

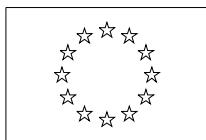
***Case No COMP/M.4494 -
EVRAZ / HIGHVELD***

Only the English text is available and authentic.

**REGULATION (EC) No 139/2004
MERGER PROCEDURE**

Article 6(2) NON-OPPOSITION
Date: 20/02/2007

***In electronic form on the EUR-Lex website under document
number 32007M4494***



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 20-02-2007

SG-Greffe(2007) 200776

In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EC) No 139/2004 concerning non-disclosure of business secrets and other confidential information. The omissions are shown thus [...]. Where possible the information omitted has been replaced by ranges of figures or a general description.

PUBLIC VERSION

MERGER PROCEDURE
ARTICLE 6(2) DECISION

To the notifying party

Dear Sir/Madam,

**Subject: Case COMP/M.4494 – Evraz / Highveld
Notification of 22.12.2006 pursuant to Article 4 of Council Regulation
No 139/2004¹ (the "Merger Regulation")**

1. On 22/12/2006, the Commission received a notification of a proposed concentration pursuant to the "Merger Regulation by which the undertaking Evraz Group S.A. ("Evraz", Luxembourg) acquires within the meaning of Article 3(1)(b) of the Merger Regulation control of the whole of the undertaking Highveld Steel and Vanadium Corporation Limited ("Highveld", Republic of South Africa) by way of purchase of shares.
2. After examination of the concentration, the Commission has concluded that the notified operation falls within the scope of the Merger Regulation. Following submission by the parties of undertakings designed to eliminate competition concerns identified by the Commission, in accordance with Article 6 (2) of the Merger Regulation, the Commission has concluded that the notified operation does not raise serious doubts as to its compatibility with the common market and with the functioning of the EEA Agreement.

I. THE PARTIES

3. Evraz is an international vertically integrated steel and mining company incorporated in Luxembourg. Its operations are mainly in the Russian Federation. Evraz produces vanadium feedstock as a by-product of its steel activities in the Russian Federation.

¹ OJ L 24, 29.1.2004 p. 1.

Through Strategic Minerals Corporation ("Strategic Minerals", a company jointly controlled by Evraz and the Japanese company Sojitz Corporation, ("Sojitz")), Evraz is also active in the production of vanadium feedstock from other sources, vanadium oxides and finished vanadium products.

4. Highveld is a steel producer based in South Africa. Highveld is also active in the production of various vanadium products (vanadium feedstock, vanadium oxides and finished vanadium products) and in the production of ferroalloys and certain carbonaceous products. Highveld has a presence in Europe through its fully owned subsidiary Hochvanadium and has a shareholding in South Africa Japan Vanadium (Proprietary) Limited ("SAJV"), a joint venture between Highveld and the Japanese companies Mitsui Co. Ltd. and Nippon Denko Ltd.

II. THE OPERATION AND THE CONCENTRATION

5. The transaction concerns the acquisition by Evraz of 54% of Highveld's share capital from Anglo American and Credit Suisse. Upon completion of the transaction, Evraz will hold 79% of Highveld's outstanding shares², thus acquiring sole control of the company.
6. The notified operation therefore constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

III. COMMUNITY DIMENSION

7. The undertakings concerned have a combined aggregate worldwide turnover of more than EUR 5,000 million³ (Evraz EUR [...] million and Highveld EUR [...] million). Each of the undertakings concerned has a Community-wide turnover in excess of EUR 250 million (Evraz EUR [...] million and Highveld EUR [...] million) but they do not achieve more than two-thirds of their aggregate Community-wide turnover within one and the same Member State. The notified operation has therefore a Community dimension.

IV. RELEVANT MARKETS

8. Evraz and Highveld are both active in the production of vanadium and steel products.

A. Relevant product markets

1. Steel products

9. The parties follow the approach taken by the Commission in its previous decisions dealing with the steel sector⁴ to identify the relevant product markets. Evraz and Highveld's steel

² Evraz purchased 24.9% of Highveld's share capital from Anglo American on July 13, 2006.

³ Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Notice on the calculation of turnover (OJ C 66, 2.3.1998, p. 25).

⁴ Case COMP/ESC.1351 Usinor / Arbed / Aceralia and COMP/M.4317 Mittal / Arcelor.

activities overlap only with respect to two categories of carbon steel products: plate and sections in the EEA. In any event, given the limited overlaps between the parties' activities in the steel sector (see recital 59), it is not necessary to further define the exact scope of the relevant product market in the field of steel products for the purposes of this decision.

10. Similarly, the parties consider that the geographic dimension of the steel markets is EEA-wide, which is consistent with the approach taken by the Commission in its previous decisions dealing with the steel sector. In any event, given the limited overlaps between the parties' activities in the steel sector, it is not necessary to further discuss the exact geographic scope of the relevant product market in the field of steel products for the purposes of this decision.

2. *Vanadium products*

11. The vanadium industry value chain can be broken down into the following segments: upstream (vanadium feedstock), intermediate (vanadium oxides) and downstream (finished vanadium products).

a) *Vanadium feedstock*

12. Vanadium feedstock can be obtained from vanadium-rich ore (around 25% of the supply) or from by-products of various production processes such as slag from steel production and residues from oil processing (boiler slag, cokes and ashes, gasifier residues and spent catalysts) (around 75% of the supply).
13. The parties claim that all vanadium feedstocks constitute a single relevant product market since the converters of vanadium feedstock generally have the ability to switch between the different types of feedstock and all finished vanadium products can be produced from all vanadium feedstock. The parties further submit that vanadium feedstock prices are generally linked to the worldwide quoted ferrovanadium⁵ price.
14. The market investigation has not confirmed this approach and the majority of respondents indicate that vanadium feedstock should be sub-segmented in narrower product markets according to their source. On the supply-side, vanadium steel slag, vanadium residues and vanadium ore are produced by different industrial processes and there is no supply-side substitutability. On the demand-side, the three types of feedstock cannot always be used by any vanadium converter since the process and the facility used to convert vanadium steel slag, vanadium residues and vanadium ore differ substantially. Vanadium steel slag, vanadium residues and vanadium ore are however used as vanadium feedstock to produce finished vanadium products used in the same end applications.
15. The parties recognise that demand-side substitution is significantly constrained by the required processes and the installed facilities and indicate for instance that processors of vanadium steel slag and vanadium residues may not have the equipment for processing the much greater quantities of ore efficiently⁶. The parties also recognize that certain vanadium residue processors (using a hydrometallurgical process) do not have the

⁵ Ferrovanadium is a finished vanadium product used for steel applications (See recital 28) and account for 90% of vanadium consumption.

⁶ See Form CO, p.31, § 4.

required equipment to process vanadium steel slag and would need to invest in roasting equipment to use such slag. The parties finally submit that processors of vanadium ore have generally greater flexibility to switch to non-ore feedstock (vanadium steel slag or vanadium residues). The market investigation has confirmed that the only credible substitution could be from vanadium ore to non-ore vanadium sources and potentially from vanadium residues to vanadium steel slag.

16. The market structures for the supply of vanadium steel slag, vanadium residues and vanadium ore are very distinct. Vanadium steel slag is only produced by certain steel producers which use iron ore with a comparatively high vanadium content (Evraz (Russia), Highveld (South Africa), Chengde (China), Pangang (China) and New Zealand Steel (New Zealand)). The vanadium content of vanadium steel slag is generally between 6% and 13%. The merchant market for the supply of vanadium steel slag is limited to Evraz, Highveld and New Zealand Steel since Chengde and Pangang are completely vertically integrated. The sources of vanadium residues are much more dispersed and comprise a number of crude oil refineries and power plants. The chemical composition of these vanadium residues varies significantly from one source to another. The vanadium content of vanadium residues is generally between 1% and 3%. Vanadium ore producers are generally vertically-integrated and there is not trade of vanadium ore because it is not economic to transport large quantise of ore with limited (less than 1%) vanadium content.
17. As a result, the pricing mechanism of the different types of vanadium feedstock differs substantially. While vanadium steel slag prices are generally indexed on standard vanadium oxides or ferrovanadium prices, crude oil refiners and other producers of vanadium residues may have to pay vanadium processors to get rid of these residues when the prices of vanadium oxides and finished vanadium producers are low. As regards vanadium ore, it appears that there is no merchant market⁷, and thus no prices, for this vanadium feedstock due in particular to the vertical integration of vanadium ore processors and the prohibitive transport costs⁸. The vanadium content of vanadium ore is usually very low, below 1%.
18. In view of the above, for the purposes of this decision, the question of whether vanadium steel slag, vanadium residues and vanadium ore constitute distinct relevant product markets or belong to the same relevant market of vanadium feedstock can be left open. In any event, the proposed transactions raises competition concerns under any alternative product market definition for vanadium feedstock.

b) Vanadium oxides

19. Vanadium feedstock is processed to obtain vanadium oxides, which are in turn further processed to produce finished vanadium products.

⁷ The only merchant sales of vanadium/iron ore are sales from Evraz to [...] in 2005).

⁸ According to the market investigation (See reply of [...] to the Commission's market investigation), transports cost for vanadium steel slag and vanadium residues typically are in the range 500 – 600 EUR/MT of vanadium content, representing around 2% of current vanadium feedstock purchase prices. Assuming similar transport costs for vanadium ore, this would result in transport costs accounting for 20% of the current vanadium ore value since the vanadium content of vanadium is typically 10 times lower than for vanadium steel slag and vanadium residues.

20. The most common types of vanadium oxides produced by vanadium feedstock processors are vanadium pentoxide (V_2O_5) and vanadium trioxide (V_2O_3), and to a much lesser extent, vanadium tetraoxide (V_2O_4), tetravanadium septoxide (V_4O_7), hexavanadium triskaidekoxide (V_6O_{13}) and vanadium alkoxide. According to the parties, vanadium pentoxide (V_2O_5) and vanadium trioxide (V_2O_3) account for respectively around 65% and 25% of the worldwide production respectively.
21. Each vanadium oxide can be produced in different grades depending on its purity. The parties distinguish "standard" (or "technical") grades, predominantly V_2O_5 and V_2O_3 , which are mainly further processed into finished vanadium products for steel applications; and "high-purity" (or "chemical") grades (>99.5% pure), which are used for the production of vanadium chemicals.
22. The parties consider that all vanadium oxides constitute a single relevant product market since the vast majority (over 90%) of all vanadium oxides are processed into vanadium for steel applications, and both standard and high-purity grades can be used for the production of finished vanadium products for steel application. The parties also submit that the production processes and the technology required for the production of the various types of vanadium oxides are similar and most vanadium oxides producers produce a broad range of vanadium oxides. Finally, as regards standard grade V_2O_5 and V_2O_3 , the parties underline that the price differential is very limited.
23. The parties however also recognize that certain end applications of finished vanadium products require high-purity oxides, in particular certain vanadium chemicals and specialty vanadium alloys⁹. The parties also admit that certain vanadium oxides producers do not have the necessary equipment to produce high-purity oxides and may not be able to produce high-purity vanadium oxides¹⁰. The demand and supply side substitution between standard and high-purity vanadium oxides is thus unidirectional: customers and producers of high-purity vanadium oxides can use or produce standard vanadium oxides but not all customers of high-purity oxides can switch to standard vanadium oxides and not all producers of standard vanadium oxides can produce high-purity oxides.
24. Respondents to the market investigation, in particular customers of high-purity vanadium oxides, have confirmed that they have very specific requirements in terms of purity of the oxides, that could be met by only very few producers of vanadium oxides. According to these customers active in the vanadium chemicals, standard vanadium oxides contains too many impurities, which would be detrimental to the characteristics and the performance of the final material / products in which the finished vanadium products are used. On this basis, the Commission takes the view that both supply and demand side substitutability between standard grade vanadium oxides and high-purity vanadium oxides is very limited and that high-purity vanadium oxides belong to a separate relevant product market.
25. The market investigation has also shown that substitution between the different vanadium oxides is not straightforward. For instance, the process to produce ferrovanadium from

⁹ See Form CO, p.35, fourth §.

¹⁰ See Form CO, p.36, second § and footnote 53.

standard grade vanadium pentoxide and trioxide differ significantly and require distinct production equipment¹¹.

26. In view of the above, for the purposes of this decision, the Commission takes the view that high-purity vanadium oxides do not belong to the standard grade vanadium oxides market(s). The precise scope of markets for the supply of the high-purity vanadium oxides is further discussed below in the section on vanadium chemicals.
27. As regards standard vanadium oxides, the question of whether all standard grade vanadium oxides constitute distinct relevant product markets or belong to the same relevant market of vanadium standard grade oxides can be left open. In any event, the proposed transactions raises competition concerns under any alternative product market definition for standard grade vanadium oxides. For convenience, in the present decision, the term vanadium oxide will refer to standard grade vanadium oxide unless it is explicitly referred to chemical grade or high-purity vanadium oxides.

c) Finished Vanadium Products

(1) Finished Vanadium Products for Steel Applications

28. Vanadium for steel applications accounts for more than 90% of the vanadium worldwide consumption. Vanadium is used in steel as a microalloy in certain steels to increase its yield and tensile strength, making it more resistant to shock and metal fatigue. Steels to which alloying elements are added to increase their strength are usually referred to as High Strength Low Alloy ("HSLA") steels. Vanadium can be added to steel (i) in the form of ferrovanadium, an alloy composed of vanadium and iron with other elements, or (ii) in the form of vanadium with nitrogen. In turn, ferrovanadium can be sub-segmented into various grades depending on its vanadium content (FeV 42%, FeV 50%, FeV 60% and FeV 80%), while vanadium with nitrogen can be sub-segmented into nitrated ferrovanadium and vanadium carbonitride.
29. The parties indicate that the prices of the various grades of ferrovanadium are based on the vanadium content and therefore, on a vanadium content base, these products are priced identically. In addition, according to the parties, ferrovanadium producers can switch easily between the production of the various grades of ferrovanadium at zero cost.
30. As regards vanadium combined with nitrogen, the parties explain that vanadium combined with nitrogen and ferrovanadium are used in the same end applications, but the use of vanadium with nitrogen increases the yield and tensile strength of steel with less vanadium. The addition of vanadium combined with nitrogen is thus more efficient and it is therefore sold at a slight premium to the price of ferrovanadium.
31. The parties however recognize that there are certain limitations to the substitution of ferrovanadium by vanadium combined with nitrogen. First, certain steel producers cannot use nitrogen containing vanadium products in their production process and customers of the finished steel products may, for various reasons, restrict the level of nitrogen in steel¹². In fact, steel producers using vanadium combined with nitrogen can always use

¹¹ See Form CO, p. 35, footnote 52.

¹² Form CO, p.38.

ferrovanadium, but not vice versa, depending on the type of steel and its end application. The parties also explain that, among steel producers who can use both ferrovanadium and vanadium combined with nitrogen, some may not want to use vanadium combined with nitrogen due to the perception that nitrogen may be an undesirable impurity.

32. The parties therefore consider that vanadium combined with nitrogen competes for around 30% of the demand of all finished vanadium products for steel applications. In Europe, sales of vanadium combined with nitrogen account for only 4% of the total sales of finished vanadium products to the steel industry. This share amounts to 7% to 10% worldwide.
33. Finally, the parties claim that some steel companies may add nitrogen themselves in the steel production process rather than purchasing vanadium combined with nitrogen, and that other elements such as niobium and titanium can be considered as substitutes to vanadium for steel applications to a large extent. The relevance of the competitive constraint exercised by these alternative elements on the price of finished vanadium products for steel applications is further discussed below.
34. The parties finally submit that all finished vanadium products for steel applications should be considered as one single relevant product market.
35. The market investigation has shown that most ferrovanadium producers only produce one or two grades of ferrovanadium, and not the whole range, although some ferrovanadium producers have indicated that they can easily change between the production of the ferrovanadium grades they produce. In addition, there are only a few producers of vanadium combined with nitrogen at the global level, which means that most producers of ferrovanadium do not produce vanadium combined with nitrogen. The supply side substitutability between ferrovanadium and vanadium combined with nitrogen is thus limited.
36. On the demand side, the market investigation has confirmed the technical constraints on the use of vanadium combined with nitrogen. In particular, certain large steel producers do not use vanadium combined with nitrogen at all.
37. Finally, although ferrovanadium and ferroniobium may to some extent be used in similar steel applications, neither the parties nor any respondent to the Commission's market investigation has claimed that these two products should be considered as part of the same relevant product market.
38. In view of the above, for the purposes of this decision, the question of whether ferrovanadium and vanadium combined with nitrogen constitute distinct relevant product markets or belong to the same relevant market of finished vanadium products for steel applications can be left open. In any event, the proposed transactions raises competition concerns under any alternative product market definition for finished vanadium products for steel applications.

