ANNEXURE 8

(with **CONFIDENTIAL Attachment 2**)

SUMMARY OF NON-IRON ORE RESOURCE PROJECTS IN THE PILBARA

Summary

1. This annexure demonstrates that all major non-iron ore resource projects in the vicinity of the Mt Newman Line[1] do not, will not, or are unlikely to use the Service. This is because the owners of existing projects currently transport their ores by means other than rail and it is likely that the owners of proposed projects will transport their ores also by means other than rail (ie. access to the Service is not "essential").

2. As a result, declaration of the Service will not promote competition in any of the "other minerals markets"[2] identified by FMG.

3. Even if non-iron ore producers were likely to use the Service, the "other minerals" markets in which each of those producers compete are global in scope and effectively competitive (except tantalum) and accordingly, access to the Service would not promote competition in these other markets.

4. In respect of tantalum, the largest producer of tantalum is located in the Pilbara and supplies 75% of the global market. While this producer currently uses road transport for its production and has no demand for the Service, even if it accessed the Service, competition would not be promoted in the global market for tantalum.[3]

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[1] A distance of approximately 150km has been used to select those projects in the "vicinity" of the Mt Newman Line. See **Attachment 1** : Excerpt from Cooper, RW and Flint, DJ (2004), *Major Resource Projects*, Western Australia – 2005 (scale 1:3,000,000): Western Australia Department of Industry and Resources. The full map showing all of Western Australia can be accessed at: http://www.doir.wa.gov.au/documents/investment/gsdMajorProjectsMap2005.pdf. This includes projects operating in 2004 or under development with an actual or anticipated value of production of greater than $A10 million (shown on map in blue), proposed or potential projects with a capital expenditure of greater than $A20 million (shown on map in red), and care and maintenance projects (shown on map in purple). The map is based on information held in MINEDEX database, DoIR.

[2] The "other minerals markets" refers to the following markets which FMG, in its Application, suggests are "other" markets : the market for "the production, development and exploitation of other minerals and products in the Pilbara region of Western Australia requiring transport services from the source of production to port facilities at Port Hedland : para 12.1(2); the market for "the haulage of . . . other minerals from various mine sites in the Pilbara region of Western Australia" para 12.1(4); and the market for the "retail of . . . other minerals, both as sold at the mine and also as sold at export terminals" : para 12.1(5).

[3] See discussion below in respect of tantalum.

Projects

5. The following projects are referred to in the notes below.

Project	Mineral	Distance (km)[4]	Stage	Development plans	Common mode of transport for mineral
Wodgina	Tantalum	15	Operation (proven and probable reserves, and indicated and inferred resources reported).	Owner currently in voluntary administration. Second (decision) meeting of creditors 30 June 2005.	Road
Coobina	Chromite	15	Operation (indicated and inferred resources reported).	Coobina has a five year mine life - plan to move plant to Woodie Woodie when Coobina mined out. Further drilling being undertaken.	Road
Panorama Zn Cu	Zinc, Copper	40	Undeveloped (measured, indicated and inferred resources reported).	Further drilling planned.	Road, slurry pipeline
Indee	Gold	55	Undeveloped (measured, indicated and inferred resources reported).	Objective is to establish gold inventory for development of 30,0000-50,000 ounce/annum open cut mine operation. Plan to "have a new mine producing gold during the 2005/06 financial year".	Air, Road
Whim Creek	Copper	90	Commissioning phase (proved and probable reserves, and measured, indicated and inferred resources reported).	Project in commissioning phase with cathode production for 2005 forecast at 10,000 tonnes. Further drilling being undertaken to extend four year mine life.	Road, slurry pipeline
Golden Eagle	Gold	115	Undeveloped (measured, indicated and inferred resources reported).	Finalisation of feasibility study expected by mid 2005. Subsequent development of project pending final outcome.	Air, Road
Mt Olympus	Gold	155	Care and maintenance (measured, indicated and inferred	Placed on care and maintenance in April 2004. Reorganisation of joint venture arrangements – further drilling taking place with new party to farm in to project and	Air, Road

[4] Distance from the Mt Newman Line (rough approximation only).

Project	Mineral	Distance (km)[4]	Stage	Development plans	Common mode of transport for mineral
			resources reported).	carry existing party to "decision to mine".	
Woodie Woodie	Manganese	240	Operation (proven reserves, and measured and inferred resources reported).	Manganese production to increase to 1 Mtpa during the first half of 2005. Exploration review indicates "projected mine life of 16 years from current defined resources".	Road
Ant Hill	Manganese	165	Undeveloped (indicated resources reported).	45,000tpa unbeneficiated fine grained manganese ore from Woodie Woodie – currently seeking finance for 23,000t EMD plant at Kalgoorlie.	Road

Wodgina (Tantulum - Sons of Gwalia Ltd (Administrator Appointed))

6. The Wodgina Mine is 100% owned by Sons of Gwalia Ltd (Administrators Appointed) (**SGW**) and is located approximately 100km south of Port Hedland in the Pilbara region of Western Australia[5]. The Wodgina Mine is the world's second largest resource of hard rock tantalum (a rare grey-blue metal used primarily in the electronics industry), the largest being SGW's Greenbushes operations in the southwest Yilgarn Craton. Together the two operations account for 75% of the global tantalum resource base[6].

7. As at 30 June 2003, the Wodgina Mine had a production capacity of 725Kt (1.6Mlb) per annum Ta205, with an estimated mine life of in excess of 40 years[7] (however note that there are conflicting estimates of mine life)[8].

