

## **COSTS OF DELAYS TO INVESTMENT IN INFRASTRUCTURE AS A RESULT OF REGULATORY INTERVENTION**

### **Introduction**

1. The Council needs to quantify the inefficiencies of sharing infrastructure in reaching its conclusion on criterion (b), namely that it would be uneconomical to develop another facility, and criterion (f), namely that it would not be against the public interest.
2. This submission models and quantifies one of the key costs - the cost to BHPBIO of delays to investment caused by the presence of another above rail operator on the Mt Newman and Mt Goldsworthy Lines pursuant to declaration of the Service, and the regulatory process under Part IIIA.
3. The importance of timely investment in BHPBIO's integrated mine/rail/port iron ore production system to Australia's export performance, and to BHPBIO's financial performance, results from the following factors:
  - (a) market demand for iron ore is continuing to grow strongly;
  - (b) in the medium to long term, market demand for seaborne iron ore will most likely continue to grow;
  - (c) BHPBIO is currently running at maximum system capacity, which includes its rail sub-system running at maximum capacity; and
  - (d) growth in system capacity will require coordinated expansions of sub-system rail capacity.
4. This means that the rail sub-system capacity will need to be continually increased for the foreseeable future to match the likely increased demand for seaborne iron ore.

### **The effects of regulation**

5. Currently no regulator exists for the BHPBIO rail sub-system and there is no other operator on the Mt Newman and Mt Goldsworthy Line. BHPBIO can expand its rail sub-system subject only to the necessary environmental and statutory approvals from the WA Government. No third-party consent from rail users or any regulator is required.
6. Declaration will, at the very least, require extensive commercial negotiations with other rail operators or users on the Mt Newman and Mt Goldsworthy Line in respect of further investments in expansion, or operational changes. Further, it is highly likely that there will be serious commercial disputes between BHPBIO and any other rail operator using the rail system at these times. The ability of a competing iron ore producer and rail operator on the Mt Newman and Mt Goldsworthy Lines, such as FMG, to engage in brinkmanship negotiation techniques and other strategies to "game" the system for more favourable commercial outcomes to it, and the very different and conflicting commercial objectives and pressures of the parties, mean that serious disputes around further investment in infrastructure will inevitably be generated. Consequently, declaration will result in a Regulator being introduced and becoming heavily involved, where currently there is none.
7. The settlement or resolution of disputes over investment in infrastructure, the practicalities of constructing that infrastructure and the ensuing commercial arrangements as to its use will require considerable time and effort from a Regulator.
8. The experience on the east coast of Australia is illustrative. At Dalrymple Bay Coal Terminal, the Regulator took 22 months to settle access terms. There will undoubtedly be many reasons for this. But the adjacent Hay Point Coal Terminal—where no Regulator is

## **COSTS OF DELAYS TO INVESTMENT**

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involved—has completed two expansions before Dalrymple Bay Coal terminal has completed one expansion.

9. The complex nature of the vertically integrated mine/rail/port iron ore production system of BHPBIO, of which the Mt Newman and Mt Goldsworthy Line (being the facility from which the Service is to be provided) forms only a part, means that the factual context of such disputes will be complicated, and will not be amenable to a rapid solution. Further, in BHPBIO's view:
  - (a) such disputes are inevitable if the Service is declared; and
  - (b) those disputes will take many months to resolve given the complexity of the issues and factual context, and the differing incentives on the parties and the consequent poor prospects of compromise.

An estimate of a one year delay to any significant BHPBIO expansion, caused by the introduction of another operator and a Regulator, is conservative, based on the experience at Dalrymple Bay Coal Terminal and BHPBIO's own estimates of the incentives and objectives of a third party operator such as FMG. It could well take longer.