(2) Vanadium Chemicals

39. Vanadium chemicals are generally produced from vanadium oxides¹³ (in particular high-purity vanadium pentoxide) and include vanadium chlorides (or "halides") and other vanadium-containing specialty chemicals. Vanadium chemicals are used in a variety of applications such as active ingredient in oxidation catalysts, catalyst in pollution control or pigment in ceramic applications. High-purity vanadium oxides are used in certain of these end applications and therefore are normally considered as vanadium chemicals. They are also used for the production of other vanadium chemicals.
40. According to the parties, substitution between vanadium chemicals or between vanadium chemicals and other products depends on the precise end applications in which they are used. Substitution may also occur when new technologies or processes are developed. The parties however do not consider further sub segmentations on this market.
41. The market investigation has confirmed that vanadium chemicals are used in a broad range of end applications, in particular as pigments and catalysts. Respondents to the market investigation have underlined that there are specific requirements for each type of end application. Supply-side substitution is also limited by the equipment and production processes of the vanadium chemicals' producers.
42. In view of the limitations to demand-side substitutability, a number of respondents suggested that the relevant product market in the field of vanadium chemicals should be defined according to the end applications: catalysts, glass industry, batteries, pigments and others. Alternatively, each type of vanadium chemical could also be considered as a relevant product market due to its specific chemical properties.
43. In any event, for the purposes of this decision, the question of whether vanadium chemicals should be further sub-segmented by end applications or by chemistry can be left open since the proposed remedies remove the serious doubts identified by the Commission on the potential narrow product market for high-purity vanadium pentoxide or any alternative product market for vanadium chemicals.

(3) Specialty Vanadium Alloys

44. Specialty vanadium alloys for the titanium industry are produced from vanadium oxides and are used in high-strength, lightweight applications, such as jet engines or turbine coatings and other similar military and aerospace industries. Vanadium is one of the various components of titanium alloys.
45. According to the parties, specialty vanadium alloys include (i) vanadium-aluminium, (ii) vanadium-aluminium-ruthenium and (iii) aluminium-molybdenum-vanadium. The most important specialty vanadium alloy is however vanadium-aluminium which accounts for close to 99% of specialty vanadium alloys sales worldwide.
46. The parties claim that all specialty vanadium alloys should be viewed as a single market given that almost all specialty vanadium alloys sales are concentrated in one alloy. In addition, the parties submit that any specialty vanadium alloy producer able to produce

¹³ Certain vanadium chemicals, such as ammonium metavanadate ("AMV") or ammonium polyvanadate ("APV") are also intermediate products in the processing of vanadium feedstock into vanadium oxides.

one type of specialty vanadium alloy also has the ability to produce the other types of specialty vanadium alloys. On the demand-side, however, the substitutability of a specialty vanadium alloy by another depends on the precise specifications and on the end applications¹⁴.

47. The market investigation has supported the parties' view as regards the supply-side and demand-side substitutability. In particular, while it is clear that titanium alloy producers (the customers of specialty vanadium alloys) have very precise specifications and generally apply stringent qualification procedures, the market investigation has confirmed that producers of specialty vanadium alloys have the capability to produce different types of specialty vanadium alloys and to switch between the production of such alloys.
48. In view of the above, for the purposes, the Commission considers that all specialty vanadium alloys constitute one single relevant product market.

B. Relevant geographic markets

(1) Introduction

49. The parties claim that the geographic market for vanadium feedstock, vanadium oxides and finished vanadium products (including vanadium for steel applications, vanadium chemicals and specialty vanadium alloys) should be defined as worldwide. The parties also submit that the exact scope of the relevant geographic market can however be left open as regards vanadium feedstock and vanadium oxides.
50. The parties indicate in particular that there are no significant tariff or non-tariff barriers to trade of vanadium products at the global level and that transport costs of vanadium products are very low in comparison to the value of the products (1%-2%), which makes it economical to transport globally. As a result, the parties submit that there are important trade flows of vanadium products at the global level and in particular into the EEA. In addition, prices of vanadium products are broadly uniform across all regions as they are generally based on standard grade pentoxide and ferrovanadium quoted prices¹⁵.
51. Respondents to the market investigation have broadly confirmed that vanadium products are traded on a global basis since trade tariffs and transport costs are generally not obstacles. However, certain respondents have argued that the assessment of the relevant geographic scope for vanadium feedstock should distinguish the three different categories of vanadium feedstock and the majority of respondents questioned the competitive constraint exercised by Chinese players for finished vanadium products, in particular ferrovanadium.

¹⁴ See Form CO., p. 42.

¹⁵ Ferrovanadium and standard grade vanadium pentoxide prices are quoted by the London Metal Bulletin ("LMB") or Ryan's Notes in the United States, and normally prices of the various vanadium products are linked to these indexes.

(2) Vanadium feedstock

52. The market investigation has given indications that the markets for the supply of vanadium steel slag, vanadium residues and vanadium do not have the same geographic scope.
53. While the vast majority of respondents agree that steel slag can be transported and traded globally, vanadium residues may have a narrower geographic scope due to their lower economic value and higher transport costs. Vanadium residues are produced in relatively limited quantities by a variety of industries and may be classified as hazardous waste. Their transport thus requires a special notification in each country, which makes the administration process particularly burdensome. Purchasing data provided by vanadium residue processors show that, depending on the value of the vanadium residue, vanadium residues are generally sourced on a regional basis.
54. As regards vanadium ore, a respondent to the market investigation has explained that that relevant geographic scope for the supply of vanadium ore is more likely to be local. In view of its low vanadium content (vanadium ore: <1% compared to non-ore vanadium sources: 6%-13% for steel slag and 1%-3% for vanadium residues), it is indeed not economical to transport vanadium ores. For this reason, in most cases, vanadium ore is processed in a plant next to or very close to the vanadium ore mine and owned by the same mining and metals group. The relevant geographic market for the supply of vanadium ore should thus be defined as local.
55. In view of the above, for the purposes of this decision, the Commission considers that the potential markets for the supply of vanadium steel slag and vanadium ores are respectively global and local in scope. The question of whether the potential market for the supply of vanadium residues is regional (EEA-wide) or global in scope can be left open since it does not modify the competitive assessment.

(3) Ferrovandium

56. As regards ferrovandium, the Commission assessed potential barriers to trade between China and the EEA for finished vanadium products and the role and the competitive pressure exercised by Chinese vanadium suppliers in the EEA. This question is of particular relevance since Chinese vanadium producers account for a significant share of the global production of a number of finished vanadium products.
57. A number of respondents to the market investigation highlighted that most Chinese vanadium producers are entirely vertically integrated and, due to the strong demand in China, have limited activities in the EEA. Furthermore, according to certain market players¹⁶ and to industry publications¹⁷, the Chinese administration may be discouraging exports of finished vanadium products, in particular ferrovandium, due to the strong domestic demand for such vanadium products. In January 2007, China introduced a 10% export tariff for ferrovandium and industry publications expect that a specific licensing regime for exports of ferrovandium will be put in place in 2007. These measures are

¹⁶ See reply of [...] to the Commission' market investigation, 23 January 2007.

¹⁷ See Ryan's note, 8 January 2007.

likely to negatively affect the ability of Chinese vanadium producers to export ferrovanadium to the EEA.

58. In any event, for the purposes of this decision, the question of whether the potential market for the supply of ferrovanadium is global in scope or whether China is not part of the relevant geographic market can be left open since it does not modify the competitive assessment.

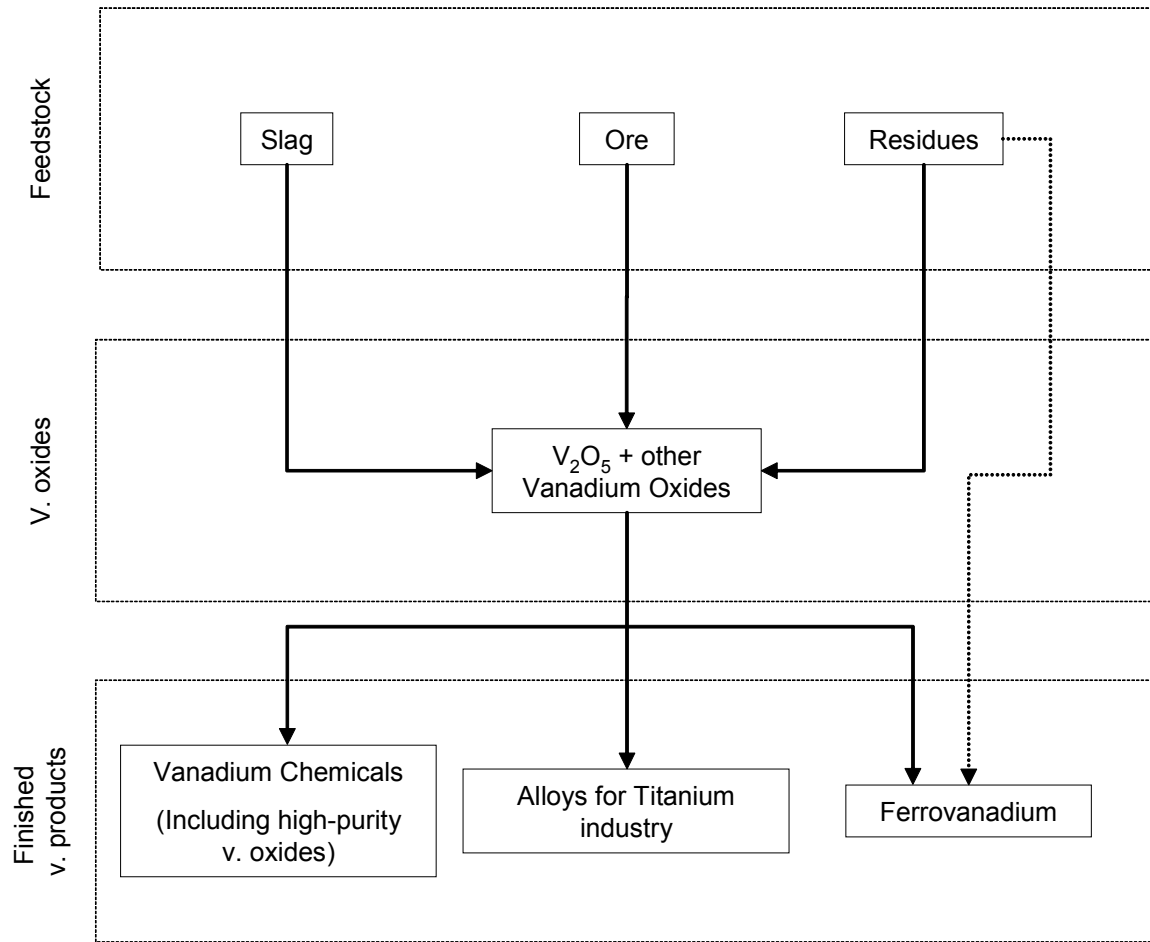
V. COMPETITIVE ASSESSMENT

A. Steel products

59. Both Evraz and Highveld are active in the production and direct sale of a number of carbon steel products. Evraz is primarily active in Russia and in the EEA, where it has two operating subsidiaries, Palini e Bertoli S.p.A. in Italy and Vitkovice Steel a.s. in Czech Republic. In the steel sector, Highveld is mainly active in South Africa, with very limited exports to the EEA.
60. The only steel products where the activities of the parties overlap are carbon steel plates (flat products) and carbon steel sections (long products). Under any possible product market definition, Highveld's market share in the EEA for steel plates and steel sections is well below 1% and Evraz market share is below 15%, the transaction is thus unlikely to significantly impede effective competition in the field of finished steel products. The same applies if steel markets were to be considered global in scope.

B. Vanadium products

61. Contrary to steel products, the transaction gives rise to a number of horizontal overlaps and vertical relationships as regards vanadium feedstock, vanadium oxides and finished vanadium products. Both Evraz, directly and through Strategic Minerals, and Highveld are active at several levels of the vanadium value chain. The diagram below shows the various vanadium products affected by the transaction and the vertical relationships between the markets concerned.



1. Introduction

62. As the result of the proposed transaction, the new entity would control nearly half of the global vanadium resources currently exploited and would be vertically integrated in the entire vanadium value chain. The new entity would in particular gain a very strong position in the production and supply of vanadium feedstock, in particular in the supply of vanadium steel slag, where the Evraz and Highveld are the two major suppliers. It would also and gain a very strong position for the supply of high-purity vanadium pentoxide. At the vanadium oxides and finished products levels, the main competitors of the new entity would be Xstrata, Chinese vanadium producers, whose competitive presence in the EEA is limited, and Vanady Tula, Chusovskoy and Treibacher, which are dependent on the new entity for their feedstock supply. The majority of respondents in the vanadium industry expressed serious concerns about the competitive impact of the proposed transaction.

63. Firstly, a number of respondents to the market investigation have taken the view that the transaction would raise significant competitive concerns at all levels of the vanadium value chain and both competitors and customers have expressed serious concerns about the availability and prices of vanadium products. They have indicated that, due to its position at the upstream level, the new entity would have the ability and incentive to restrict access to vanadium feedstock resources to its downstream competitors, so as to increase the prices of finished vanadium products. The most likely markets to be affected, vanadium oxides and finished vanadium products for steel applications, represent the largest part of the global vanadium supply.

64. Secondly, market respondents have underlined that the new entity would acquire a very strong position for the supply of high-purity vanadium pentoxide and would have the ability and incentive to use its market power to reduce output or increase prices. The proposed transaction also gives rise to vertical concerns since the new entity would be at the same time the main supplier and a competitor of its downstream rivals active in the supply of vanadium chemicals and of specialty vanadium alloys for the titanium industry. The new entity would thus have the ability and the incentive to foreclose its downstream rivals on these markets to increase its market power at the downstream level.

2. *Market structure*

a) *Vanadium feedstock*

65. Vanadium feedstock production is characterized by few large vanadium feedstock producers, except for vanadium residues, and few customers. As regards vertical integration, certain large vanadium feedstock producers are to a large extent vertically integrated and process internally all their vanadium feedstock into vanadium oxides and finished vanadium products (Pangang, Chengde, Xstrata) while other producers (such as Evraz) sell vanadium feedstock to third party vanadium feedstock processors, generally on the basis of long term relationships and other producers (such as Highveld) are partially vertically integrated.

66. In 2005, the worldwide vanadium feedstock production was about 51,000 MT¹⁸, out of which the merchant market accounts for 21,000 MT. Vanadium steel slag, vanadium residues and vanadium ore respectively accounted for 51%, 21% and 28% of global vanadium feedstock production.

67. As shown in the table below, the parties accounted for [35-45]% of the global vanadium feedstock production in 2005 (Evraz: [10-20]% and Highveld: [20-30]%) and [40-50]% of global vanadium feedstock merchant sales (Evraz: [20-30]%; Highveld: [20-30]%). The remainder of the vanadium feedstock production is accounted for by two Chinese producers (Pangang, [10-20]% and Chengde, [5-10]%), Xstrata ([10-20]%), NZ Steel ([0-5]%) and various suppliers of vanadium residues.

¹⁸ All figures given in MT refer to MT of contained vanadium.

Vanadium Feedstock (all sources) - 2005 - Shares of Production

Companies	Total
Evraz total	[10-20]%
Evraz	[10-20]%
Strategic Minerals	[0-5]%
Highveld	[20-30]%
Combined	[35-45]%
Xstrata	[10-20]%
Other Europe	[0-5]%
Other America	[10-20]%
Chengde	[5-10]%
Pangang	[10-20]%
Other Chinese	[0-5]%
Other Asia	[5-10]%
New Zealand Steel	[0-5]%
Other rest of the world	[0-5]%
TOTAL	100%

Vanadium Feedstock (all sources) - 2005 - Market Shares

Companies	Total
Evraz total	[20-30]%
Evraz	[20-30]%
Strategic Minerals	[0-5]%
Highveld	[20-30]%
Combined	[40-50]%
Xstrata	[0-5]%
Other Europe	[0-5]%
Other America	[20-30]%
Chengde	[0-5]%
Pangang	[0-5]%
Other Chinese	[0-5]%
Other Asia	[10-20]%
New Zealand Steel	[5-10]%
Other rest of the world	[0-5]%
TOTAL	100%

(1) Vanadium steel slag

68. The parties accounted for [45-55]% of the global vanadium steel slag production in 2005 (Evraz: [20-30]%, Highveld: [20-30]%). They had a combined share of [80-90]% for the supply of vanadium steel slag, NZ Steel being the only other supplier with a [10-20]% market share. The main customers of the parties are Vanady Tula for Evraz and Treibacher for Highveld.