8. On 30 October 2004, SGW appointed a voluntary administrator and its securities were suspended from quotation on the ASX[9]. On 21 March 2005, the Administrators announced that the Committee of Creditors approved a further extension of the statutory convening period for the second (decision) meeting of creditors until 30 June 2005, to determine the fate of the company[10].

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[5] http://www1.sog.com.au/pages/print/amd_wodgina.asp (dated 2003).

[6] http://www1.sog.com.au/pages/print/amd_wodgina.asp (dated 2003).

[7] Sons of Gwalia, http://www1.sog.com.au/pages/print/amd_wodgina.asp (dated 2003).

[8] http://www1.sog.com.au/pages/advanced.asp (dated 2003) expected life in excess of 25 years.

[9] ASX, *Market release – Sons of Gwalia Limited suspension from official quotation* (30 August 2004).

[10] SGW, *ASX Announcement – Extension of convening period for second creditors' meeting* (21 March 2005).

9. Tantalum is generally transported by road rather than rail. Indeed, SGW carries tantalum by road from its Greenbushes mine to the port of Bunbury. In these circumstances, SGW will not or is unlikely to use the Service for its tantalum mine at Wodgina.

Coobina (Chromite – Consolidated Minerals Limited)

10. The Coobina chromite mine is located 80 kilometres south-east of Newman and 585 kilometres south of Port Hedland[11]. It has been owned and operated by Pilbara Chromite Pty Ltd (a wholly owned subsidiary of Consolidated Minerals Limited (**ConsMin**)), since July 2001. Coobina has a production capacity of 250,000 tonnes per annum of 42% chromite ore, which represents a 2.5% share of the world market[12]. On current reserve/resource inventories, Coobina has a mine life of 5 years[13].

11. The area has been very lightly explored to date, with 3 fences of RC drilling (7 holes in total) at about 1.5km intervals completed in December 2004[14]. An 8,000m drilling program has been planned for the Coobina chromite deposits, commencing during the June quarter 2005[15].

12. On 12 April 2005, the managing director of ConsMin, Michael Kiernan indicated that at the end of Coobina's 5 year mine life, the plant would be transported to Woodie Woodie. He stated:

> *Coobina has around a five year mine life. We've investigated the tenements around the hill but concluded that the chromite is only contained within the hill. The chromite seams go deeper but they are probably not economic at depth. The plant and camp at Coobina are transportable and we plan to move them to the southern part of our manganese province at Woodie Woodie and have two plants operating there when Coobina is mined out.*[16]

13. Ore is generally produced from open pits and is crushed and screened to remove fines and then beneficiated through a heavy media drum plant. The product is then trucked to stockpiles at Port Hedland for shipping to overseas customers[17]. In such circumstances, ConsMin will not and is unlikely to use the Service.

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[11] Consolidated Minerals Limited, *Annual Report 2004*, p9.

[12] http://www.consminerals.com.au/pages/chromite/pilbara-chromite.htm (undated).

[13] http://www.consminerals.com.au/pages/corporate/corporate-overview.htm (last updated 1 April 2005).

[14] Consolidated Minerals Limited, *Quarterly activities report for the quarter ended 31 March 2005.*

[15] Consolidated Minerals Limited, *Quarterly activities report for the quarter ended 31 March 2005.*

[16] Consolidated Minerals Limited, *Open Briefing. Cons Minerals. Strategy & Outlook*, (12 April 2005).

[17] Consolidated Minerals Limited, *Annual Report 2004*, p9.

Panorama Zn Cu (Zinc, Copper – Sipa Resources Limited, CBH Resources Limited)

14. Panorama is a Volcanogenic Massive Sulphide Province, located 120 kilometres southeast of Port Hedland, in the Pilbara granite-greenstone terrain[18].

15. On 23 May 2005, Sipa Resources Limited (**Sipa**) entered an agreement with CBH Resources Limited **(CBH)** under which CBH has an option to earn a 60% interest in the Panorama project, by spending $4 million within five years (with a minimum commitment of $1 million within the first three years)[19]. Sipa also purchased 100% of the adjacent and smaller Sulphur Springs project (containing the Sulphur Springs Copper–Zinc Deposit)[20]. All project sites are yet to be developed.[21]

16. The exploration concept for Panorama is "to discover major deposits of copper and zinc (hopefully with gold)"[22]. On 3 March 2005, Sipa announced that drilling for the Panorama Base Metals Project "is planned for closer to the middle of the year"[23]. CBH has stated that a drilling program of 1,400m will start at Sulphur Springs in June[24]. CBH has also indicated in relation to Sulphur Springs that it "believes it can build a mine and central mill facility within 18 months based on low cost plant and open cut methods", with the "first substantial stream of copper production in 2007"[25].

17. Zinc and copper are each generally transported by road or slurry pipeline, rather than by a railway line.[26] Accordingly, it is unlikely that Sipa/CBH will or are likely to use the Service.

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[18] Sipa Resources Limited, *Annual Report 2004*, p7.

[19] Sipa Resources Limited, *ASX announcement – Re: Panorama Copper-Zinc Project* (23 May 2005). Also see Sipa Resources Limited, *ASX announcement: Re: Panorama Project – Sipa introduces CBH Resources Limited* (8 November 2004); CBH Resources Limited, *ASX announcement: CBH farm-in to Panorama* (23 May 2005).