### **Cost of one year's delay on recently announced expansion**

10. BHPBIO's most recently announced expansion (RGP4) will add approximately 26mtpa of system capacity. The opportunity cost of delaying this expansion by one year to BHPBIO is calculated at **A\$910m**. This assumes, conservatively, that all the capital expenditure could also be deferred by one year. This calculation uses current BHPBIO price forecasts, exchange rate forecasts and BHPBIO discount rates.
11. The reasonableness of this figure can be seen by noting:
  - (a) at current iron ore prices of approximately A\$80/t for fines and A\$100/t for lump, the revenue forgone by delaying the RGP4 expansion for one year is in excess of A\$2.3 billion;
  - (b) in financial year end June 07, BHPBIO had an average operating margin of approximately 54%, indicating an operating cash flow per annum of in excess of A\$1,200m; and
  - (c) allowing for tax and discounting the opportunity cost by one year, the opportunity cost to BHPBIO of delaying the project by one year is in the order of A\$900m.<sup>1</sup>

### **Cost of one year's delay on future expansion projects**

12. The future expansion path for BHPBIO is unclear. It will involve new iron ore mines, it may involve new port sites, and it is likely to involve new rail lines. In the absence of a clear expansion path it is necessary to estimate a possible—and very general—expansion path.
13. BHPBIO has already stated that the BHPBIO's iron ore capacity levels in the Pilbara is potentially 300mtpa by 2015.
14. After RGP4 is commissioned in 2010, capacity is estimated at 155mtpa, meaning that another 145 mtpa or so of capacity will need to be added by 2015. That is around 5.6 RGP4-type expansions will need to be constructed by 2015.

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<sup>1</sup> Taxes and royalties do not form part of the opportunity cost to BHPBIO. From a societal perspective, however, they do form part of the opportunity cost of delay.

## **COSTS OF DELAYS TO INVESTMENT**

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15. In the last 6 years BHPBIO has committed to 6 distinct projects that will increase capacity by some 85 mtpa. BHPBIO hopes to commit to another expansion project later this year.
16. To ensure an optimal sequencing of engineering design and construction services, a gap of at least one year is necessary between the approval of each expansion project. A delay of one year on the first expansion project will therefore cause a delay of at least one year on the second expansion project even if there were no regulatory involvement on the second expansion project. If a regulator were to be involved in the second expansion project as well, the second expansion project would be delayed by two years.
17. The opportunity cost of the second expansion project being delayed by two years, assuming it has the same economic value as RGP4 is:
  - (a) A\$910 million divided by 1.10, assuming a 10% per annum discount rate, or A\$827 million. This is the economic cost today to BHPBIO of the delay between year 2 and year 1; **plus**
  - (b) A\$910 million, being the cost of the delay for the first year.

That is, the NPV cost of delaying the **second** project by two years is **A\$1,737 million**.

18. Accordingly the cost of delaying the first two expansion projects is some A\$2,647 million (A\$910 million for the first project, plus A\$1737 million for the two year delay for the second project). This is the opportunity cost to BHPBIO. To this figure must be added societal costs, such as royalties and taxation foregone and employment opportunities forgone etc.
19. It is important to note this economic cost does **not** assume that the project does not proceed. It merely assumes that the approval of each project is delayed by one year as a result of the introduction of another operator and a Regulator into an environment in which neither was previously involved.
20. If it is assumed conservatively that the remaining expansion projects are each delayed by only one year—that is, there is no assumed cascading effect of delays—then the delay of, say, 3.6 expansion projects spread relatively evenly over the period is worth some **A\$2,000 million** to BHPBIO in opportunity costs in today's terms. Undiscounted, the opportunity cost of these additional delays to BHPBIO would be some A\$3,250 million.

### **Discussion of results**

21. The total cost to BHPBIO of the delays caused by the introduction of a Regulator would be **in excess of A\$4,600 million**. This ignores the cost of delays post 2015. As discussed above, BHPBIO expansion plans are evolving, and an expansion may encompass a new port and a completely different and separate rail alignment to the Mt Newman and Mt Goldsworthy Line. The above analysis assumes that all the expansions will suffer the effects of a Regulator. To the extent this is not the case, this cost will be reduced.
22. However, it is unclear to BHPBIO that if the Mt Goldsworthy Service is declared that subsequent rail lines will not also be declared.
23. The above analysis assumes that declaration will not cause an expansion to be uneconomic. This, however, is by no means certain. Were declaration to cause an expansion to be shelved, the economic costs of declaration would be far higher than calculated above.