Vanadium Feedstock - 2005 - Shares of Production

Companies	Steel Slag
Evraz total	[20-30]%
Evraz	[20-30]%
Strategic Minerals	[0-5]%
Highveld	[20-30]%
Combined	[45-55]%
Chengde	[10-20]%
Pangang	[20-30]%
New Zealand Steel	[5-10]%
TOTAL	100%

Vanadium Feedstock - 2005 - Market Shares

Companies	Steel Slag
Evraz total	[40-50]%
Evraz	[40-50]%
Strategic Minerals	[0-5]%
Highveld	[30-40]%
Combined	[80-90]%
New Zealand Steel	[10-20]%
TOTAL	100%

(2) Vanadium residues

69. Vanadium residues producers include a broad range of industrial companies (crude oil refineries, power plants, other industrial applications) which produce vanadium-bearing residues as a by-product of their production processes. Vanadium residues are also recovered from spent catalysts from the chemical industry. The majority of vanadium residues are produced in America and in Asia.
70. The parties are not active in the production or the sale of vanadium residues, although Strategic Minerals is active as a customer.

Vanadium Feedstock - 2005 - Shares of Production

Companies	Residues
Evraz total	[0-5]%
Evraz	[0-5]%
Strategic Minerals	[0-5]%
Highveld	[0-5]%
Combined	[0-5]%
Other Europe	[0-5]%
Other America	[50-60]%
Other Chinese	[5-10]%
Other Asia	[30-40]%
TOTAL	100%

Vanadium Feedstock - 2005 - Market Shares

Companies	Residues
Evraz total	0%
Evraz	0%
Strategic Minerals	0%
Highveld	0%
Combined	0%
Other Europe	[0-5]%
Other America	[50-60]%
Other Chinese	[5-10]%
Other Asia	[30-40]%
TOTAL	100%

(3) Vanadium ore

71. The parties accounted for [45-55]% of the global vanadium ore production in 2005 (Evraz: [20-30]%, Highveld: [20-30]%) if only the ore production used directly for the production of vanadium oxides is taken into account (excluding the ore production for the production of steel of which vanadium steel slag is a by-product). This category of vanadium feedstock accounted for [20-30]% of global vanadium feedstock production in 2005. Besides the parties, the main producer of vanadium ore is Xstrata ([30-40]% of global production).
72. As mentioned above, there is no real merchant market for vanadium ore since it is not economical to transport and is generally processed internally by vanadium ore producers. The only merchant sale of vanadium ore is the sale by Evraz of vanadium rich iron ore to [...] [...] in 2005, accounting for around [5-10]% of global ore production).

Vanadium Feedstock – 2005 - Shares of Production

Companies	Ore
Evraz total	[20-30]%
Evraz	[5-10]%
Strategic Minerals	[10-20]%
Highveld	[20-30]%
Combined	[45-55]%
Xstrata	[30-40]%
Other Chinese	[5-10]%
TOTAL	100%

Vanadium Feedstock - 2005 - Market Shares

Companies	Ore
Evraz total	100%
Evraz	100%
Strategic Minerals	0%
Highveld	0%
Combined	100%
TOTAL	100%

b) Vanadium oxides

73. In the market for vanadium oxides, the combined market share of the parties is [10-20]% (Evraz [5-10]% and Highveld [5-10]%). The next competitors / alternative sources of vanadium oxides are Chinese exporters ([30-40%]), intra-Chinese trade ([10-20%]), followed by Vanady Tula ([10-20%]) and Xstrata ([5-10%]). The rest of the market is split between a number of smaller producers.

**Merchant Market Shares
Vanadium Oxides - 2005 (standard+ all high grades)**

Company	Sales (MT of v-content)	Market shares
Evraz (via Strategic Minerals)	[...]	[5-10]%
Highveld	[...]	[5-10]%
Combined	[...]	[10-20]%
Treibacher	[...]	[0-5]%
Vanady Tula	[...]	[10-20]%
Xstrata	[...]	[5-10]%
GfE	[...]	[0-5]%
Taiyo Koko	[...]	[0-5]%
Metaux Preciaux	[...]	[0-5]%
Windimurra *	[...]	[0-5]%
Intrachinese trade *	[...]	[10-20]%
Chinese exporters *	[...]	[30-40]%
TOTAL	[...]	100,0%

(*) Based on parties' estimates

c) Finished vanadium products

(1) Vanadium for steel applications

74. If all vanadium for steel applications is considered as a relevant product, the parties' combined global market share in 2005 would be [10-20]% (Strategic Minerals [5-10]% and Highveld [5-10]%).

Merchant Market Shares
Ferro-vanadium – 2005

Company	Sales	Market share
Evraz (Strategic Minerals)	[...]	[5-10]%
Highveld	[...]	[5-10]%
SAJV	[...]	[0-5]%
Combined	[...]	[10-20]%
Treibacher	[...]	[5-10]%
Vanady Tula	[...]	[5-10]%
Nikom	[...]	[0-5]%
Chusovskoy *	[...]	[5-10]%
Taiyo Koko	[...]	[0-5]%
Xstrata	[...]	[5-10]%
Metallurg Vanadium Corp	[...]	[0-5]%
GfE	[...]	[0-5]%
Bear Gulf *	[...]	[0-5]%
Chengde *	[...]	[0-5]%
Essel Mining *	[...]	[0-5]%
Full Yield *	[...]	[0-5]%
Masteralloy *	[...]	[0-5]%
Pangang *	[...]	[10-20]%
Shieldalloy *	[...]	[0-5]%
Shinko *	[...]	[0-5]%
Other Chinese *	[...]	[0-5]%
Others (Korea mainly) *	[...]	[0-5]%
TOTAL	[...]	100%

(*) Based on Parties' estimates

(2) Vanadium chemicals

75. As regards the narrowest product market definition, the parties have not been able to provide market shares on the basis of product markets by type of vanadium chemicals as there are no market data available for vanadium chemicals.
76. Out of the twelve main vanadium chemicals, the parties' activities however only overlap for two chemicals: high-purity vanadium pentoxide (Strategic Minerals: [...] MT and Highveld: [...] MT, production and sales in 2005) and ammonium metavanadate (Strategic Minerals: [...] MT and Highveld: [...] MT, production and sales in 2005). While the parties are not aware of the global market size for high-purity vanadium pentoxide and ammonium metavanadate, they submit that there are many other competitors such as Xstrata, GfE, Shinko, Full Yield, Silver Eagle or Bear/Gulf.

Parties' vanadium chemicals sales (MT of vanadium content) - 2005

Vanadium Chemical	Evraz (Strategic Minerals)	Highveld
High-purity vanadium pentoxide	[...]	[...]
High-purity vanadium trioxide	[...]	[...]
Ammonium metavanadate	[...]	[...]
Vanadyl sulfate	[...]	[...]
Vanadyl oxalate	[...]	[...]
Vanadium oxytrichloride	[...]	[...]
Vanadium titanium chloride	[...]	[...]
Vanadium tetrachloride	[...]	[...]
Sodium Ammonium vanadate	[...]	[...]
Potassium metavanadate	[...]	[...]
Sodium metavanadate	[...]	[...]
Ammonium polyvanadate	[...]	[...]

77. The table below shows the market structure based on the information gathered during the Commission's market investigation for high-purity vanadium pentoxide:

High-purity V2O5 - 2005 *

Company	Production capacity	Production	Spare capacity	Sales	Market share
Evraz (Strategic Minerals' facilities at Hot Springs - USA)	[...]	[...]	[...]	[...]	[40-50]%
Highveld (Vanchem site - South Africa)	[...]	[...]	[...]	[...]	[30-40]%
Combined	[...]	[...]	[...]	[...]	[70-80]%
GfE	[...]	[...]	[...]	[...]	[10-20]%
Taiyo Koko	[...]	[...]	[...]	[...]	[0-5]%
Metaux Preciaux	[...]	[...]	[...]	[...]	[0-5]%
Treibacher	[...]	[...]	[...]	[...]	[0-5]%
Total	[...]	[...]	[...]	[...]	100%

(*) [Certain companies not included in the calculation of the market structure]. In any case, there are no indications that these companies are big producers of high-purity vanadium pentoxide and therefore the combined market share obtained for the parties is considered to be a good estimate. Other market participants have estimated that the combined market share of the parties is around or above 70%.

78. The parties would have a global combined market share of [70-80]% for high-purity vanadium pentoxide (Evraz [40-50]%, Highveld [30-40]%). This estimate is also

consistent with the view of certain market respondents which estimated the market shares of the parties to be within this range. The remaining competitors are GfE ([10-20]%) and smaller players (Treibacher, Taiyo Koko and Métaux Précieux) with market shares below 5%.

79. As regard the wider market for vanadium chemicals, the parties have not been able to provide any sensible estimate either of the market size or of the market shares of the various market participants. The market investigation has not provided enough data either as to allow the Commission to reconstruct the market structure with a sufficient degree of accuracy. In any event, the main overlap between the parties takes place for high-purity vanadium pentoxide, and since the remedies offered (by removing the overlap for all vanadium chemicals) resolve the identified competition concerns for this narrower market and indeed any alternative markets for vanadium chemicals, it is not necessary to assess the impact of the merger at the level of each of the individual vanadium chemicals.

(3) Specialty vanadium alloys

80. The transaction will not lead to any horizontal overlap in this market. According to the parties, there are only two big competitors in this market: Evraz with [40-50]% market share and Reading Alloys (USA) which also accounts for [40-50]%. However, the market investigation has given some indications that, at global level, the parties' combined market share could be smaller. The investigation shows the following figures: Reading Alloys [30-40]%, Evraz [20-30]%, UralRedmet [20-30]% and GfE [10-20]%

Specialty Vanadium Alloys for the Titanium Industry - 2005

Company	Production capacity	Production	Spare capacity	Sales	Market share
Evraz (Strategic Minerals)	[...]	[...]	[...]	[...]	[20-30]%
Highveld	0	0	0	0	0,0%
Combined	[...]	[...]	[...]	[...]	[20-30]%
Reading Alloys	[...]	[...]	[...]	[...]	[30-40]%
GfE	[...]	[...]	[...]	[...]	[10-20]%
UralRedmet	[...]	[...]	[...]	[...]	[20-30]%
TOTAL	[...]	[...]	[...]	[...]	100%

3. *Impact on competition*

a) Market for the supply of vanadium slag / vanadium feedstock

81. Although the merger will combine the two largest suppliers of vanadium steel slag, the Commission considers that a number of characteristics of the market eliminate the risk of competition concerns for the supply of vanadium steel slag. First, the Commission's investigation has shown that the supply of vanadium steel slag cannot be considered as a merchant market. There are only three suppliers to third parties of vanadium steel slag globally (Evraz, Highveld and New Zealand Steel) and three main customers (Vanady Tula, Chusovskoy and Treibacher). New Zealand Steel sold around [...] MT of vanadium steel slag in 2005, accounting for [10-20]% of the supplies of vanadium steel slag. The two large Chinese (Pangang and Chengde) producers of vanadium steel slag are vertically integrated and use their entire vanadium steel slag production internally to produce vanadium oxides. Each of the three customers has a long-term supply relationship with a

single vanadium slag producer. Vanady Tula has been sourcing vanadium slag from Evraz since the Soviet period and Treibacher has sourced slag from Highveld since [...]. These long-term relationships are almost equivalent to vertical integration.

82. The production facilities of these purchasers of vanadium steel slag appear to be specifically adapted to the vanadium steel slag of their long-term suppliers. [...]. Treibacher also indicated that, contrary to Highveld, Evraz's slag is not ground and Treibacher would have to invest into a grinding circuit (grinding mill, dust collection and particle sizing equipment) to process Evraz vanadium steel slag. The parties estimate that the cost of such grinding circuit would be around USD 5 millions¹⁹.
83. Although [...] ²⁰ [...] ²¹. For these reasons, pre-merger Evraz and Highveld cannot be considered as competitors for the supply of vanadium steel slag.
84. Secondly, the existence of these long-term relationship results in a mutual interdependence between vanadium steel slag producers and customers of vanadium steel slag. Since Evraz and Highveld produce vanadium steel slag as a by product of their steel operations, they cannot reduce the production of slag and have to sell at least part of it to third parties for further processing as they do not have sufficient processing capabilities to process it all. Vanadium steel slag is a material that cannot be stored in large quantities over a long period. Vanadium steel slag is classified as a Medium Dangerous Substance in Russia and its handling, transportation and storage must be carried out under certain technical conditions. According to the parties²², Evraz in general does not store slag for longer than [...].
85. Thirdly, it should be pointed out that the price of vanadium steel slag is generally determined by reference to the prices of standard vanadium pentoxide or ferrovanadium quoted on the London Metal Bulletin ("LMB"), which restricts the new entity's ability to increase vanadium steel slag prices unilaterally. Furthermore, vanadium steel slag, vanadium residues and vanadium ore are, although they may belong to distinct product markets, used to produce the same type of finished vanadium products, which creates a competitive constraint on the price of vanadium steel slag.
86. As regards Treibacher, the contract between Highveld and Treibacher is [...]. This provides Treibacher with contractual guarantees on its continued access to vanadium steel slag on the same terms as at present.
87. The possibility for the new entity to redirect Evraz slag supply for internal use in Highveld downstream oxides facility, which is a vertical issue, is discussed below in the section on vertical foreclosure. Finally, it should be noted the effects of any potential distortion in the supply of vanadium steel slag should be assessed at the level of downstream markets for the supply of vanadium oxides and finished vanadium products. The remedies proposed by the parties to address the overall competition markets in these

¹⁹ E-mail of the parties of 16/02/2007.

²⁰ Treibacher has in fact a toll-conversion agreement with Hochvanadium, a subsidiary of Highveld [...].

²¹ [...].

²² Evraz's confidential responses to Commission Request for Information of 05/02/2007.

markets will however ensure that these markets will remain competitive after the proposed transaction.

88. To conclude, except potential vertical issues related to the presence of the new entity on the downstream markets, the Commission takes the view that the proposed operation does not give rise to horizontal competition concerns for the supply of vanadium steel slag. As regards vanadium residues and vanadium ore, the proposed transaction does not give rise to any overlap between the parties in terms of sales.

b) Market for the supply of vanadium chemicals / high-purity vanadium pentoxide

89. As vanadium chemicals, the combined market share of the parties for the supply of high-purity vanadium pentoxide would reach around [70-80]% after the transaction.

90. The market investigation has indicated that such market share would give rise to both horizontal issues, by increasing the market power of the merger entity, and vertical issues since the parties are also active on the downstream markets for the supply of vanadium chemicals. The majority of respondents to the market investigation on these markets expressed concerns that the new entity would have the ability and incentive to foreclose their downstream competitors by reducing supplies and raising their costs.

91. The following table shows the market shares of the main players and an indication of the estimated spare production capacity²³:

High-purity pentoxide – 2005

Company	Production capacity	Production	Spare capacity	Sales	Market share
Evraz (Strategic Minerals' facilities at Hot Springs - USA) **	[...]	[...]	[...]	[...]	[40-50]%
Highveld (Vanchem site - South Africa) ***	[...]	[...]	[...]	[...]	[30-40]%
Combined	[...]	[...]	[...]	[...]	[70-80]%
GfE	[...]	[...]	[...]	[...]	[10-20]%
Taiyo Koko	[...]	[...]	[...]	[...]	[0-5]%
Metaux Preciaux	[...]	[...]	[...]	[...]	[0-5]%
Treibacher	[...]	[...]	[...]	[...]	[0-5]%
Total	[...]	[...]	[...]	[...]	100%

²³ As already indicated in section B.2.c.2, [certain companies not included in the calculation of the market structure]. However since other market participants have estimated that the combined market share of the parties is around or above 70% and there are no indications that these companies are big producers of the size of the parties for the production of high-purity vanadium pentoxide, the combined market share obtained for the parties is considered to be a good estimate.