[20] Sipa Resources Limited, *ASX announcement – Re: Panorama Copper-Zinc Project* (23 May 2005). Also see Sipa Resources Limited, *ASX announcement: Re: Panorama Project – Sipa introduces CBH Resources Limited* (8 November 2004); CBH Resources Limited, *ASX announcement: Sulphur Springs Copper Zinc Project Deal executed* (23 May 2005).

[21] Western Australian Department of Industry and Resources, *Minedex*, http://www.doir.wa.gov.au/minedex2/

[22] Sipa Resources Limited, *Annual Report 2004*, p7.

[23] Sipa Resources Limited, *ASX announcement: Re: Sipa Drilling Programmes Update* (3 March 2005).

[24] CBH Resources Limited, *ASX announcement: Sulphur Springs Copper Zinc Project Deal executed* (23 May 2005).

[25] CBH Resources Limited, *ASX announcement: Sulphur Springs Copper Zinc Project Deal executed* (23 May 2005).

[26] Zinc: Teck Cominco, owner of the Red Dog Mine in Alaska (the world's largest producer of zinc concentrate, located 88km from the Chukchi Sea), states that "concentrate from the mill is trucked to a port facility… where it is stored prior to loading onto vessels" (http://www.teckminco.com/operations/reddog/index.htm (last updated 25 January 2005); the 300km Pasminco Slurry pipeline carries ore concentrate slurries from Pasminco's Century Mine to Karumba on the Gulf of Carpentaria for shipment; Newmont Mining Corporation's Scuddles mine in Western Australia has an approximately 300km road haul to Geraldton Port; BHPB's Cannington mine involves carriage 180km by road train then 700km by rail to port; XStrata's trucks mixed lead-zinc concentrate from its McArthur River mine by road to a port facility at Bing Bong (http://archive.xstrata.com/mim/www.mim.com.au/mcarthur.html (undated) – note that the mine was previously operated by MIM Holdings Ltd which Xstrata acquired in June 2003).

Indee (Gold – Range River Gold Ltd)

18. The Indee Gold Project is located 80 km south of Port Hedland in the Pilbara region of Western Australia covering 1,000 square kilometres. Seven prospects have been defined, with two prospects (Camel 1 and Withnell) being drilled and both containing measured and indicated resources[27].

19. Range River Gold Ltd **(Range River)** has stated that the primary goal for the Indee Project is the establishment of a gold inventory to allow for the development of an open-cut mining operation capable of producing 30,000-50,000 ounces of gold per annum (with the possibility of an intermediate production step)[28]. Range River has commenced a diamond drilling program to further confirm key metallurgical geological and geotechnical aspects of the project, to be completed during May 2005[29]. A preliminary assessment is being carried out in relation to several production options and Range River expects to advise the final preferred processing option during the June Quarter 2005.

20. When all feasibility study tasks are complete during the first half of 2005 (and subject to various factors such as $A gold prices and cost escalation), Range River "plans to have a new mine producing gold during the 2005/2006 financial year"[30].

21. Range River has stated that one of the appeals of the Pilbara region is its "favourable proximity to Port Hedland and the associated infrastructure of the North West Highway and the existence of the gas pipeline"[31]. In light of this, Range River will not and is unlikely to use the Service. Indeed, gold is generally transported by road (or air) rather than by railway line[32].

Whim Creek (Copper – Straits Resources Limited)

22. The Whim Creek Copper Project is wholly owned by Straits Resources Limited (**Straits**)[33] and is located adjacent to the North West Highway, midway between Karratha and Port Hedland in Western Australia.

Copper: BHP's Escondida, Alumbrera and Antamina mines have long slurry pipelines for concentrate, while BHPB trucks concentrate from its Tintaya mine by road.

[27] Range River Gold Ltd, http://www.rangeriver.com.au/docs/exploration/wa.htm (last updated 22 March 2005).

[28] Range River Gold Ltd, http://www.rangeriver.com.au/docs/exploration/wa.htm (last updated 22 March 2005).

[29] See Range River Gold Ltd, Media release – *Range River consolidates full ownership of the Indee Project* (27 April 2005).

[30] Range River Gold Ltd , http://www.rangeriver.com.au/docs/exploration/wa.htm (last updated 22 March 2005).

[31] Range River Gold Ltd , http://www.rangeriver.com.au/docs/exploration/wa.htm (last updated 22 March 2005).

[32] For example Newmont Mining Corporation, the world's largest gold producer with significant assets or operations on five continents, states that "haul trucks transport the ore to various areas for processing" (http://www.newmont.com/en/gold/howmined/index.asp (dated 2004); see also Placer Dome, Newcrest Mining Limited.

[33] Straits Resources Limited, http://www.straits.com.au/default.asp?V_DOC_ID=862 (dated 2005).

23. Whim Creek comprises two deposits – the Whim Creek and Mons Cupri deposits, located six kilometres apart, both of which are shallow dipping deposits[34]. A processing facility is located midway between the two ore bodies, and comprises a new crushing plant, agglomerator and overland conveyor - radial stacker arrangement.

24. Feasibility studies have demonstrated project viability based on the production of 51,000 tonnes of LME Grade A copper cathode over a four year mine life, from an ore reserve grading 1% copper[35].

