> Mr Richard Davies (Australian Mineral Industries Research Association International Ltd), Transcript p. 257: 'The Australian mineral industry research is clearly the best in the world'.

<sup>16</sup> Ericsson AsiaPacificLab Australia, Submission No. 14, pp. 5-6.

<sup>17</sup> Prof. Murray Gillin, Transcript p. 91.

<sup>18</sup> Prof. Graham Macdonald (Merck, Sharp & Dohme (Australia) Pty Ltd, Transcript, p. 341.

<sup>19</sup> Mr John Yenken and Prof. Murray Gillin, Submission No. 19, pp. 4-5.

<sup>20</sup> GlaxoSmithKline, Submission No. 26, pp. 6-8.

<sup>21</sup> Merck, Sharp & Dohme (Australia) Pty Ltd, Submission No. 55, p. 4.

- 6.10 Consistency of government policy is an important consideration for major international corporations when making their R&D investment decisions. They look for 'policy continuity (bi-partisanship) and national consistency (state/federal) to reduce duplication of effort/brand dilution'.<sup>22</sup>
- 6.11 The clear association of a country with a 'brand' is a consideration for major international companies in choosing where to site their R&D investment. Such a brand can arise from the international identification of a country with particular fields of research but, stated a major pharmaceutical company:
  - ... the lack of... national coordination of science activities and attraction of R&D investment is an impedient to an "Australian R&D" investment message reaching overseas entities... Australia does not present a united front to the rest of the world in relation to our research capacity.<sup>23</sup>
- 6.12 Access to markets is another key consideration for major international corporations. This was indicated by Ericsson in its reference (above) to the size of the Chinese market as a key factor in deciding to retain a presence there but not in Australia. It is also spelt out in the following comment by the Taxation Institute of Australia:

From an international perspective, Australia does not offer the most attractive incentives for multinational corporations to relocate their R&D facilities. As Australia is a relatively small economy, there are no natural reasons for foreign companies to develop full manufacturing and research facilities in Australia. Australia is physically located at the fringe of the Asia Pacific Rim and the distance between Australia and the Asian market is, clearly, an issue. Further, as ASEAN countries are forming a free trade zone with extensive bilateral tax free trade agreements that are currently being negotiated with Japan, South Korea and other countries, Australia may be kept out of this significant market. Therefore, it is possible that multinational corporations may locate their operating hubs for the region in Asia rather than Australia, despite our political stability and advanced communication infrastructure.24

<sup>22</sup> Ericsson AsiaPacificLab Australia, Submission No. 14, pp. 5-6.

<sup>23</sup> GlaxoSmithKline, Submission No. 26, pp. 6-8.

Taxation Institute of Australia, Submission No. 67, pp. 4-5.

6.13 The conclusion drawn by the Taxation Institute, in light of the above, was that:

In order to compete with other countries, it is necessary to provide more attractive incentives for companies to locate their operations to Australia.<sup>25</sup>

- 6.14 So the nature of government incentive programs is a consideration for major international corporations. If they cannot access a particular government incentive, then this may act as a deterrent to R&D investment by those companies. This is the case with access to tax concessions by international pharmaceutical companies which keep their IP overseas—and hence are ineligible for the concession. On the other hand, the PIIP—which has no restriction on where IP is held—has encouraged R&D activity: 'In the first year of PIIP, R&D activity by the eligible companies increased by 29%'. The government's commitment to funds for biomedical research and the introduction of ARC Federation Fellowships, which encourage skilled researchers to return to Australia, have also encouraged R&D activity. 27
- In a similar vein, Holden pointed out that, though it sees 'the R&D tax concession as the principal funding mechanism... to offset its considerable investment in R&D', the combination of the company tax rate (30%) and tax concession (125%) is a negative consideration because 'in many cases highly innovative programs are unable to pass the business case hurdles due to the lack of financial support for R&D'.<sup>28</sup> Further, the 175% tax concession is of 'of little relevance' because it 'only applies to incremental expense above a base level'—but, said Holden, 'an industry like automotive manufacturing... has a very high, steady rate of R&D expenditure' and so cannot access the concession.<sup>29</sup>
- 6.16 Because of the globalisation of industry and the fact that countries compete against one another for investments by major international corporations, then the extent to which government incentives in Australia compare to those offered elsewhere are a consideration in investment decisions by international companies. In this respect, two major international pharmaceutical corporations pointed to the

<sup>25</sup> *ibid*.

<sup>26</sup> Pfizer Pty Ltd, Submission No. 65, pp. 2-3.

<sup>27</sup> *ibid.*, pp. 2-3 and pp. 8-9.

<sup>28</sup> Holden Ltd, Submission No. 57, pp. 14-15.

<sup>29</sup> ibid., p. 15.

'aggressive' nature of the incentives offered by the Singapore government: 'We are losing quite a lot of business from our Australian operation to Singapore', stated Bristol-Myers Squibb; and GlaxoSmithKline decided to site its Asia-Pacific research hub in Singapore, rather than in Australia, because:

Singapore offered things like training, access to postdoctoral students, easy visa capacities, the capacity for your children to go to school in Singapore more readily, then follow on to university and then actually stay in Singapore.<sup>30</sup>

## Conclusion

- 6.17 The considerations by which major international corporations site their R&D investment include the following:
  - cost and control concerns;
  - the extent to which a country is innovation-friendly;
  - the standard of pre-competitive research support;
  - the nature of the legal, financial, taxation and regulatory environment;
  - the consistency of government policy and incentive programs;
  - the national 'brand' of a country; and
  - access to markets.
- 6.18 The committee notes, in particular, that major international corporations with R&D facilities in Australia have a high regard for the competitive cost and very high quality of Australian researchers.

<sup>30</sup> Miss Catherine McGovern (GlaxoSmithKline), Transcript, p. 199. A report commissioned by Medicines Australia, Exhibit No. 27, *Comparing Australian & Singaporean Investment Environments*, lists the special incentives provided by the Singaporean government to attract the pharmaceutical manufacturing sector. The incentives are principally tax based and include exemption from corporate income tax for a period of up to ten years. Singapore aims to become the region's centre for clinical trials and drug development by 2010. Biomedical science is one of four manufacturing industry sectors targeted by the Singaporean government for aggressive investment attraction programs (p. 5).