92. In view of the limited number of alternative suppliers and given their constraints in terms of production capacity (the spare capacity owned by the competitors is around [...] MT, representing around [10-20]% of the estimated market size, customers of high-purity vanadium pentoxide such as chemical companies and catalyst manufacturers would not be able to find alternative suppliers to the parties. In most of these end applications, the performance of the final chemical products is very dependent on the exact composition of the vanadium oxides and these customers cannot use standard vanadium oxides.
93. The operation is therefore likely to impede effective competition on the market for the supply of high-purity vanadium pentoxide, as the result of the horizontal overlap between Strategic Mineral and Highveld, and on the downstream market for the supply of vanadium chemicals (see recital 39), . The concentration thus raises serious doubts about its compatibility with the common market and the EEA agreement as regards the supply of high-purity vanadium pentoxide and vanadium chemicals.

c) Vertical foreclosure for vanadium oxides and finished vanadium products

94. A number of respondents expressed serious concerns as regards the impact of the proposed transaction throughout the vanadium value chain. These market players indicated that the new entity's control over 40/50% of the vanadium feedstock resources would negatively affect effective competition on all downstream vanadium markets, both at the level of vanadium oxides and finished vanadium products.
95. More specifically, certain respondents considered that the new entity would have the ability and incentive to foreclose those of its competitors at the oxide and finished product levels it supplies with vanadium feedstock. This would negatively affect their ability to compete with the parties at these downstream levels. Certain respondents considered that the parties would redirect their production flow of vanadium products, thereby reducing access to vanadium feedstock to third parties and increasing their market share at the downstream levels. Finally, the concern was voiced that the new entity would be in a position to reduce the global vanadium supply in certain circumstances and would gain control over the finished vanadium products prices in this way.
96. The Commission assessed the possibility and likelihood of such scenarios, as well as their impact on effective competition at the downstream levels of the vanadium value chain. The Commission also reviewed an economic study presented by LECG for the parties showing that the parties would not have an economic interest in reducing global vanadium supplies to increase prices.

(1) Ability to foreclose downstream vanadium competitors

97. As indicated above, the new entity would control [40-50]% of the vanadium feedstock production in 2005, allowing it to significantly reduce the global vanadium feedstock production, with a view to tighten the downstream vanadium markets and increase standard vanadium pentoxide and ferrovanadium prices.
98. At the feedstock level, Evraz and Highveld produce vanadium steel slag as a by-product of their steel operations (Evraz: [...], Highveld: [...]). Evraz also directly produces and

sells iron/vanadium ore to third parties ([...]) while Strategic Minerals also produces iron/vanadium and Highveld produces ore for their internal consumption (Strategic Minerals: [...] and Highveld: [...]).

99. According to the parties, Evraz and Highveld production of vanadium steel slag cannot be reduced since it is driven by the companies' steel production. In addition, Evraz and Highveld have a number of supply commitments for vanadium steel slag or vanadium oxides, which would prevent them from reducing vanadium feedstock output. In particular, Highveld has a commitment to supply SAJV with vanadium oxides for conversion into ferrovanadium and marketing by the Japanese joint venture partners, which represents [...]% of Highveld's total oxides production (around [...] MT). In addition, Highveld is party to a long-term supply agreement with Treibacher, [...]. Highveld's current supplies of vanadium slag amount to approximately [...] MT of vanadium. The new entity's ability to reduce the vanadium feedstock output of Strategic Minerals (ore production) is also limited since Strategic Minerals is only [70-80]% owned by the new entity.
100. The Commission's investigation has however shown that the new entity would have the ability to reduce its production of vanadium feedstock in several ways, which could potentially be combined. As regards Evraz, it should first be noted that, although Evraz has a long-term relationship with Vanady Tula and Chusovskoy, the actual vanadium steel slag supply agreements with these third parties are short-term agreements, which both expire on [...]. In addition, the ore and slag supply agreements with Chusovskoy do not specify any minimum quantities to be delivered. This means that, while Evraz may not be able to reduce significantly its vanadium slag production, it could potentially stop supplying Vanady Tula and Chusovskoy after [...].
101. Evraz also directly sells vanadium / iron ore to Chusovskoy pursuant to a supply agreement expiring on [...] and could decide not to renew this contract. As regards Highveld, the investigation has shown that it could reduce its production of vanadium ore, as long as it can meet its supply commitments vis-à-vis SAJV and Treibacher. Strategic Minerals could also potentially decrease its production of vanadium ore subject to producing sufficient vanadium oxides and finished vanadium products to fulfil its supply commitments. In order to tighten the vanadium markets, Evraz, Strategic Minerals and Highveld could also delay their vanadium feedstock or vanadium processing plant expansion plans as far as vanadium ore is concerned.
102. In combination with the various possibilities to reduce global vanadium feedstock production, the new entity would also have the ability to reduce access to vanadium feedstock or increase vanadium feedstock prices to third-party vanadium feedstock processors. Since the supply agreements with Vanady Tula and Chusovskoy end on [...] and instead of not renewing these contracts, the new entity could decrease the vanadium feedstock volumes supplied to these companies or impose higher prices for these vanadium feedstock supplies. The new entity would have the ability to increase its level of vertical integration by using internally the vanadium feedstock resources that were previously sold to third-parties. The new entity would indeed have the capability to process internally part of this vanadium steel slag, in particular in Highveld's Vanchem oxide plant, which can use both vanadium ore and vanadium slag.

103. The new entity could even possibly impose toll-manufacturing agreements to Vanady Tula and Chusovskoy since these two companies would not have any alternative supplier for vanadium steel slag or vanadium ore for Chusovskoy.
104. As regards Treibacher, the new entity would have less flexibility to modify the terms and conditions of the feedstock supply. [...]. All these scenarios show that the new entity would be in a position to foreclose its downstream rivals which do not have access to adequate vanadium feedstock resources.
105. The parties submitted that the new entity would not be in a position to divert Evraz's vanadium steel slag production since it would not have the capability to process this vanadium steel slag internally. This argument should be mitigated for the following reasons. First, in 2005, Highveld's Vanchem plant had a processing capacity of [...] MT of vanadium per year and produced approximately [...] MT, leaving a spare capacity of [...] MT. The use of this spare capacity for processing vanadium slag into oxides (which can be easily transported and stores) would represent around [...] % of Evraz's current sales of vanadium slag. Second, the new entity could in addition reduce the iron/vanadium ore production at Highveld's Mapochs mine so as to free up additional vanadium processing capacity.

(2) Incentive to foreclose downstream vanadium competitors

106. The objective of these strategies would primarily be to restrict the global production of vanadium feedstock by removing part of the new entity's feedstock production. This lower production of vanadium at the upstream level would obviously negatively affect the availability on the merchant market of standard grade vanadium pentoxide and ferrovanadium, the two vanadium products quoted on the LMB. By affecting the balance between supply and demand of these two products, the new entity would be able to increase prices at all levels of the vanadium value chain, since these products are generally sold by reference to the standard vanadium pentoxide or the ferrovanadium price. In view of the large share of the new entity in the production of vanadium, the losses it would incur by reducing its vanadium feedstock production would in all likelihood be more than compensated by the additional margins on the sale of other vanadium products. The trade-off of this strategy is discussed in more detail in the assessment of the LECG study below.
107. Finally, as underlined by certain respondents to the market investigation, vanadium steel slag is generally considered as the most attractive vanadium feedstock since it has a higher proportion of vanadium and fewer impurities than vanadium residues or vanadium ore and is cheaper to process into vanadium oxides. The new entity would thus have an economic incentive to substitute to the maximum extent possible the internal consumption of vanadium ore by vanadium steel slag for the production of vanadium oxides²⁴. In addition to reducing global vanadium feedstock production, this strategy would also benefit to the new entity as it would enable it to foreclose its downstream rivals, distort competition and gain market share at the level of vanadium oxides and finished vanadium products.

²⁴ According to the parties (e-mail of 19/02/2007), Highveld's Vanchem plant can currently use up to around [...] MT of vanadium steel slag as feedstock and this volume could be increase with minor investments.

108. The parties submitted that the new entity will not have the incentive to reduce its vanadium steel slag output as the result of the merger, since it would require a reduction in the production of steel, vanadium steel slag being a by-product of the steel production process. The profit foregone by the new entity with the reduction of their steel production could not be compensated by an increase in global vanadium prices. This argument is not valid since, as explained above, the new entity could reduce the global vanadium feedstock production essentially by reducing its vanadium ore production while maintaining vanadium steel slag production levels.
109. It should be noted that the new entity's ability and incentive to reduce the global production of vanadium feedstock and foreclose its downstream rivals results directly from the proposed operation. Firstly, before the proposed transaction, Evraz had only access to the downstream vanadium processing facilities of Strategic Minerals, which it does not control entirely, while it will have complete access to Highveld's processing facilities in South Africa post-transaction. Secondly, by combining the vanadium products sales of Evraz and Strategic Minerals on the one hand and Highveld's on the other hand, the proposed transaction will double the total vanadium products sales of the new entity and thereby significantly increase the profits it would earn from higher vanadium prices.
110. To conclude, the Commission's investigation has shown that the new entity's strong position on the market for vanadium feedstock would allow it to reduce the global production of vanadium feedstock, restrict the availability of vanadium feedstock to non-integrated vanadium processors and raise their production costs. The new entity is also likely to have the incentive to carry out such strategies to tighten the balance between vanadium supply and demand, increase reference vanadium prices and foreclose its downstream rivals.

(3) Effect on competition

111. As discussed above, the strong market position of the new entity in the production of vanadium feedstock in general and of vanadium slag in particular gives rise to vertical competition concerns on the vanadium oxides and finished products markets. The strategic behaviour described above would significantly affect Vanady Tula, Chusovskoy and Treibacher, which have significant combined market shares on the vanadium oxides and finished vanadium product markets.
112. The new entity's strategy to reduce global vanadium production and foreclose its downstream rival would thus impede effective competition on the markets for the supply of standard vanadium oxides, vanadium for the steel industry (ferrovanadium and vanadium combined with nitrogen) and speciality vanadium alloys. The impact of these strategies on effective competition in each of these markets is discussed in turn.

(a) Vanadium oxides

113. As regards vanadium oxides, the new entity would have at global combined market share of [10-20]% and would have a significant influence on the competitive behaviour of Vanady Tula ([10-20]%) and Treibacher ([0-5]%). If domestic sales between Chinese suppliers are excluded from the global vanadium oxides market, the new entity and the vanadium oxides it supplies would have a global market share of 40%, the two remaining competitors being Xstrata ([5-10]%) and Chinese exports ([40-50]%). This means that any foreclosure strategy of the new entity, which would weaken the competitiveness of

Vanady Tula and Treibacher would affect a significant share of the vanadium oxides market. In addition, it is worth noting that the competitive constraint exercised by Chinese exports of vanadium oxides may decrease in the future, in view of the Chinese policy to restrict exports of vanadium products, such as ferrovandium.

(b) Ferrovandium

114. The impact is also straightforward in the downstream market for ferrovandium, where Vanady Tula, Chusovskoy and Treibacher are significant players. At the global level, the market share of the new entity would be [10-20]%²⁵ and the three companies mentioned above, which are supplied by the new entity for a significant share of their vanadium feedstock needs, would have a combined market share of [20-30]% (Vanady Tula: [5-10]%, Chusovskoy: [5-10]% and Treibacher: [10-20]%), The total market share of the new entity and ferrovandium producers dependent upon the new entity would thus amount to around 40%, the remaining competitors being Xstrata ([5-10]%) and the Chinese company Pangang ([10-20]%).

115. The market investigation has however shown that Chinese ferrovandium producers had a weak presence outside of China and that the newly introduced export duties and the potential introduction of a licensing regime would further restrict the competitive constraint they exert outside of China. Thus, if the sales of Chinese producers are excluded, the market shares of the new entity and the producers it supplies with feedstock would be respectively [10-20]% and [30-40]%, giving a total of [45-55]%, which amounts up to [50-60]% if [name of a company] is also considered²⁶. The only major competitor would be Xstrata with a [10-20]% market share. It thus clear that a foreclosure strategy implemented by the new entity would negatively affect effective competition for the supply of ferrovandium since it will restrict the competitiveness of oxides suppliers accounting for nearly half of the sales outside of China.

(c) Specialty vanadium alloys

116. As regards specialty vanadium alloys, there are four main competitors (Reading Alloys, Strategic Minerals, Uralredmet and GFE) and two of them (Reading Alloys and Uralredmet) would source part of their vanadium oxides needs from the new entity (Reading Alloys:[30-40]% of its purchases from Highveld, and UralRedmet [5-10]% from Evraz). The other main vanadium oxides supplier of specialty vanadium alloys producers is Xstrata, which supplies the majority of [...] and [...] needs. Reading Alloys also sources vanadium oxides from [...].

117. Certain of these market players expressed concerns about the availability and pricing of standard grade vanadium oxides suitable for the production of speciality vanadium alloys. In particular, it was felt that the new entity could use its vertical integration and its access to vanadium resources to negatively affect competition and squeeze non-integrated speciality vanadium alloy producers. These concerns are consistent with the above conclusion that the new entity output restriction and foreclosure strategy would impede

²⁵ Including ferrovandium sales made through SAJV.

²⁶ [Explanation of why this company should also be considered].

effective competition at the level of vanadium oxides. Such effect would necessarily be seen at the specialty vanadium oxide level as well.

118. In view of the above, it can be concluded that the above mentioned strategies would allow and provide the incentive to the new entity to foreclose important players at the vanadium oxides and finished vanadium products levels. This would necessarily impede effective competition on these markets.

(4) LECG study

119. The parties presented to the Commission an economic study prepared by LECG²⁷ purporting to show that it would not be profitable for the new entity to reduce their production of vanadium feedstock to raise vanadium pentoxide and ferrovanadium prices. The LECG study focuses on the potential effect of a reduction in output on the ferrovanadium market, since any harm to vanadium consumers would be felt at this level. The study is based on data from CRU²⁸ on the structure of the vanadium markets.

120. CRU has extensive contacts in the vanadium industry worldwide and has developed a supply and demand model. CRU vanadium supply forecast are based on the existing vanadium production, announced capacity expansions and planned greenfield operations. Demand forecasts are to a large extent based on forecast on the production of steel and estimates of the proportion of steel products which require the addition of vanadium. CRU also closely follows vanadium pentoxide and ferrovanadium quotations and has assembled an extensive price data base.

121. CRU considers that the global market for the supply of vanadium is broadly balanced at the beginning of 2007 and that 2008 and 2009 will be characterized by a certain degree of over supply as the large Windimurra project will come on stream in Q4 2007 and brownfield expansions will be completed. Ferrovanadium prices would thus continue to decrease to return on the long-term trend of [...]. Given the absence of other major projects in the period, supply and demand will progressively become balanced by 2009 and the market may even become tight in 2010 since vanadium demand continues to grow in line with the growth of global steel consumption. This scenario is the base case scenario established by CRU, which is taken as a reference point for the LECG study.

122. The starting point of the LECG study is that to raise ferrovanadium prices by respectively 5% or 10%, the new entity would have to reduce its vanadium output by [...] and [...] MT. These figures have been estimated by CRU based on their knowledge of the vanadium industry and their views on the supply and demand-side response to such output reduction from the parties. They are not supported by any quantitative modelling of supply and demand side elasticities and empirical evidence.

123. The LECG study estimates the profits lost by the new entity on the sales of vanadium products it would withdraw from the market and the profits gained by the new entity on its remaining sales of vanadium products due to higher vanadium prices. This calculation

²⁷ LECG is a global expert services firm that provides expert analysis, testimony, authoritative studies, and strategic advisory services to clients around the world.

²⁸ CRU is a global editor of metals and mining industry reports, which provides in particular consultancy services in the vanadium industry.

takes into account the new entity's share of the profit obtained on vanadium product sales of Strategic Minerals ([...]%) and SAJV ([...]%). The study also discusses which types of vanadium products the new entity would most likely stop producing and selling (vanadium ore from Highveld).