25. Whim Creek is currently in the commissioning phase. The crushing plant commenced commissioning in March 2005 and by the end of the quarter, approximately 100,000 tonnes of ore had been placed under leach[36]. The production of first copper cathode is expected in May 2005[37], with cathode production for 2005 is forecast at 10,000 tonnes[38]. Exploration drilling is currently in progress, with extension of mine life being a priority.

26. Oxide copper ore will be trucked 2.5 km to the processing facility located midway between the two ore bodies[39]. While there is no publicly available information on Straits' plans to transport copper to the port, copper is generally transported by road rather than by rail. In these circumstances, Straits will not or is unlikely to use the Service.

Golden Eagle (Gold – Wedgetail Exploration NL)

27. The Golden Eagle Project is located within the Nullagine tenement holdings owned by Wedgetail Exploration NL (**Wedgetail**), which cover 1,230 square kilometres and a major portion of the Nullagine Goldfield in Western Australia[40]. Historical production from the Nullagine Goldfield is above 217,700 ozs, however Wedgetail has indicated that the area remains underexplored[41].

28. Wedgetail indicated that it expected to have obtained sufficient technical and commercial information on the viability of the Nullagine Gold Project to allow the finalising of a

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[34] Straits Resources Limited, http://www.straits.com.au/default.asp?V_DOC_ID=862 (dated 2005).

[35] Straits Resources, *Annual Report 2004*, p5. See also http://www.straits.com.au/default.asp?V_DOC_ID=862 (dated 2005).

[36] Straits Resources Limited, Quarterly activities report for the period ended 31 March 2005.

[37] Straits Resources Limited, http://www.straits.com.au/default.asp?V_DOC_ID=862 (dated 2005).

[38] Straits Resources Limited, Quarterly activities report for the period ended 31 March 2005; Straits Resources Limited, *CEO Briefing AGM* (May 2005).

[39] Straits Resources Limited, http://www.straits.com.au/default.asp?V_DOC_ID=862 (dated 2005).

[40] Wedgetail Exploration NL, *2004 Annual Report*, p3.

[41] Wedgetail Exploration NL, *2004 Annual Report*, p3.

feasibility study by mid 2005[42]. Pending the outcome of the feasibility study, Wedgetail has planned to progress to subsequent development of the project[43].

29. As indicated above, gold is generally transported by air or road rather than by rail. As a result, and there is no evidence to suggest otherwise, Wedgetail will not or is unlikely to use the Service.

Mt Olympus (Gold – Sipa Resources Limited, Newcrest Mining Limited)

30. In 1996, Sipa[44] farmed into the Mt Olympus Gold Prospect (near Paraburdoo in the Ashburton Region of Western Australia), putting together 2,500 square kilometres of mining tenements to the north west of Mt Olympus[45]. Sipa developed Mt Olympus in 1998 with the first gold being poured on 30 December 1998. Approximately 370,000 ounces of gold were produced from Mt Olympus and the satellite deposits of Zeus, Peake and Waugh between January 1999 and April 2004[46]. Production from the Waugh satellite deposit came to an end in January 2004[47].

31. Newcrest Mining Limited (**Newcrest**) farmed into Sipa's regional tenements in June 1998 and into the land surrounding Mt Olympus in February 2000, spending over $13 million on the Ashburton Project up to June 2004[48]. A reorganization of the joint venture arrangements between Sipa and Newcrest in the Ashburton Region of Western Australia, was subsequently announced on 7 July 2004[49]. Newcrest is continuing an "aggressive" exploration campaign, including deep diamond holes to 800 metres or more on several prospects within the Ashburton Regional Joint Venture, together with a number of holes (400-600 metres) targeting the down-plunge extension of sulphide mineralisation at both Mt Olympus and Zeus[50].

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[42] Wedgetail Exploration NL, *2004 Annual Report*, p17.

[43] Wedgetail Exploration NL, *2004 Annual Report*, p2.

[44] At the time, Sipa was named "Sipa Resources International NL": see Sipa Resources Limited, *History*, http://www.sipa.com.au/hist.html (undated).

[45] This area covered approximately 300 kilometres of strike of rocks prospective for gold: see Sipa Resources Limited, *History*, http://www.sipa.com.au/hist.html (undated).

[46] Sipa Resources Limited, *History*, http://www.sipa.com.au/hist.html (undated).

[47] Sipa Resources Limited, *Annual Report 2004*, page 5.

[48] Sipa Resources Limited, *History*, http://www.sipa.com.au/hist.html (undated).

[49] These arrangements comprise the Ashburton Regional Joint Venture, the Sulphide Prospect Joint Venture and four participation joint ventures where Newcrest/Sipa is earning an interest with third parties: see Sipa Resources Limited, *Annual Report 2004*, page 5.

[50] Sipa Resources Limited, *Annual Report 2004*, page 5.

32. Sipa has stated that "it will continue to monitor the possibilities for treatment of oxide resources through the Paraburdoo Gold Mine plant, and/or the divestment of the plant and established gold resources"[51].

33. As gold is generally transported by air or road rather than rail (as indicated above), it is unlikely (and there is no evidence to suggest otherwise) that Sipa/Newcrest will or are likely to use the Service.

Woodie Woodie

34. The Woodie Woodie manganese project is owned and operated by ConsMin's wholly owned subsidiary, Pilbara Manganese Pty Ltd and is located in the East Pilbara, approximately 400km from Port Hedland[52].

35. ConsMin has announced that manganese production is to increase by 60% to a new long term level of 1mtpa during the first half of 2005, following the completion of a $6.5 million expansion project[53]. It has also stated an exploration review indicated "a projected mine life of 16 years from current defined resources"[54].