124. The Commission has reviewed the data provided by CRU and the LECG study and considers that the study fails to show that the new entity would not have the incentive to reduce output to benefit from high prices. In particular, the Commission takes the view that it is very difficult to estimate the volumes that the new entity would need to withdraw from the market to reach a given price increase, given the uncertain grounds on which the price estimates are based on. The new entity would also certainly not have the incentive to withdraw fixed large quantities of vanadium products from the market from one day to another. On the contrary, a strategy to reduce progressively its vanadium output by a volume just sufficient to maintain a small tightness on the market would maintain vanadium prices close to their current high levels and would at the same time discourage new entries, more likely to take place in a huge lack of supply scenario. The analysis made by CRU and LECG also relies on a number of assumptions as to the reaction of supply and demand to a potential output reduction of the parties. The Commission's market investigation has shown that a number of these assumptions can be questioned.
125. First, as regards the response of vanadium supply to a potential reduction in output of the new entity, the Commission notes that it is difficult for most vanadium producers to expand rapidly output. In the short term, although vanadium prices have fallen from their peak in 2005, they are currently well above the long-term trend and the long term forecast prices. This suggests that vanadium producers' capacity utilisation remains high and most marginal sources of vanadium raw material have already been exploited. This is also consistent with the evolution of the levels of stock since 1999. While stock levels increased from [...] MT of ferrovanadium to a peak [...] MT at the end of 2005, they have decreased since then to their lowest level over the period, [...] MT.
126. In the longer-term, to increase output of vanadium products it is necessary to secure a source of vanadium feedstock. Although vanadium is a fairly common element, exploitable sources are rare. Supplies of vanadium steel slag and vanadium residues cannot easily be increased since these materials are produced as by-products of other industrial processes. It is not economic to increase steel production just to produce vanadium bearing slag. The production of vanadium slag is related to the production and thus the demand for steel. Similarly, the volume of residues available depends on other industrial processes (power stations, petrochemical plants, and used catalysts).
127. It seems likely that additional vanadium feedstock would have to originate from vanadium ore. Developing new mines and vanadium oxide plants is however a lengthy and expensive process. The evidence is that, apart from the Windimurra project in Australia, expected to start in Q4 2007 and to produce 5,000 MT per year, none of the current vanadium-ore based projects indicated by the parties as future entries will be realised in the foreseeable future despite the current high vanadium prices. The Balla Balla project in Australia, which is the only other large-scale vanadium project identified by CRU, is expected to proceed in two stages and only the first stage of the project, the development of an iron ore mine to supply China, will be operational in a reasonable time frame. It also should be noted that much of the planned increase in capacity is in China where the growth in consumption is highest than demand, in particular due to the strong demand in the steel industry. According to CRU, China, which has been a net exporter

until now, will even become a net importer of finished vanadium products by 2008. For these reasons, it is unlikely that a reduction in output from the new entity would induce a supply-side response in the short to medium term.

128. As regards the demand-side, the parties have submitted that ferrovanadium can be substituted almost completely by ferroniobium and would thus be constrained by ferroniobium prices. This substitution is also considered by CRU and LECG as a major competitive constraint on ferrovanadium prices.

129. This is not born out by the Commission's investigation. Firstly Highveld itself, at seminars for ferrovanadium users, has stated that substitution is not possible. This view is supported by a majority of European steel makers who responded to the market investigation confirming that there are limited or no possibilities for substitution by ferroniobium in most of the steel end applications that use vanadium. Secondly, it appears that the possible substitution of ferrovanadium by ferroniobium may have already taken place. There was a special situation in China where niobium replaced vanadium in rebars for the construction industry in 2005; however this substitution appears to have reached its limits. In fact CRU itself considers that *"Significant substitution is not expected [...]"* and *"However we expect vanadium intensity of use in China to return to historic levels of growth in 2007/8. We do not expect significant substitution in other regions."*²⁹

130. The Commission therefore considers that the study put forward by the parties to support their case is not conclusive. First, the study does not demonstrate that the new entity would not have an economic incentive to gradually reduce vanadium output and replace vanadium ore by vanadium slag in their operations in order to maintain a tight situation on the ferrovanadium market. Second, the claim that the parties would have to withdraw the equivalent of [...] or [...] MT of vanadium to achieve 5% and 10% increases in prices does not appear to reflect the market functioning. Timely supply-side response seems unlikely and the study appears to have exaggerated the likely effects of substitution by niobium.

(5) Conclusion

131. The concentration thus raises serious doubts about its compatibility with the common market and the EEA agreement as regards the supply of vanadium oxides and finished vanadium products.

VI. ASSESSMENT OF REMEDIES

A. Procedure

132. As explained in the Commission notice on remedies³⁰, where a concentration raises serious doubts about its compatibility with the common market, the parties may seek to modify the concentration in order to resolve the competition concerns identified by the Commission.

²⁹ [...]

³⁰ Commission Notice on remedies acceptable under Council Regulation (EEC^o No 4064/89 and under Commission Regulation (EC) No 447/98.

133. In order to address the competition concerns identified by the Commission stemming from the proposed transaction, the parties submitted remedies on 2 February 2007. The remedies consisted of the parties' commitments to divest the Highveld's Vanchem vanadium chemicals plant located in South Africa, to maintain its current supply obligations under the current agreement between Hochvanadium and Treibacher and to supply vanadium steel slag to Vanady Tula and steel slag and ore to Chusovskoy for a period not less than [...].
134. On 14 February 2007, the parties submitted revised remedies. In the new remedies, Evraz proposed to divest Highveld's vanadium business including Highveld's vanadium extraction (either), oxides and vanadium chemicals production facilities located at the Vanchem site and Highveld's ferrovanadium smelter located at the site of Highveld's iron and steel operations. In addition, Evraz committed to divest an equity interest in - or the divestiture of - a discrete part of Highveld's Mapochs mine and Highveld's entire shareholding in SAJV, which is a joint venture between Highveld and Nippon Denko Co, Limited and Mitsui & Co. Ltd. Finally, Evraz committed to maintain the existing feedstock supply relationships with Vanady Tula, Chusovskoy and Treibacher.
135. The Commission has assessed the revised remedies and has concluded that the divested businesses constitute an independent and economically viable entity able to compete effectively on the markets for vanadium oxides and ferrovanadium. The Commission concludes after its assessment and market test that the remedies, as revised on 14 February 2007, are sufficient to remove the competition concerns brought about by the proposed transaction.

B. Description of the remedies

136. The revised remedies proposed by the parties on 14 February 2007 comprise (i) the divestment of Highveld's vanadium business combined with either an equity interest in or full-ownership in a discrete part of Highveld's Mapochs mine (the "divested business"), (ii) the divestment of Highveld's 50% shareholding in SAJV (the "divested shareholding") and (iii) the commitment of the parties' to enter into long-term supply agreements with Treibacher, Vanady Tula and Chusovskoy (together "the supply commitments").

1. The divested business (Highveld's vanadium business and Mapochs mine)

137. The divested business includes Highveld vanadium chemicals and vanadium oxides plants located in Witbank, South Africa (together "Vanchem plants"), as well as Highveld smelter located on Highveld's iron and steel operations site and the equity interest or ownership of a discrete part of the Mapochs mine.
138. The Vanchem plants are located at Ferrobanm (Witbank), and comprise four production units and services departments with around [...] employees. The production units are the following:
- The vanadium extraction facilities;
 - The vanadium oxides production facilities for the production of standard vanadium pentoxide and trioxide;

- The chemicals plant for the production of high-purity pentoxide and other vanadium chemicals (ammonium metavanadate, sodium ammonium vanadate and potassium metavanadate);
- The ferrovanadium smelter, located at the site of Highveld's iron and steel operations, using vanadium trioxide for the production of ferrovanadium and vanadium with nitrogen.

139. The divested business includes the main pieces of equipment required for operating each of the production units and all other facilities, machinery and equipment located at the Vanchem site and at Highveld's ferrovanadium smelter. It also includes all intangible assets necessary for the development, production, servicing and sale of the products manufactured at the Vanchem plants.

140. As regards the Mapochs mine, it is located in the Bushveld Complex, which is body of rock that consist of layers of ore bodies with an extension of around 70,000 km². The Bushveld complex is exploited by various mining companies. Highveld exploits at its Mapochs mine the vanadium-bearing titaniferous magnetite layer of the ore body. The mining method used is surface and open pit mining.

141. Evraz commits to divest an undivided equity interest in the Mapochs mine, determined as a percentage of the current total capacity of the Mapochs mine and sufficient to cover the divested business' feedstock input needs up to the Vanchem plants' current capacity.

142. The Purchaser will be entitled to obtain the mine's output up to its equity interest, in the form of ore at a price linked to the price for iron ore fines FOB Australia, or in the form of ore and vanadium steel slag (supplied by Highveld from its steel operations) up to the current proportion of slag/ore used at the Vanchem plants at a price linked to the price for ferrovanadium as quoted by Metal Bulletin. The Purchaser will also have a priority right over the ore output of the Mapochs mine up to the Vanchem plants' current capacity so that any reduction in the mine's output will not affect the Purchaser's ability to obtain the quantities of vanadium ore required.

143. Alternatively, and at the option of the Purchaser, instead of divesting an interest in the mine, Evraz commits to divest an equivalent portion of the Mapochs mine to the Purchaser. The mine portion would constitute a discrete portion of the Mapochs mine, suitable for the extraction of vanadium ore and with similar ore quality and development opportunities as the rest of the mine.

2. The divested shareholding (50% of SAJV)

144. The divested shareholding is Highveld's 50% shareholding in SAJV. The remainder of the shares in SAJV are held by Nippon Denko Co. Limited ("Nippon Denko") (40%) and Mitsui & Co., Ltd. ("Mitsui") (10%) of Japan.

145. Highveld, Nippon Denko and Mitsui jointly control SAJV, pursuant to the terms of a shareholders' agreement between the three shareholders, concluded in 2002 (the "Shareholders Agreement"). [...].

146. SAJV owns a ferrovanadium smelter which is located at the site of Highveld's iron and steel operations and transforms vanadium pentoxide supplied by Highveld into

ferrovanadium. [...]. Post-divestment, Highveld vanadium oxides supply obligations to SAJV will remain in place and the Purchaser of the Divested Shareholding will have to assume these supply obligations.

3. The supply commitments

a) Supply commitment to Treibacher

147. Evraz commits to maintain the existing vanadium steel slag supply relationship between Highveld and Treibacher and not to modify or discontinue this relationship. [...]. The existing supply contact between Highveld and Treibacher can only be terminated under clearly defined restrictive terms and conditions, which will not be affected by the operation. [...].

148. In addition, the supply commitment to Treibacher specifies that Evraz commits not to proceed to the voluntary liquidation of Hochvanadium.

b) Supply commitment to Vanady Tula and Chusovskoy

149. Evraz commits to enter into long-term supply agreements (between [...]) with Vanady Tula and Chusovskoy to provide them with at least as much vanadium-containing steel slag as Evraz currently supplies to them, on terms and conditions similar to those currently in force, unless otherwise agreed with Vanady Tula or Chusovskoy. This commitment is subject to Vanady Tula and Chusovskoy entering into reciprocal commitments to purchase, for a period of not less than [...] years, subject to Vanady Tula and Chusovskoy's rights to terminate the contracts on a yearly basis, a quantity of vanadium-containing steel slag not less than the quantities of vanadium-containing steel slag currently supplied to them.

150. With respect to Chusovskoy, Evraz also commits to enter into a long-term supply agreement (between [...] years) with Chusovskoy for the supply of at least as much titaniferous magnetite ore as Evraz currently supplies, on terms and conditions similar to those currently in force, unless otherwise agreed with Chusovskoy. This commitment is subject to Chusovskoy entering into a reciprocal commitment to purchase, for a period of not less than [...] years, subject to Chusovskoy's rights to terminate the contract on a yearly basis, a quantity of titaniferous magnetite ore not less than the quantities of currently supplied by Evraz to it.

151. The supply commitments to Vanady Tula, Chusovskoy and Treibacher include a procedure to solve potential disputes related to these supply agreements. This procedure involves in a first step the Monitoring Trustee, which makes a proposal to resolve the dispute. If the parties to the supply agreements cannot agree on this proposal a fast-track arbitration procedure is foreseen.

C. Assessment of the remedies

1. Introduction

152. Where a proposed concentration threatens to significantly impede effective competition, the creation of the conditions for the emergence of a new competitive entity or the strengthening of existing competitors via a divestiture may be an effective way to restore effective competition. The divested activities must consist of a viable business that, if

operated by a suitable purchaser, can compete effectively with the merging parties on a lasting basis.

153. Whenever the notifying parties submit remedies, the Commission has thus to assess whether the remedies will lead to the restoration of effective competition on the relevant markets. In so doing, the Commission considers the type, scale and scope of the remedies by reference to the structure and particular characteristics of the markets in which competition concerns arise. The Commission assesses in particular (i) the independence, the viability and the competitiveness of the divested business on the long term and (ii) the effectiveness of the proposed remedy in removing the competition concerns. In order to carry out this assessment, the Commission may seek the views of competitors and customers on the relevant markets.

154. The Commission's assessment concluded that the modified remedies proposed by Evraz on 14 February 2007, address appropriately all competition concerns identified in its investigation and are effective in restoring effective competition.

2. Independence, viability and competitiveness

155. The Commission's investigation has confirmed that the divested business is an independent, viable and competitive entity. The Commission's assessment particularly focused on the ability of the divested businesses to source input materials and to market its production of finished vanadium product independently from the new entity.

156. In the market test of the first remedy package proposed by the parties (the divestment of the Vanchem chemical plant), a number of respondents expressed concerns that the business proposed for divestiture would have a too limited scale and would not be commercially viable. In particular, the dependence of the purchaser on the merged entity upstream for the procurement of raw materials and downstream for the sale of oxides and finished vanadium products raised concerns as to the viability and competitiveness of the remedy proposal.

157. The parties substantially improved the remedies on 14 February 2007, in particular by broadening the scope of the divested business by including the Vanchem extraction plant, the Vanchem oxide plant and Highveld's ferrovanadium smelter to ensure that the purchaser of the divested package will have sufficient and guaranteed access to raw material from Highveld's Mapochs mine. In addition, the divested business will have sufficient commercial capabilities, including the marketing of the output of Highveld's smelter and, potentially, its participation in SAJV, which will allow the purchaser to sell a significant part of the divested business sales independently and share the profits of SAJV's activities.

(a) Feedstock supply

158. At the upstream level, the proposed divestiture of an equity interest in the Mapochs mine or the divestiture of full-ownership rights in a discrete part of the mine will ensure that the divested business has access to its own source of vanadium-bearing feedstock input material. The divested interest or the divested portion of the Mapochs mine will represent between [30-50] % of the mine's estimated current total annual capacity.

159. Therefore, the purchaser of the divested business will become entirely independent from Highveld as regards vanadium ore sourcing and should have sufficient quantities of ore to run the Vanchem plants at full capacity. The current production of the Mapochs mine is [...] of vanadium contained in the ore and Highveld estimates that the mine current total capacity would be around [...] to [...] of vanadium contained in the ore mined. The commitments foresee that the divested business will obtain an equity interest in the mine which is equal to the ratio of the Vanchem plants' capacity and the Mapochs mine production capacity.
160. The fact that the new entity will continue to exploit the mine to supply its steelworks will significantly limit its ability and incentive to reduce the output of the Mapochs mine. In any event, the purchaser of the divested business will be able to source a sufficient quantity of ore even if the new entity decided to reduce the mine's production since it will benefit from a priority right on the output of the mine up to its vanadium ore needs.
161. Finally, the divested business could possibly source iron / vanadium ore from other mining companies exploiting the Bushveld complex or acquire land and licenses to mine such iron / vanadium ore. The commitments will also allow the divested business to operate the Vanchem plants with the same input mix (vanadium steel slag and vanadium ore) as before the transaction since Evraz has committed to supply the necessary quantities of vanadium steel slag at the option of the Purchaser.

(b) Access to downstream markets

162. At the downstream level, with the ownership of the smelter for the production of ferrovanadium and potentially the 50% stake in SAJV, the purchaser of the divested business will also be independent from Highveld as regards sales and marketing of finished vanadium products for steel applications. Even if the purchaser of the divested business does not acquire Highveld's 50% share in SAJV, under the proposed remedies, SAJV will no longer have a structural relationship with Highveld. Since the divested business will be in a position to market or further process a substantial proportion of its vanadium oxide production³¹, it will either supply vanadium oxides to other producers of ferrovanadium, which would compete with the new entity, or will produce and market ferrovanadium to end customers. The divested business will even have sufficient resources to increase its current production of vanadium oxides (its capacity utilization rate was [...] in 2005) and market or further process the additional quantities of oxides produced.
163. Finally, since the divested business will be in the same position as Highveld before the proposed transaction, it will have the same capabilities and opportunities to compete effectively on the relevant vanadium markets, as Highveld did before the proposed transaction. According to the parties³², the divested business is a profitable business and contributed to an important share of Highveld's operating profits in 2005 and 2006.

³¹ The only proportion of the divested business' vanadium oxide production that will contractually be committed is the sale of vanadium pentoxide to SAJV. As the result of the proposed remedies, SAJV will either be a JV between the divested business and former Highveld's Japanese partners or a company wholly owned by these Japanese partners. In any case, SAJV will be independent from the new entity.

³² Highveld's Interim report for the six months to 30 June 2006.

164. Therefore, the Commission considers that the divested business, by having access to sufficient vanadium feedstock to operate at full capacity and direct access to end customers or a significant portion of its vanadium oxides and finished vanadium products, will constitute an independent and viable business, with the ability and incentive to compete with the new entity on the downstream vanadium markets.

3. *Effectiveness of the remedies in removing the competition concerns*

165. The Commission assessed whether the revised remedies eliminate the competition concerns brought about by the proposed transaction. It should be noted that the divested business comprise all Highveld's vanadium business and that the only remaining activity of Highveld related to vanadium after the divestment of the divested business will be the production of vanadium steel slag as a by-product of its steel production and its sale to Treibacher, to Strategic Minerals and to the divested business.

166. The impact of the divestiture of Highveld's vanadium operations and the Mapochs mine on the new entity's market shares post-transaction is illustrated in the table below:

	Market shares without the remedy	Market shares with the remedy
Vanadium feedstock *	[40-50]%	[30-40]%
High-purity vanadium pentoxide	[70-80]%	[40-50]%
Vanadium oxides	[10-20]%	[5-10]%
Ferrovanadium	[10-20]%	[5-10]%

* For v-feedstock, shares of production.

(a) Vanadium feedstock

167. As regards vanadium feedstock, the parties' vanadium feedstock production will decrease from [...] to around [...] due to the partial divestment of the Mapochs mine. In terms of share of global vanadium feedstock production, the new entity' feedstock production will decrease from [40-50]% to around [30-40]% after the partial divestment of the Mapochs mine. In addition, with the entry of Windimurra's, (production estimated at 5,000 MT per year), the new entity's share of vanadium feedstock production will even be lower, in the area of [20-30]% in 2008 and 2009.

168. Finally, it should be noted that the effect of the remedies on the downstream vanadium product markets will also contribute to eliminate the risk of potential upstream competition concerns. Since, under the proposed remedy, Highveld will divest its entire vanadium downstream business, the markets for the supply of vanadium oxides and finished vanadium products will remain competitive after the proposed transaction (see section below). Therefore, even if the new entity were to impede effective competition on the markets for the supply of vanadium feedstock, in particular vanadium steel slag³³, this would not result in any harm to vanadium products end consumers.

³³ The Commission's investigation has shown that the proposed transaction was not likely to give raise to horizontal competition concerns on the markets for the supply of vanadium feedstock, in particular vanadium steel slag. (See recitals 81 to 88).

(b) Vanadium oxides and finished vanadium products

169. As regards downstream markets, vanadium oxides and finished vanadium products, the proposed remedies will comprise all of Highveld's vanadium oxide and finished vanadium products capacities and Highveld will thus not be active any more on these markets after the divestment of the divested business. In terms of market share, since Evraz is not directly active in these downstream markets either, the new entity's market share will be limited to Strategic Minerals' market share, [5-10]% for vanadium oxides and [5-10]% for ferrovanadium.
170. Considering the competition concerns presented above, the proposed remedies will clearly eliminate any horizontal overlap between the merging parties at the vanadium oxides and finished vanadium product level. The sale of the divested business will hence entirely remove the horizontal competition concerns in the market for the supply of high-purity vanadium pentoxide and the related vertical competition concerns in the market for the supply of vanadium chemicals.
171. The proposed remedies will also remove the vertical competition concerns deriving from the new entity strong position at the vanadium feedstock level and affecting potentially all vanadium oxides and finished vanadium products markets.
172. First, the partial divestment of the Mapochs mine and the divestment of Highveld's vanadium business will remove the new entity's ability to reduce global vanadium feedstock production since, as shown above, the new entity would most likely have reduced its vanadium ore production in the Mapochs mine and redirected vanadium steel slag for internal consumption. Given the new entity's need to exploit the Mapochs mine to extract iron ore for its steel operations and given the divested' business priority right for the mine output, the new entity will clearly not be in a position to reduce the production of the mine without negatively affecting its steel operations.
173. Second, the new entity's only vanadium feedstock processing facilities will be those of Strategic Minerals. Evraz and Strategic Minerals' downstream production capacities will thus remain unchanged after the transaction. The new entity's ability to reduce output by redirecting the production flows of vanadium ore will hence not be increased by the proposed transaction. In particular, it will not be able to reduce its sales of vanadium steel slag to Vanady Tula, Chusovskoy or Treibacher and to process this vanadium steel slag at Highveld's vanadium oxide plant, which will belong to a third party after its divestment. In addition, the fact that the proposed remedies will provide access to sufficient vanadium ore to expand production and to increase its sales of vanadium oxides or ferrovanadium will further reduce the new entity's incentive to reduce output.
174. In terms of incentives, the relevant factor is the additional profit the new entity could realize by reducing global vanadium output or foreclosing its downstream rivals. Due to the partial divestment of the Mapochs mine, the overall share of the parties in vanadium feedstock production will decrease from [40-50]% to [30-40]%. In itself, this significant decrease in the overall production of vanadium feedstock will considerably reduce the new entity's incentive to restrict vanadium feedstock output and foreclose its downstream competitors.
175. As analyzed in the LECG study, the economic incentive for the new entity to reduce vanadium feedstock production is based on a trade-off between the higher margin on its

sales of intermediate or finished vanadium products and the margins lost on the volumes withdrawn. This trade-off has to take into account the share of the profits obtained by the new entity on the sales of vanadium products (100% for Evraz and Highveld, [...] for Strategic Minerals and [...] for SAJV). The lower the share of the new entity in the production of vanadium, the lower are the higher margins on its sales of intermediate and finished vanadium products. The economic rationale of a strategy to foreclose its downstream rivals also disappears with the proposed remedies since the new entity will have market shares below 10% both for vanadium oxides and ferrovanadium.

176. The Commission market tested the proposed remedy related to with the divestment of the Highveld's vanadium business and the share of the Mapochs mine. Respondents of the market generally confirmed the independence and viability of the divested business and considered that it would create a credible competitor provided it has access to the necessary vanadium feedstock.
177. A respondent to the market investigation however expressed the concern that the proposed remedy would not eliminate the new entity's ability and incentive to reduce global vanadium production and foreclose its downstream rivals. In particular, this respondent indicated that Highveld could redirect its vanadium steel slag to Strategic Minerals' South African operations or to the divested business. The Commission estimates that such concern is not justified for several reasons. First, Highveld has [a long term] supply contract for vanadium steel slag with Treibacher [...]. [...]. Highveld's obligation to supply Treibacher with vanadium steel slag is also part of the Commitments attached to this decision. Second, the new entity would have little incentive to sell Highveld's vanadium steel slag to the divested business, which will be an independent competitor downstream, since the toll-manufacturing and supply contract with Highveld foresees that Highveld earns [...]. As regards Strategic Minerals, the new entity obtains a similar share ([...]) of the profits achieved by Strategic Minerals on its sales of finished vanadium products.
178. Finally, the Commission market tested the proposed remedy related to the restatement of the parties' supply agreements with the feedstock customers. Several respondents to the market test considered that these commitments will also contribute to reduce the competition concerns identified by the Commission since they will prevent any foreclosure of the new entity's three main customers of vanadium feedstock in the medium term.
179. In particular, the supply commitments will enable Vanady Tula and Chusovskoy to enter into long-term supply agreements ([...]) with the new entity to secure their vanadium steel slag and ore supply, whereas the two companies currently source these materials from Evraz under short-term supply agreements.
180. As regards Treibacher, the supply commitments also foresee that the new entity will continue supplying Treibacher and will not voluntarily liquidate Hochvanadium, the Austrian subsidiary party to the toll-conversion and supply agreement with Treibacher. This will remove the potential concern that the new entity could have liquidated this shell company to terminate the toll-conversion and supply agreement with Treibacher. Evraz's commitments to continue supplying Treibacher and not to voluntarily liquidate Hochvanadium ensure that this supply relationship will not be modified nor terminated by the new entity against the will of Treibacher.

181. Finally, the proposed remedies include a fast-track arbitration procedure to resolve potential disputes related to these supply agreements.

4. Conclusion

182. On the basis of the foregoing, the Commission has concluded that the divested business constitutes an independent and viable business, which will compete effectively in the markets for the supply of vanadium products. Therefore, the proposed remedies are sufficient to remove the competition concerns identified by the Commission's investigation and restore effective competition on all markets for the supply of vanadium products.

183. As regards the competition concerns deriving from the strong market position of the new entity on the markets for the supply of high-purity vanadium pentoxide, the proposed remedies entirely eliminate the overlap between Strategic Minerals and Highveld since the divested business will comprise the entire high-purity vanadium oxides production of Highveld.

184. The proposed remedies will also remove the vertical competition concerns deriving from the new entity's strong market position at the vanadium feedstock level, in particular vanadium steel slag. The position of the new entity at the vanadium feedstock level will decrease to a level below 30% with the sale of the interest in or portion of the Mapochs mine and the sale of the entire vanadium oxides and ferrovanadium business of Highveld will eliminate the new entity's ability and incentive to reduce output. Finally, the supply commitments will further contribute to eliminate the risk of input foreclosure of downstream rivals.

D. Conditions and obligations

185. The commitments under Section B and E of the Commitments attached herewith constitute conditions of this decision, as the structural change on the relevant markets can only be achieved through full compliance therewith.

186. The remaining commitments constitute obligations, as they concern the implementing steps, which are necessary to achieve the sought structural change.

VII. CONCLUSION

187. In view of the above, the Commission has decided not to oppose the notified operation and to declare it compatible with the common market and with the EEA Agreement. This decision is adopted in application of Article 6(2) of Council Regulation (EC) No 139/2004.

For the Commission
signed
Ján Figel
Member of the Commission

February 19, 2007

By fax: 00 32 2 296 4301
European Commission – Merger Task Force
DG Competition
Rue Joseph II 70
B-1000 Brussels

Case M.4494 – Evraz/Highveld

COMMITMENTS TO THE EUROPEAN COMMISSION

Pursuant to Article 6(2) of Council Regulation (EC) No. 139/2004 (the “Merger Regulation”), Evraz Group S.A. (“Evraz”) hereby provides the following Commitments (the “Commitments”) in order to enable the European Commission (the “Commission”) to declare the proposed acquisition of Highveld Steel and Vanadium Corporation Limited (“Highveld”) (together, the “Parties”) compatible with the common market and the EEA Agreement by its decision pursuant to Article 6(1)(b) of the Merger Regulation (the “Decision”).

The Commitments shall take effect upon the date of adoption of the Decision.

This text shall be interpreted in the light of the Decision to the extent that the Commitments are attached as conditions and obligations, in the general framework of Community law, in particular in the light of the Merger Regulation, and by reference to the Commission Notice on Remedies.

A. DEFINITIONS

For the purpose of the Commitments, the following terms shall have the following meaning:

Affiliated Undertakings: undertakings controlled by the Parties and/or by the ultimate parents of the Parties, whereby the notion of control shall be interpreted pursuant to Article 3 of the Merger Regulation and in the light of the Commission Notice on the concept of concentration under the Merger Regulation.

Chusovskoy: OJSC Chusovskoy Steel Works with its business address at Trudovaya Street 13, 618200 Chusovoy, Russia.

Chusovskoy Ore Supply Agreement: the ore supply agreement between Evraz and Chusovskoy currently in force.

Chusovskoy Slag Supply Agreement: the slag supply agreement between Evraz and Chusovskoy currently in force.

Closing: the transfer of the legal title of the Divestment Business to the Purchaser.

Conversion Agreement: the agreement between Hochvanadium and Treibacher dated [...], pursuant to which Hochvanadium supplies certain volumes of vanadium-containing slag to Treibacher for further processing of this slag into vanadium oxides and finished vanadium products.

Divestiture Trustee: one or more natural or legal person(s), independent from the Parties, who is approved by the Commission and appointed by Evraz and who has received from Evraz the exclusive Trustee Mandate to sell the Divestment Package to a Purchaser at no minimum price.

Divestment Business: the business as defined in Section B.

Divestment Mine Equity Interest: the interest as defined in Section B.

Divestment Mine Portion: the assets as defined in Section B.

Divestment Package: the Divestment Business together with the Divestment Shareholding, and either the Divestment Mine Equity Interest or the Divestment Mine Portion.

Divestment Shareholding: the shareholding as defined in Section B.

Effective Date: the date of adoption of the Decision.

Evraz: Evraz Group S.A., with its corporate seat at 1 Allée Scheffer, L-2520 Luxembourg, Luxembourg, and its Affiliated Undertakings.

Feedstock Customer: Treibacher, Chusovskoy, or Vanady Tula.

First Divestiture Period: the period of [...] from the Effective Date.

Highveld: Highveld Steel and Vanadium Corporation Limited, with its corporate seat at Old Pretoria Road, Portion 29 of the Farm, Schoongezicht 308 JS, PO Box 111, Witbank 1035, Republic of South Africa, and its Affiliated Undertakings being acquired by Evraz as defined above.

Hochvanadium: Hochvanadium Handels GmbH, a company indirectly and fully owned by Highveld, with its corporate seat at Renngasse 1/Freyung, A-1013 Vienna, Austria, registered with the Austrian company registry under the number FN 176323z.

Hold Separate Manager: the person appointed by Evraz for the Divestment Business to manage the day-to-day business under the supervision of the Monitoring Trustee.

Key Personnel: all personnel necessary to maintain the viability and competitiveness of the Divestment Business, as listed in Schedule A.

KGOK Mining Operations: Evraz's mining operations at Kachkanar in the Sverdlovsk region in Russia.

Mapochs Mine: Highveld's South African mine, which is a titaniferous magnetite ore mine in the Bushveld Complex, located about 140 kilometres northeast of Witbank in Roosenekal, Republic of South Africa.

Monitoring Trustee: one or more natural or legal person(s), independent from the Parties, who is approved by the Commission and appointed by Evraz, and who has the duty to monitor Evraz's compliance with the conditions and obligations attached to the Decision.

NTMK Steel-Making Operations: Evraz's steel making operations at Nizhny Tagil in the Sverdlovsk region in Russia.

Personnel: all personnel currently employed by the Divestment Business, including Key Personnel listed in Schedule A, and staff seconded to the Divestment Business and shared personnel.

Purchaser: the entity approved by the Commission as acquirer of the Divestment Business in accordance with the criteria set out in Section D.

Treibacher: Treibacher Industrie AG, with its corporate seat at Auer Welsbach-Straße 1, A-9330 Althofen, Austria, registered with the Austrian company registry under the number FN 198543a.

Trustee(s): the Monitoring Trustee and the Divestiture Trustee.

Trustee Divestiture Period: the period of [...] from the end of the First Divestiture Period.

Vanady Tula: OAO Vanady Tula, with its business address at Przhevalskogo Street 1, 300016 Tula, Russia.

Vanady Tula Slag Supply Agreement: the slag supply agreement concluded between Evraz and LLC ChermetHolding, which is the parent company of Vanady Tula, currently in force.

Vanchem Operations: Highveld's production facilities and related assets located at the Vanchem site in Witbank, Republic of South Africa, including the vanadium extraction and vanadium oxide production facilities and the chemicals plant located at the same site, and Highveld's ferrovanadium smelter located at the site of Highveld's iron and steel operations in Witbank, Republic of South Africa, as described in detail in Schedule A.

Working Days: means "Working Days" within the meaning of Article 24 of Commission Regulation (EC) No. 802/2004.

B. THE DIVESTMENT COMMITMENT

Commitment to divest

1. Evraz commits to divest, or procure the divestiture of, the Divestment Business as a going concern, the Divestment Shareholding, and at the Purchaser's choice, either the Divestment Mine Equity Interest or the Divestment Mine Portion, by the end of the Trustee Divestiture Period to a purchaser and on terms of sale approved by the Commission in accordance with the procedure described in paragraph 17. To carry out the divestiture, Evraz commits to find a purchaser and to enter into a final binding sale and purchase agreement for the sale of the Divestment Package within the First Divestiture Period. If Evraz has not entered into such an agreement at the end of the First Divestiture Period, Evraz shall grant the Divestiture Trustee an exclusive mandate to sell the Divestment Package at no minimum price.

2. Evraz shall be deemed to have complied with this commitment if, by the end of the Trustee Divestiture Period, Evraz has entered into a final binding sale and purchase agreement, if the Commission approves the Purchaser and the terms in accordance with the procedure described in paragraph 17 and if the closing of the sale of the Divestment Business, the Divestment Shareholding, and either the Divestment Mine Equity Interest or the Divestment Mine Portion takes place within a period not exceeding 3 months after the approval of the purchaser and the terms of sale by the Commission.
3. In order to maintain the structural effect of the Commitments, Evraz shall, for a period of 10 years after the Effective Date:
 - (a) not acquire direct or indirect influence over the whole or part of the Divestment Business unless the Commission has previously found that the structure of the market has changed to such an extent that the absence of influence over the Divestment Business is no longer necessary to render the proposed concentration compatible with the common market;
 - (b) not acquire the whole or part of the Divestment Mine Equity Interest or the Divestment Mine Portion, as applicable, unless the Commission has previously found that the structure of the market has changed or the supply needs of the Divestment Business to such an extent that the divestiture of the entire Divestment Mine Equity Interest or the entire Divestment Mine Portion are no longer necessary to render the proposed concentration compatible with the common market.