36. The project is located approximately 240km from the Mt Newman Line – a distance which is likely to make use of the Mt Newman Line uneconomic even if other factors made it attractive. The existing arrangements are that both lump and fines products are trucked from Woodie Woodie to Port Hedland for shipping[55]. Accordingly, ConsMin is unlikely to use the Service.

Ant Hill (Manganese – HiTec Energy Limited)

37. Ant Hill is a manganese deposit located 360km by road from Port Hedland, 100% owned by HiTec Energy Limited (**HiTec**)[56].

38. On 8 June 1999, HiTec (formerly Sovereign) announced it had entered into an option agreement with ConsMin to buy at least 45,000 tonnes per year of ConsMin's unbeneficiated fine-grained ore from Woodie Woodie. HiTec stated that the agreement

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[51] Sipa Resources Limited, *Annual Report 2004*, page 6.

[52] Consolidated Minerals Limited, *Annual Report 2004*, p5.

[53] Consolidated Minerals Limited, *Quarterly activities statement for the quarter ended 31 December 2004*.

[54] Consolidated Minerals Limited, *Quarterly activities statement for the quarter ended 31 December 2004*.

[55] Consolidated Minerals Limited, *Annual Report 2004*, p6. GEMCO (BHPB) also uses road transport to carry manganese to the port for shipping. On 30 May 2005, De Grey Mining Ltd announced that a drill hole contained a high percentage of main manganese-bearing ore at tenements at Beyondie. Any manganese or other minerals being explored at Beyondie (eg. zinc, nickel, molybdenum, gold and copper) are all likely to be transported by road rather than rail as the tenements are "[o]nly 35 kilometres east of Kumarina and the Great Northern Highway": De Grey Mining Ltd, *ASX announcement: De Grey indicates base and precious metals at Beyondie Bluff* (9 March 2005).

[56] HiTec Energy Limited, http://www.HiTec-energy.com.au/electrofuelproject/oresource.htm (last updated 27 February 2004).

"gives [it] access to high quality raw material that would otherwise have to be mined from the Ant Hill deposit"[57].

39. As indicated above, Woodie Woodie manganese is transported by road and accordingly it is unlikely that HiTec will use the Service.

Even if, contrary to the above, any of these projects were likely to use the Service, competition in "other minerals" markets would not be promoted because all of these markets are global in scope and effectively competitive (except tantalum)

Background

40. Most minerals are high value, homogeneous, bulk commodities which are traded for immediate delivery or delivery at a specified date. Transportation costs generally represent a relatively small proportion of their value. As a result, purchasers of these commodities are able to procure them from any producer in the world at global reference prices.

41. The relevant geographic market for such minerals is global in scope. Recent decisions of the EU Commission confirm this view:

    (a) EU Commission in *Rio Tinto/North (Case No. COMP/M.2062)* (examining copper, gold, uranium, zinc and iron ore): "Metals and minerals are traded as commodities on a global basis. The relevant geographic markets are, therefore, world-wide", referring to *Gencor/Shell (Case No. IV/M.470*)[58] and *CRA/RTZ (Case No. IV/M.660*[59], recently confirmed in Outokumpu/Boliden *(Case No. COMP/M3284)*[60];

    (b) EU Commission in *BHP/Billiton (Case No. COMP/M.2413)*: "the relevant markets for the supply of copper concentrate and refined copper to third parties are world-wide in geographic scope", recently confirmed in *Outokumpu/Boliden*;

    (c) EU Commission in *BHP/Billiton*: "the relevant geographic markets for lead, silver, and gold [are] world-wide in scope, due to the fact that these metals are actively traded on a global basis as commodities", referring to *Gencor/Shell* and *CRA/RTZ*, recently confirmed in *Outokumpu/Boliden*.

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[57] Sovereign Resources (Australia) NL, *ASX announcement: Option agreement with Consolidated Minerals Limited* (8 June 1999).

[58] In *Gencor/Shell*, the relevant markets affected were bauxite, alumina, aluminium, gold, silver, nickel, copper, lead, zinc and titanium dioxide. The EU Commission stated "Basically metals are traded on a global basis under long term contracts with process tied to the prices quoted on the London Metal Exchange. Therefore, the relevant geographic market is a world market".

[59] The relevant product markets in *CRA/RTZ* were copper, gold, iron ore, bauxite, alumina and aluminium, diamonds, salt, borates, titanium, coal, talc, zircon and uranium.

[60] The product markets considered in *Outokumpu/Boliden* were zinc concentrate, copper cathodes, lead concentrate, gold, silver, selenium, crude nickel sulphate and brass.

42. The ACCC has recognised that "gold is a globally traded commodity with the majority of gold produced in Australia being exported"[61], and that Australian producers are constrained by imports and multinational companies in relation to products such as gold, copper, cobalt, silver and primary nickel[62].

Copper

43. Copper ore is mined in open pits and underground operations and can be found in two basic forms: copper sulphide and copper oxide. Sulphide ores are typically processed into copper concentrate prior to further processing in a smelting plant. To produce copper concentrate, the sulphide ore containing the minerals for extraction is ground in mills, concentrated by flotation and then separated from the rest of the ore. Oxide ores are not suitable for concentration, but are processed by leaching and electrowinning to produce refined copper.