Structure and definition of the Divestment Business

4. The Divestment Business comprises the Vanchem Operations. The Vanchem Operations is a division of Highveld and is not incorporated separately. The Divestment Business includes Highveld's production facilities and related assets located at the Vanchem site in Witbank, Republic of South Africa, including the vanadium extraction and vanadium oxide production facilities and vanadium chemicals plant, and Highveld's ferrovanadium smelter located at the site of Highveld's iron and steel operations in Witbank, Republic of South Africa. The Divestment Business, described in more detail in Schedule A, includes:
 - (a) all tangible and intangible assets (including intellectual property rights), which contribute to the current operation or are necessary to ensure the viability and competitiveness of the Divestment Business;
 - (b) all licences, permits and authorisations issued by any governmental organisation for the benefit of the Divestment Business, to the extent possible under South African law;
 - (c) all contracts, leases, commitments and customer orders of the Divestment Business; all customer, credit and other records of the Divestment Business (items referred to under (a)-(c) hereinafter collectively referred to as "Assets");
 - (d) the Personnel.

Structure and definition of the Divestment Mine Equity Interest

5. The Divestment Mine Equity Interest consists of an undivided interest in the Mapochs Mine, determined as a percentage of the current total capacity of the Mapochs Mine and sufficient to cover the Vanchem Operations' feedstock input needs up to the Vanchem Operations' current capacity.
 - (a) Evraz commits to ensure that the Divestment Mine Equity Interest will grant the Purchaser, subject to South African law, an *in rem* right to claim its share of the ore output that is suitable (including in quality and form) for the direct extraction of vanadium at the Divestment Business.
 - (b) Following the divestiture of the Divestment Mine Equity Interest, the Purchaser will be entitled to obtain the mine's output up to its equity interest, in the form of ore at a price linked to the price for iron ore fines FOB Australia, or in the form of slag suitable (including in quality and form) for the direct extraction of vanadium at the Divestment Business, up to the current proportion of slag used at the Vanchem Operations at a price linked to the price for ferrovanadium as quoted by Metal Bulletin and comparable to the average price of slag observed in comparable slag transactions on the merchant market, as applicable, on a monthly basis plus transport and other costs to the extent incurred by Evraz, subject to negotiation with the Purchaser.
 - (c) The Purchaser will have priority over the ore output of the Mapochs Mine up to the Vanchem Operations' current capacity.

Structure and definition of the Divestment Mine Portion

6. At the option of the Purchaser, instead of divesting the Divestment Mine Equity Interest, Evraz commits to transfer full legal title in the Divestment Mine Portion. The Divestment Mine Portion would constitute a discrete portion of the Mapochs mine, suitable for the extraction of an amount of titaniferous magnetite ore, determined as a percentage of the current total capacity of the Mapochs Mine and sufficient to cover the Vanchem Operations' feedstock input needs up to the Vanchem Operations' current capacity. The Divestment Mine Portion would have the same characteristics in terms of quality and opportunities for development as the portion of the Mapochs Mine retained by Evraz. Evraz commits to define the precise confines of the land parcel or land parcels that constitute the Divestment Mine Portion upon consultation with the Purchaser. The Divestment Mine Portion would include:
 - (a) all fixtures and fittings attached to the Divestment Mine Portion;
 - (b) all licences, permits and authorisations issued by any governmental organisation for the benefit of the exploitation of the licences, permits and authorisations issued by any governmental organisation for the benefit of the Divestment Business, to the extent such licences, permits and authorisations can be transferred under South African law without simultaneously being lost by the current holder of such licences, permits and authorizations;

- (c) all leases, servitudes and other contractual or *in rem* rights associated with the access to and needed for the use of the Divestment Mine Portion, to the extent that such rights are transferable under South African law.

In case any of the licences, permits and authorisations required under South African law in order to be able to exploit titaniferous magnetite ore from the Divestment Mine Portion cannot be transferred, the purchaser will obtain such licences, permits and authorisations and Evraz undertakes to offer its best efforts to assist the Purchaser in obtaining any licences, permits and authorisations required under South African law to exploit titaniferous magnetite ore from the Divestment Mine Portion. Evraz also commits, as applicable, to grant or to offer its best efforts to assist in obtaining any leases, servitudes and other contractual or *in rem* rights associated with the access to and needed for the use of the Divestment Mine Portion.

Unless otherwise agreed with the Purchaser, the Divestment Mine Portion shall include:

- (a) any items that are all movable tangible or intangible assets currently or at the time of the transfer of the Divestment Mine Portion located on the Divestment Mine Portion; and/or
- (b) any contracts associated with Highveld's mining activities at the Divestment Mine Portion, including but not limited to employment contracts, contracts entered into by Highveld with contractors for the exploitation of the Mapochs mine, supply contracts with suppliers of electricity or other inputs, contracts with customers of ore mined at the Mapochs mine.

Structure and definition of the Divestment Shareholding

- 7. The Divestment Shareholding is Highveld's entire (50%) shareholding in South Africa Japan Vanadium (Proprietary) Limited, with its corporate seat at P.O. Box 111, Witbank, South Africa. The Divestment Shareholding is described in detail in Schedule B.

C. RELATED COMMITMENTS

Preservation of viability, marketability and competitiveness

- 8. From the Effective Date until Closing, Evraz shall preserve the economic viability, marketability and competitiveness of the Divestment Business and its operations at the Mapochs Mine, in accordance with good business practice, and shall minimise as far as possible any risk of loss of competitive potential of the Divestment Business and its operations at the Mapochs Mine. In particular, Evraz undertakes:
 - (a) not to carry out any act upon its own authority that might have a significant adverse impact on the value, management or competitiveness of the Divestment Business or the operations at the Mapochs Mine or that might alter the nature and scope of activity, or the industrial or commercial strategy or the investment policy of the Divestment Business;

- (b) to make available sufficient resources for the development of the Divestment Business, on the basis and continuation of the existing business plans;
- (c) to take all reasonable steps, including appropriate incentive schemes (based on industry practice), to encourage all Key Personnel to remain with the Divestment Business.

Hold-separate obligations

- 9. Evraz commits, from the Effective Date until Closing, to keep the Divestment Business separate from the businesses it is retaining and to ensure that Key Personnel of the Divestment Business – including the Hold Separate Manager – have no involvement in any business retained and vice versa. Evraz shall also ensure that the Personnel do not report to any individual outside the Divestment Business.
- 10. Until Closing, Evraz shall assist the Monitoring Trustee in ensuring that the Divestment Business is managed as a distinct and saleable entity separate from the businesses retained by Evraz. Evraz shall appoint a Hold Separate Manager who shall be responsible for the management of the Divestment Business, under the supervision of the Monitoring Trustee. The Hold Separate Manager shall manage the Divestment Business independently and in the best interest of the business with a view to ensuring its continued economic viability, marketability and competitiveness and its independence from the businesses retained by the Parties.

Ring-fencing

- 11. Evraz shall implement all necessary measures to ensure that it does not after the Effective Date obtain any business secrets, know-how, commercial information, or any other information of a confidential or proprietary nature relating to the Divestment Business. In particular, the participation of the Divestment Business in a central information technology network shall be severed to the extent possible, without compromising the viability of the Divestment Business. Evraz may obtain information relating to the Divestment Business which is reasonably necessary for the divestiture of the Divestment Business or whose disclosure to Evraz is required by law.

Non-solicitation clause

- 12. The Parties undertake, subject to customary limitations, not to solicit, and to procure that Affiliated Undertakings do not solicit, the Key Personnel transferred with the Divestment Business for a period of 2 years after Closing.

Due diligence

- 13. In order to enable potential purchasers to carry out a reasonable due diligence of the Divestment Package, Evraz shall, subject to customary confidentiality assurances and dependent on the stage of the divestiture process:
 - (a) provide to potential purchasers sufficient information as regards the Divestment Package;
 - (b) provide to potential purchasers sufficient information relating to the Personnel and allow them reasonable access to the Personnel.

Reporting

14. Evraz shall submit written reports in English on potential purchasers of the Divestment Package and developments in the negotiations with such potential purchasers to the Commission and the Monitoring Trustee no later than 10 calendar days after the end of every month following the Effective Date (or otherwise at the Commission's request).
15. The Parties shall inform the Commission and the Monitoring Trustee on the preparation of the data room documentation and the due diligence procedure and shall submit to the Commission and the Monitoring Trustee a copy of any information memorandum prepared in respect of the Divestment Package before sending the memorandum out to potential purchasers.

D. THE PURCHASER

16. The Purchaser, in order to be approved by the Commission, must:
 - (a) be independent of and unconnected to the Parties;
 - (b) have the financial resources, proven expertise and incentive to maintain and develop the Divestment Business as a viable and active competitive force in competition with Evraz and other competitors;
 - (c) neither be likely to create, in the light of the information available to the Commission, *prima facie* competition concerns nor give rise to a risk that the implementation of the Commitments will be delayed, and must, in particular, reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the acquisition of the Divestment Package (the before-mentioned criteria for the purchaser hereafter the "Purchaser Requirements").
17. The final binding sale and purchase agreement shall be conditional on the Commission's approval. When Evraz has reached an agreement with a purchaser, it shall submit a fully documented and reasoned proposal, including a copy of the final agreement(s), to the Commission and the Monitoring Trustee. Evraz must be able to demonstrate to the Commission that the purchaser meets the Purchaser Requirements and that the Divestment Package is being sold in a manner consistent with the Commitments. For the approval, the Commission shall verify that the purchaser fulfils the Purchaser Requirements and that the Divestment Package is being sold in a manner consistent with the Commitments. The Commission may approve the sale of the Divestment Package without one or more Assets or parts of the Personnel, if this does not affect the viability and competitiveness of the Divestment Package after the sale, taking account of the proposed purchaser.

E. MAINTENANCE OF FEEDSTOCK SUPPLY

Supply commitment to Treibacher

18. Evraz commits to maintain its current supply obligations under the Conversion Agreement between Hochvanadium and Treibacher.

[The conversion agreement can be terminated under certain conditions, including certain economic performance parameters, breach of contract, or by mutual agreement between the parties.]

For the avoidance of doubt, Evraz commits not to proceed to the voluntary liquidation of Hochvanadium.

Supply commitment to Vanady Tula

19. Unless otherwise agreed with Vanady Tula, Evraz commits to supply vanadium-containing steel slag generated at the NTMK Steel-Making Operations to Vanady Tula for a period to be negotiated with Vanady Tula but not less than [...] years from the Effective Date, on terms and conditions, including pricing conditions, similar to those currently agreed with Vanady Tula in the Vanady Tula Slag Supply Agreement.
20. Unless otherwise agreed with Vanady Tula, the quantity of vanadium-containing steel slag to be supplied by Evraz to Tula shall not be less than the quantity of vanadium-containing steel slag from the NTMK Steel-Making Operations currently supplied to Vanady Tula pursuant to the Vanady Tula Slag Supply Agreement, unless Evraz is unable to deliver this quantity of vanadium-bearing steel slag for reasons outside the control of Evraz. This commitment is subject to Vanady Tula entering into a reciprocal commitment to purchase, for a period of not less than [...] years from the Effective Date, subject to Vanady Tula's right to terminate the contract on a yearly basis following an agreed-upon notice period, a quantity of vanadium-containing steel slag not less than the quantity of vanadium-containing steel slag from the NTMK Steel-Making Operations currently supplied to Vanady Tula pursuant to the Vanady Tula Slag Supply Agreement, unless Vanady Tula is unable to purchase this quantity of vanadium-bearing steel slag for reasons outside the control of Vanady Tula, including for maintenance reasons.
21. The instances outside the control of Evraz include a reduction in demand for steel products produced at the NTMK Steel-Making Operations due to which Evraz would no longer be able to profitably market such steel products and would therefore reduce the output at the NTMK Steel-Making Operations to a level at which not enough vanadium-containing steel slag is generated to meet the total steel slag supply commitments entered into by Evraz. In that case, each of the steel slag supply commitments entered into by Evraz shall be adapted on a pro-rata basis, unless agreed otherwise between Evraz and each of the parties with regard to which steel slag supply commitments exist.
22. The specifications of the vanadium-containing steel slag supplied by Evraz under this supply commitment shall correspond to the specifications provided in the Vanady Tula Slag Supply Agreement, unless such specifications cannot be met by Evraz due to reasons outside the control of Evraz or unless otherwise agreed between Evraz and Vanady Tula. In the event that such specifications cannot be met by Evraz for reasons outside the control of Evraz, Evraz commits to supply slag of the next closest specification subject to paragraph 21 above.

Supply commitment to Chusovskoy

(a) Vanadium-containing steel slag supply

23. Unless otherwise agreed with Chusovskoy, Evraz commits to supply vanadium-containing steel slag generated at the NTMK Steel-Making Operations to Chusovskoy for a period to be negotiated with Chusovskoy but not less than [...] years from the Effective Date, on terms and conditions, including pricing conditions, similar to those currently agreed with Chusovskoy in the Chusovskoy Slag Supply Agreement.
24. Unless otherwise agreed with Chusovskoy, the quantity of vanadium-containing steel slag to be supplied by Evraz to Chusovskoy shall not be less than the quantity of vanadium-containing steel slag from the NTMK Steel-Making Operations currently supplied to Chusovskoy pursuant to the Chusovskoy Slag Supply Agreement, unless Evraz is unable to deliver this quantity of vanadium-bearing steel slag for reasons outside the control of Evraz. This commitment is subject to Chusovskoy entering into a reciprocal commitment to purchase, for a period of not less than [...] years from the Effective Date, subject to Chusovskoy's right to terminate the contract on a yearly basis following an agreed-upon notice period, a quantity of vanadium-containing steel slag not less than the quantity of vanadium-containing steel slag from the NTMK Steel-Making Operations currently supplied to Chusovskoy pursuant to the Chusovskoy Slag Supply Agreement, unless Chusovskoy is unable to purchase this quantity of vanadium-bearing steel slag for reasons outside the control of Chusovskoy, including for maintenance reasons.
25. The instances outside the control of Evraz include a reduction in demand for steel products produced at the NTMK Steel-Making Operations due to which Evraz would no longer be able to profitably market such steel products and would therefore reduce the output at the NTMK Steel-Making Operations to a level at which not enough vanadium-containing steel slag is generated to meet the total steel slag supply commitments entered into by Evraz. In that case, each of the steel slag supply commitments entered into by Evraz shall be adapted on a pro-rata basis, unless agreed otherwise between Evraz and each of the parties with regard to which steel slag supply commitments exist.
26. The specifications of the vanadium-containing steel slag supplied by Evraz under this supply commitment shall correspond to the specifications provided in the Chusovskoy Slag Supply Agreement, unless such specifications cannot be met by Evraz due to reasons outside the control of Evraz or unless otherwise agreed between Evraz and Chusovskoy. In the event that such specifications cannot be met by Evraz for reasons outside the control of Evraz, Evraz commits to supply slag of the next closest specification subject to paragraph 25 above.

(b) Titaniferous magnetite ore supply

27. Unless otherwise agreed with Chusovskoy, Evraz commits to supply titaniferous magnetite ore to Chusovskoy for a period to be negotiated with Chusovskoy but not less than [...] years from the Effective Date, on terms and conditions, including pricing conditions, similar to those currently agreed with Chusovskoy in the Chusovskoy Ore Supply Agreement.

28. Unless otherwise agreed with Chusovskoy, the quantity of titaniferous magnetite ore to be supplied by Evraz to Chusovskoy shall not be less than the quantity of titaniferous magnetite ore from the KGOK Mining Operations currently supplied to Chusovskoy pursuant to the Chusovskoy Ore Supply Agreement, unless Evraz is unable to deliver this quantity of titaniferous magnetite ore for reasons outside the control of Evraz. This commitment is subject to Chusovskoy entering into a reciprocal commitment to purchase, for a period of not less than [...] years from the Effective Date, subject to Chusovskoy's right to terminate the contract on a yearly basis following an agreed-upon notice period, a quantity of titaniferous magnetite ore not less than the quantity of titaniferous magnetite ore currently supplied to Chusovskoy pursuant to the Chusovskoy Ore Supply Agreement, unless Chusovskoy is unable to purchase this quantity of titaniferous magnetite ore for reasons outside the control of Chusovskoy, including for maintenance reasons.
29. The specifications of the titaniferous magnetite ore supplied by Evraz under this supply commitment shall correspond to the specifications provided in the Chusovskoy Ore Supply Agreement, unless such specifications cannot be met by Evraz due to reasons outside the control of Evraz or unless otherwise agreed between Evraz and Chusovskoy. In the event that such specifications cannot be met by Evraz for reasons outside the control of Evraz, Evraz commits to supply titaniferous magnetite ore of the next closest specification.