44. The EU Commission has taken the view that the market for copper is "world-wide in geographic scope" (see above). Further, the market is unconcentrated. Figures for global copper production for 2003 are set out in **CONFIDENTIAL Attachment 2** to this annexure**.**

45. In light of the figures contained in **CONFIDENTIAL Attachment 2**, it is clear that the market for copper is global in scope and effectively competitive.

Gold

46. Gold is one of the most widely mined commodities, production being recorded in more than 60 countries. Generally, the purchasers of gold are fabricators who transform it from its massive form into semi-product form such as jewellery, industrial products and bullion and coins. There is no interaction between upstream gold producers and the ultimate consumers of the final gold products.

47. The EU Commission has taken the view that the market for gold is "world-wide in scope" (see above). Further, the market is unconcentrated. Figures for world gold production for 2003 are set out in **CONFIDENTIAL Attachment 2**.

48. In addition to the above, there are considerable above-ground stocks of gold, including extensive government and other reserves, which are available to investors and consumers.

49. In these circumstances, it is clear that the market for gold is global in scope and effectively competitive.

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[61] For example, see *Goldfields/Delta Gold* (October 2001); *AngloGold/Normandy Mining* (October 2001).

[62] This approach has been adopted by the ACCC in its recent merger decisions of Xstrata/WMC ("while the acquisition would lead to a significant increase in Xstrata's market share in Australia, Xstrata would continue to be constrained by imports and a large number of multinational copper refining and production companies") and BHPB/WMC ("In the Australian markets for the production of cobalt, silver and primary nickel…BHP is constrained by the threat of imports…and the price of products are internationally referenced, making it unlikely that BHP could increase prices above competitive levels).

Zinc

50. As indicated above, a number of EU Commission decisions have recognised that the relevant geographic market for zinc is "world-wide". There is no evidence to suggest otherwise. Accordingly, the market for zinc is global in scope and effectively competitive.

Chromite

51. While many minerals contain chromium, chromite is the only commercial ore mineral. Chromite has several industrial end uses. High chromium ores are used for producing ferro-chromium for metallurgical applications such as stainless steel (the most important application by volume and special uses (superalloys, special steels, plating). High iron chromitites are being used for the production of low quality ferro chromium, foundry sands, chromium salts (used in the leather tanning industry, as a pigment and in chromium plating) and refractory purposes (production of magnesite-chromite and chromite-magnesite bricks).[63]

52. There are no economic substitutes for chromite ore in the production of ferrochromium (i.e. stainless steel), chromium chemicals, or chromite refractories at present. Currently, chromium free substitutes either compromise product quality and/or increase costs.

53. The market is unconcentrated (approximately 93% of the global production of chromite ore is produced by 42 producers). In these circumstances, the market for chromite is global in scope and effectively competitive.

Manganese

54. Manganese is a grey white coloured metal. Its main uses are in the production of stainless and special steels and alloys. Manganese is also used in the manufacture of dry batteries, as a colorant, and as an ingredient in plant fertilisers and animal feed.

55. In 2003, Australia had 13% of the world's economic demonstrated resources (**EDR**) of manganese ore and is ranked third behind Ukraine (42%) and China (21%). South Africa has substantial resources, but South African EDR is based on reported company estimates of proven and probable reserves. In terms of contained manganese, Australia has 17% of the world EDR and is ranked second behind Ukraine (41%). Australia produces 12% of the world's manganese ore and is ranked third behind China (22%) and South Africa (17%).[64]

56. In *BHP/Billiton* (*Case No. COMP/M.2413*), the EU Commission did not consider it necessary to determine the geographic scope of the market "because no competition problems would arise whatever the relevant geographic market". In relation to manganese and manganese alloys, the EU Commission noted that "these products are … sold to steel producers and other consumers on a world-wide basis".

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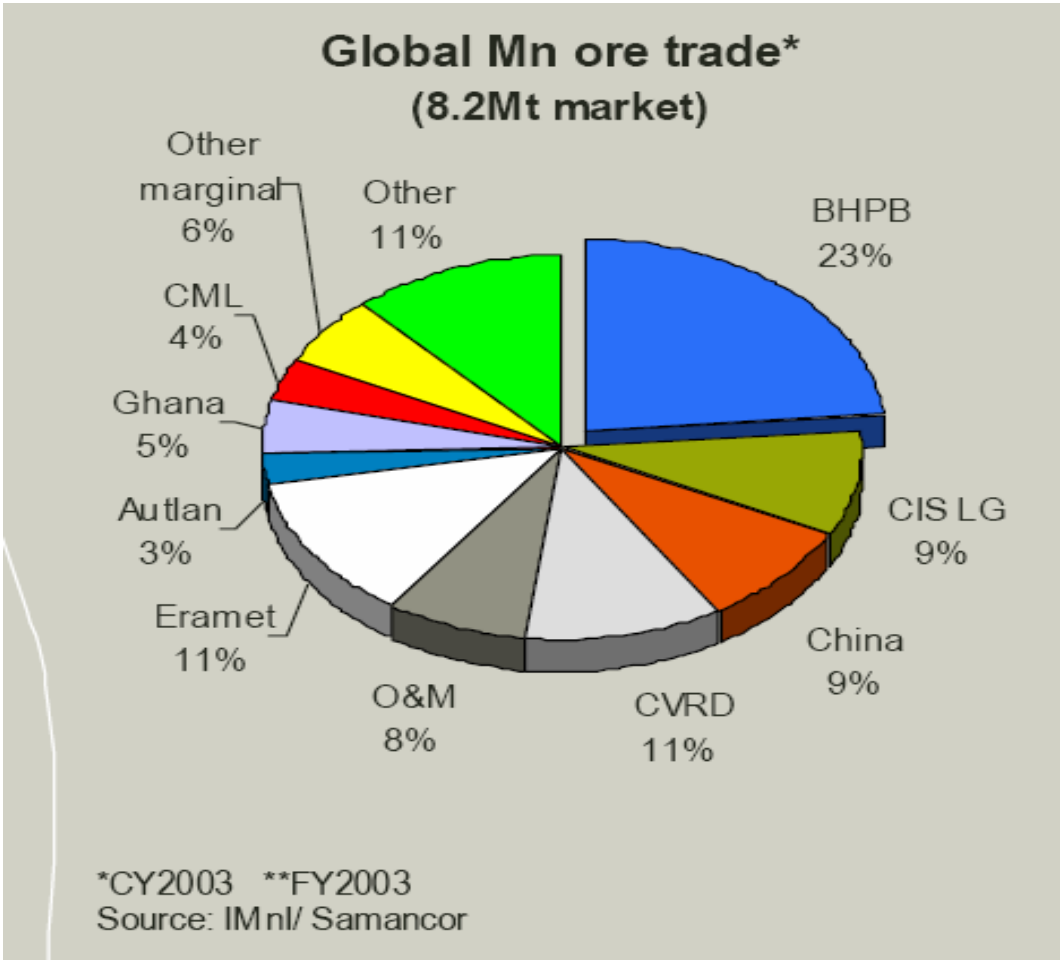
[63] "World Mining – Chromite Mining – Commodity Properties and Uses": http://www.mbendi.co.za/indy/ming/chrm/p0005.htm.

[64] "Manganese Ore AIMR Report": http://www.australianminesaltlas.gov.au/info/aimr/manganese_ore.jsp (dated 2003).

57. Details for global production as at 2003 are illustrated below.

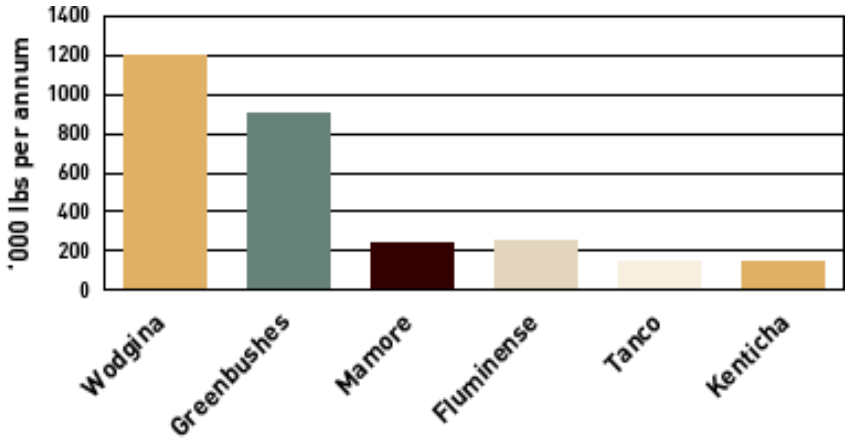


Source: BHP / Billiton Carbon Steel Materials, CGS Briefing, 15 March 2004.

58. In the circumstances above, it is clear that the market for manganese is global in scope and effectively competitive.

Tantalum

59. Tantalum is a rare, grey-blue metal used primarily in the electronics industry in the manufacture of capacitors. Major global sources of primary (ie. mined) tantalum supply as at 2003 are set out in the graph below:



Source: Sons of Gwalia website (dated 2003)[65]

60. SGW's tantalum operations represent approximately 75% of the global defined tantalum reserve base and supply approximately 55-60% of global tantalum raw materials[66], with production of 2.19Mlbs of tantalum concentrate for the 2002/2003 year[67].

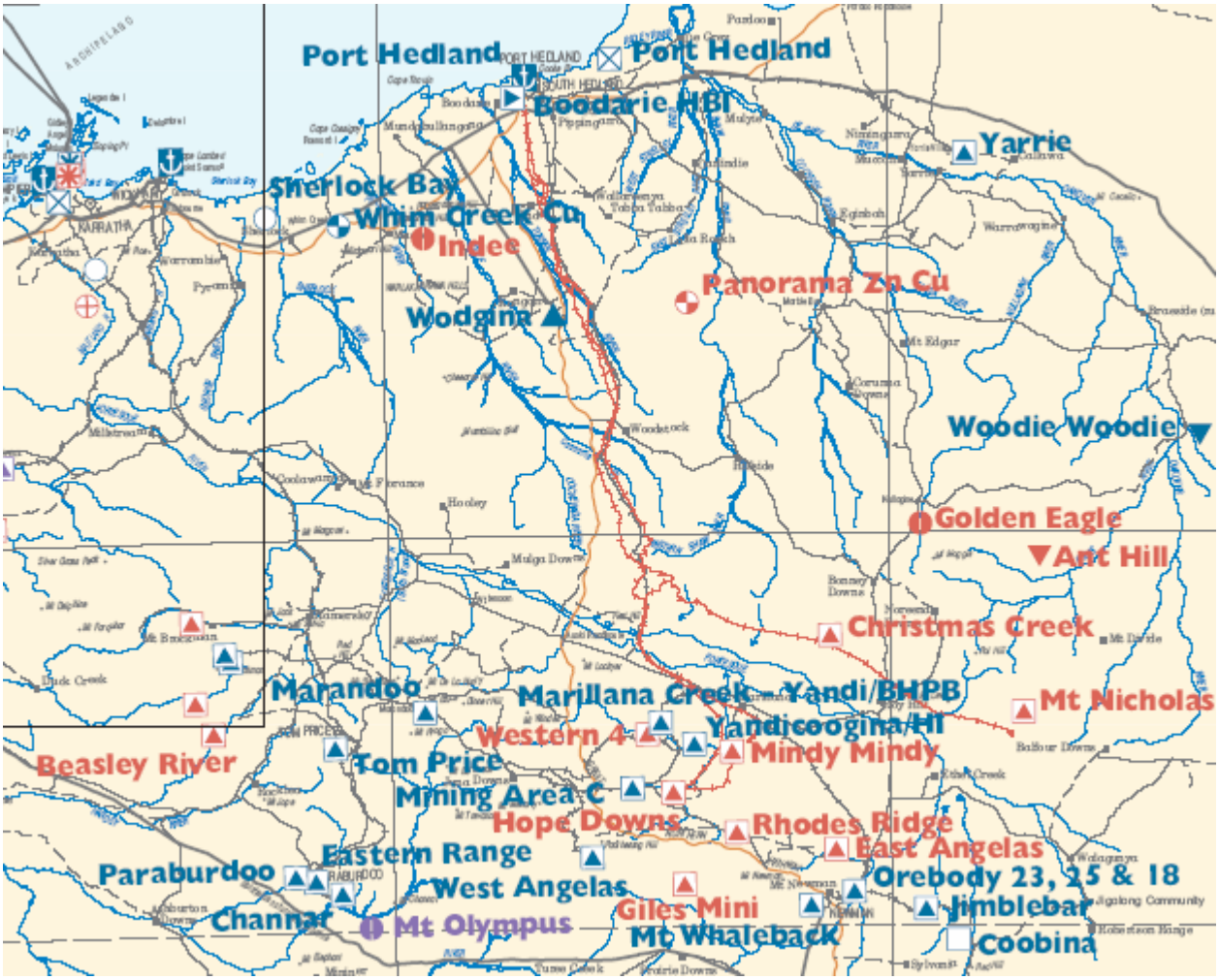
61. In light of SGW's share of the global market for tantalum, it is unlikely that competition would be promoted in such a market if access to the Service was granted.

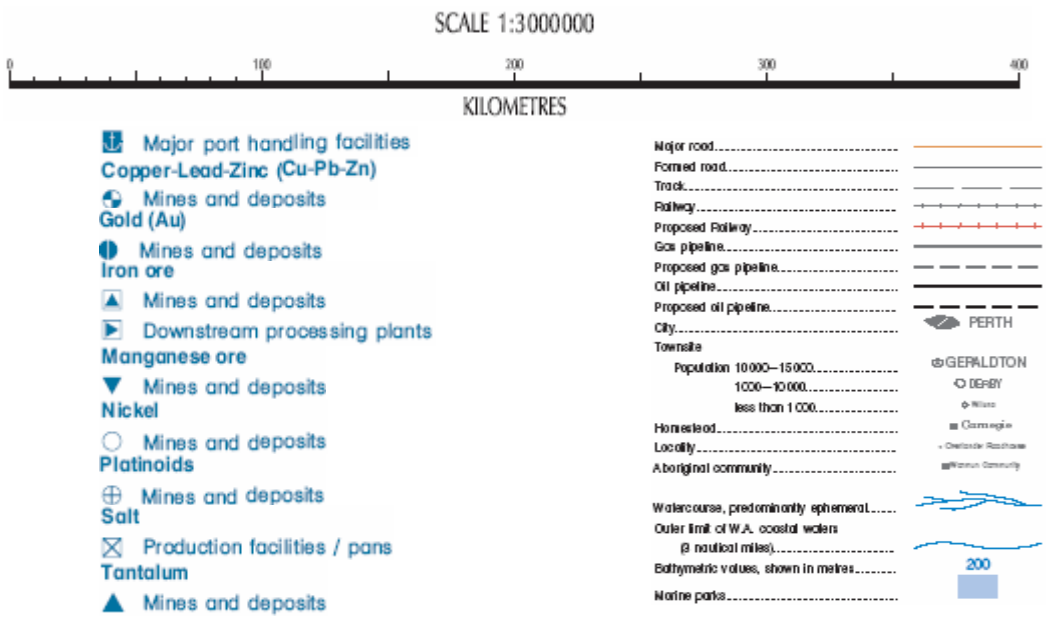
[65] Sons of Gwalia Ltd; http://www1sog.com.au/pages/print/tantalum.asp (dated 2003). Other mines referred to in the graph are Mamore (Grupo Paranapanema, Brazil), Fluminense (Compania Industrial Fluminesnse, Brazil), Tanco (Tantalum Mining Corporation of Canada) and Kenticha (Midorc, Ethiopian government).

[66] Sons of Gwalia Ltd; http://www1sog.com.au/pages/print/tantalum.asp (dated 2003).

[67] Sons of Gwalia, *Annual Report 2003*.

Attachment 1





CONFIDENTIAL ATTACHMENT 2

Figures for global copper production for 2003 and global gold production for 2003

Figures for global copper production 2003

Figures for global gold production 2003