F. TRUSTEE

I. Appointment procedure

30. Evraz shall appoint a Monitoring Trustee to carry out the functions specified in the Commitments for a Monitoring Trustee. If Evraz has not entered into a binding sales and purchase agreement one month before the end of the First Divestiture Period or if the Commission has rejected a purchaser proposed by Evraz at that time or thereafter, Evraz shall appoint a Divestiture Trustee to carry out the functions specified in the Commitments for a Divestiture Trustee. The appointment of the Divestiture Trustee shall take effect upon the commencement of the Extended Divestment Period.
31. The Trustee shall be independent of the Parties, possess the necessary qualifications to carry out its mandate, for example as an investment bank or consultant or auditor, and shall neither have nor become exposed to a conflict of interest. The Trustee shall be remunerated by the Parties in a way that does not impede the independent and effective fulfilment of its mandate. In particular, where the remuneration package of a Divestiture Trustee includes a success premium linked to the final sale value of the Divestment Package, the fee shall also be linked to a divestiture within the Trustee Divestiture Period.

Proposal by the Parties

32. No later than two weeks after the Effective Date, Evraz shall submit a list of one or more persons whom Evraz proposes to appoint as the Monitoring Trustee to the Commission for approval. No later than one month before the end of the First Divestiture Period, Evraz shall submit a list of one or more persons whom Evraz proposes to appoint as Divestiture Trustee to the Commission for approval. The

proposal shall contain sufficient information for the Commission to verify that the proposed Trustee fulfils the requirements set out in paragraph 31 and shall include:

- (a) the full terms of the proposed mandate, which shall include all provisions necessary to enable the Trustee to fulfil its duties under these Commitments;
- (b) the outline of a work plan that describes how the Trustee intends to carry out its assigned tasks;
- (c) an indication whether the proposed Trustee is to act as both Monitoring Trustee and Divestiture Trustee or whether different trustees are proposed for the two functions.

Approval or rejection by the Commission

33. The Commission shall have the discretion to approve or reject the proposed Trustee(s) and to approve the proposed mandate subject to any modifications it deems necessary for the Trustee to fulfil its obligations. If only one name is approved, Evraz shall appoint or cause to be appointed, the individual or institution concerned as Trustee, in accordance with the mandate approved by the Commission. If more than one name is approved, Evraz shall be free to choose the Trustee to be appointed from among the names approved. The Trustee shall be appointed within one week of the Commission's approval, in accordance with the mandate approved by the Commission.

New proposal by the Parties

34. If all the proposed Trustees are rejected, Evraz shall submit the names of at least two more individuals or institutions within one week of being informed of the rejection, in accordance with the requirements and the procedure set out in paragraphs 30 and 33.

Trustee nominated by the Commission

35. If all further proposed Trustees are rejected by the Commission, the Commission shall nominate a Trustee, whom Evraz shall appoint, or cause to be appointed, in accordance with a trustee mandate approved by the Commission.

II. Functions of the Trustee

36. The Trustee shall assume its specified duties in order to ensure compliance with the Commitments. The Commission may, on its own initiative or at the request of the Trustee or Evraz, give any orders or instructions to the Trustee in order to ensure compliance with the conditions and obligations attached to the Decision.

Duties and obligations of the Monitoring Trustee

37. The Monitoring Trustee shall:
- (a) propose in its first report to the Commission a detailed work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision.

- (b) oversee the on-going management of the Divestment Business with a view to ensuring its continued economic viability, marketability and competitiveness and monitor compliance by Evraz with the conditions and obligations attached to the Decision. To that end the Monitoring Trustee shall:
- (i) monitor the preservation of the economic viability, marketability and competitiveness of the Divestment Business, and the keeping separate of the Divestment Business from the business retained by the Parties, in accordance with paragraphs 8 and 9 of the Commitments;
 - (ii) supervise the management of the Divestment Business as a distinct and saleable entity, in accordance with paragraph 10 of the Commitments;
 - (iii) (i) in consultation with Evraz, determine all necessary measures to ensure that Evraz does not after the effective date obtain any business secrets, know-how, commercial information, or any other information of a confidential or proprietary nature relating to the Divestment Business, in particular strive for the severing of the Divestment Business' participation in a central information technology network to the extent possible, without compromising the viability of the Divestment Business, and (ii) decide whether such information may be disclosed to Evraz as the disclosure is reasonably necessary to allow Evraz to carry out the divestiture or as the disclosure is required by law;
 - (iv) monitor the splitting of assets and the allocation of Personnel between the Divestment Business and Evraz or Affiliated Undertakings;
- (c) assume the other functions assigned to the Monitoring Trustee under the conditions and obligations attached to the Decision, including monitoring compliance by Evraz with the conditions and obligations provided in Section E;
- (d) propose to Evraz such measures as the Monitoring Trustee considers necessary to ensure Evraz's compliance with the conditions and obligations attached to the Decision, in particular the maintenance of the full economic viability, marketability or competitiveness of the Divestment Business, the holding separate of the Divestment Business and the non-disclosure of competitively sensitive information;
- (e) review and assess potential purchasers as well as the progress of the divestiture process and verify that, dependent on the stage of the divestiture process, (a) potential purchasers receive sufficient information relating to the Divestment Package and the Personnel in particular by reviewing, if available, the data room documentation, the information memorandum and the due diligence process, and (b) potential purchasers are granted reasonable access to the Personnel;
- (f) provide to the Commission, sending Evraz a non-confidential copy at the same time:

- (i) a written report regarding the Divestment Package within 15 calendar days after the end of every month. The report shall cover the operation and management of the Divestment Package so that the Commission can assess whether the business is held in a manner consistent with the Commitments and the progress of the divestiture process as well as potential purchasers; and
- (ii) a written report regarding the maintenance of supply commitments provided in Sections B and E above within 15 calendar days after the end of every month for the first three months, and within 15 calendar days after the end of every quarter for the first five years.

In addition to these reports, the Monitoring Trustee shall promptly report in writing to the Commission, sending Evraz a non-confidential copy at the same time, if it concludes on reasonable grounds that Evraz is failing to comply with these Commitments;

- (g) within one week after receipt of the documented proposal referred to in paragraph 17, submit to the Commission a reasoned opinion as to the suitability and independence of the proposed purchaser and the viability of the Divestment Business after the Sale and as to whether the Divestment Package is sold in a manner consistent with the conditions and obligations attached to the Decision, in particular, if relevant, whether the Sale of the Divestment Package without one or more Assets or not all of the Personnel affects the viability of the Divestment Business after the sale, taking account of the proposed purchaser.

Duties and obligations of the Divestiture Trustee

- 38. Within the Trustee Divestiture Period, the Divestiture Trustee shall sell the Divestment Package to a purchaser at no minimum price, provided that the Commission has approved both the purchaser and the final binding sale and purchase agreement in accordance with the procedure laid down in paragraph 17. The Divestiture Trustee shall include in the sale and purchase agreement such terms and conditions as it considers appropriate for an expedient sale in the Trustee Divestiture Period. In particular, the Divestiture Trustee may include in the sale and purchase agreement such customary representations and warranties and indemnities as are reasonably required to effect the sale as from the Effective Date. The Divestiture Trustee shall protect the legitimate financial interests of Evraz, subject to the Parties' unconditional obligation to divest within the Trustee Divestiture Period.
- 39. In the Trustee Divestiture Period (or otherwise at the Commission's request), the Divestiture Trustee shall provide the Commission with a comprehensive monthly report written in English on the progress of the divestiture process. Such reports shall be submitted within 15 calendar days after the end of every month with a simultaneous copy to the Monitoring Trustee and a non-confidential copy to the Parties.

III. Duties and obligations of Evraz

- 40. Evraz shall provide and shall cause its advisors to provide the Trustee with all such cooperation, assistance and information as the Trustee may reasonably require to

perform its tasks. The Trustee shall have full and complete access to any of the books, records, documents, management or other personnel, facilities, sites and technical information necessary for fulfilling its duties under the Commitments, and Evraz and the Purchaser of the Divestment Package shall provide the Trustee upon request with copies of any document. Evraz and the Divestment Business shall make available to the Trustee one or more offices on their premises and shall be available for meetings in order to provide the Trustee with all information necessary for the performance of its tasks.

41. Evraz shall provide the Monitoring Trustee with all managerial and administrative support that it may reasonably request on behalf of the management of the Divestment Business. This shall include all administrative support functions relating to the Divestment Business that are currently carried out at headquarters level. Evraz shall provide and shall cause its advisors to provide the Monitoring Trustee, on request, with the information submitted to potential purchasers, in particular give the Monitoring Trustee access to the data room documentation and all other information granted to potential purchasers in the due diligence procedure. Evraz shall inform the Monitoring Trustee on possible purchasers, submit a list of potential purchasers, and keep the Monitoring Trustee informed of all developments in the divestiture process.
42. Evraz shall grant or procure Affiliated Undertakings to grant comprehensive powers of attorney, duly executed, to the Divestiture Trustee to effect the sale, the Closing and all actions and declarations which the Divestiture Trustee considers necessary or appropriate to achieve the sale and the Closing, including the appointment of advisors to assist with the sale process. Upon request of the Divestiture Trustee, Evraz shall cause the documents required for effecting the sale and the Closing to be duly executed.
43. Evraz shall indemnify the Trustee and its employees and agents (each an “Indemnified Party”) and hold each Indemnified Party harmless against, and hereby agrees that an Indemnified Party shall have no liability to Evraz for any liabilities arising out of the performance of the Trustee’s duties under the Commitments, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the Trustee, its employees, agents or advisors.
44. At the expense of Evraz, the Trustee may appoint advisors (in particular for corporate finance or legal advice), subject to Evraz’s approval (this approval not to be unreasonably withheld or delayed) if the Trustee considers the appointment of such advisors necessary or appropriate for the performance of its duties and obligations under the Mandate, provided that any fees and other expenses incurred by the Trustee are reasonable. Should Evraz refuse to approve the advisors proposed by the Trustee the Commission may approve the appointment of such advisors instead, after having heard Evraz. Only the Trustee shall be entitled to issue instructions to the advisors. Paragraph 43 shall apply mutates mutandis. In the Trustee Divestiture Period, the Divestiture Trustee may use advisors who served Evraz during the Divestiture Period if the Divestiture Trustee considers this in the best interest of an expedient sale.

IV. Replacement, discharge and reappointment of the Trustee

45. If the Trustee ceases to perform its functions under the Commitments or for any other good cause, including the exposure of the Trustee to a conflict of interest:

- (a) the Commission may, after hearing the Trustee, require Evraz to replace the Trustee; or
 - (b) Evraz, with the prior approval of the Commission, may replace the Trustee.
46. If the Trustee is removed according to paragraph 45, the Trustee may be required to continue in its function until a new Trustee is in place to whom the Trustee has effected a full hand over of all relevant information. The new Trustee shall be appointed in accordance with the procedure referred to in paragraphs 30-35.
47. Beside the removal according to paragraph 45, the Trustee shall cease to act as Trustee only after the Commission has discharged it from its duties after all the Commitments with which the Trustee has been entrusted have been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee if it subsequently appears that the relevant remedies might not have been fully and properly implemented.

G. THE REVIEW CLAUSE

48. The Commission may, where appropriate, in response to a request from Evraz showing good cause and accompanied by a report from the Monitoring Trustee:
- (a) Grant an extension of the time periods foreseen in the Commitments, or
 - (b) Waive, modify or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments including circumstances in which the structure of the market has changed to such an extent that the one or more undertakings are no longer necessary to render the proposed concentration compatible with the common market.

Where Evraz seeks an extension of a time period, it shall submit a request to the Commission no later than one month before the expiry of that period, showing good cause. Only in exceptional circumstances shall Evraz be entitled to request an extension within the last month of any period.

H. FAST TRACK DISPUTE RESOLUTION

49. A fast track dispute resolution procedure shall apply if Evraz and a Feedstock Customer cannot agree on the terms of the supply agreement pursuant to Section E or the interpretation of the terms of the supply agreement, or if Evraz and the Purchaser are in disagreement over the slag supply commitment pursuant to paragraph 5, such disagreements, including the non-conclusion of a supply agreement with a Feedstock Customer, shall be finally and exclusively resolved by the fast track dispute resolution procedure as described below, unless the Feedstock Customer concerned or the Purchaser prefers to resort to dispute resolution procedures provided for, if any, in the applicable supply agreement.
50. Any Feedstock Customer or the Purchaser, as applicable, who wishes to avail itself of the fast track dispute resolution procedure (a “Requesting Party”) shall send a written request to Evraz (with a copy to the Monitoring Trustee) setting out in detail the

reasons leading that party to believe that Combined Entity is failing to comply with the requirements of the Commitments. The Requesting Party and Evraz will use their best efforts to resolve all differences of opinion and to settle all disputes that may arise through co-operation and consultation within a reasonable period of time not exceeding 30 Working Days after receipt of the Request.

51. The Monitoring Trustee shall present its own proposal (the “Trustee Proposal”) for resolving the dispute within 15 Working Days, specifying in writing the action, if any, to be taken by Evraz in order to ensure compliance with the commitments vis-à-vis the Requesting Party, and be prepared, if requested, to facilitate the settlement of the dispute. This provision shall no longer apply after the Monitoring Trustee has been discharged by the Commission pursuant to paragraph 47.
52. Should the Requesting Party and Evraz (together the “Parties to the Arbitration”) fail to resolve their differences of opinion in the consultation phase as described in paragraph 47, the Requesting Party may serve a notice (the “Notice”), in the sense of a request for arbitration, to the International Chamber of Commerce (hereinafter the “Arbitral Institution”), with a copy of such Notice and request for arbitration to the Monitoring Trustee.
53. The Notice shall set out in detail the dispute, difference or claim (the “Dispute”) and shall contain, *inter alia*, all issues of both fact and law, including any suggestions as to the procedure, and all documents relied upon shall be attached, *e.g.* documents, agreements, expert reports, and witness statements. The Notice shall also contain a detailed description of the action to be undertaken by Evraz (including, if appropriate, a draft contract comprising all relevant terms and conditions) and the Trustee Proposal, including a comment as to its appropriateness.
54. Evraz shall, within 15 Working Days from receipt of the Notice, submit its answer (the “Answer”), which shall provide detailed reasons for its conduct and set out, *inter alia*, all issues of both fact and law, including any suggestions as to the procedure, and all documents relied upon, *e.g.*, documents, agreements, expert reports, and witness statements. The Answer shall, if appropriate, contain a detailed description of the action, which the Evraz proposes to undertake vis-à-vis the Requesting Party (including, if appropriate, a draft contract comprising all relevant terms and conditions) and the Trustee Proposal (if not already submitted), including a comment as to its appropriateness.

Appointment of the arbitrators

55. The Arbitral Tribunal shall consist of three persons. The Requesting Party shall nominate its arbitrator in the Notice; Evraz shall nominate its arbitrator in the Answer. The arbitrator nominated by the Requesting Party and by Evraz shall, within 5 Working Days of the nomination of the latter, nominate the chairman, making such nomination known to the parties and the Arbitral Institution, which shall forthwith confirm the appointment of all three arbitrators.
56. Should Evraz fail to nominate an arbitrator, or if the two arbitrators fail to agree on the chairman, the default appointment(s) shall be made by the Arbitral Institution. The three-person arbitral tribunal is herein referred to as the “Arbitral Tribunal”.

Arbitration procedure

57. The Dispute shall be finally resolved by arbitration under the rules of the Arbitral Institution with such modifications or adaptations as foreseen herein or necessary under the circumstances (the “Rules”). The arbitration shall be conducted in Paris, France, in the English language.
58. The procedure shall be a fast-track procedure. For this purpose, the Arbitral Tribunal shall shorten all applicable procedural time-limits under the Rules as far as admissible and appropriate in the circumstances. The Parties to the Arbitration shall consent to the use of e-mail for the exchange of documents.
59. The Arbitral Tribunal shall, as soon as practical after the confirmation of the Arbitral Tribunal, hold an organizational conference to discuss any procedural issues with the Parties to the Arbitration. Terms of Reference shall be drawn up and signed by the Parties to the Arbitration and the Arbitral Tribunal at the organizational meeting or immediately thereafter and a procedural timetable shall be established by the Arbitral Tribunal. An oral hearing shall, as a rule, be established within 2 months of the confirmation of the Arbitral Tribunal.
60. In order to enable the Arbitral Tribunal to reach a decision, it shall be entitled to request any relevant information from the Parties to the Arbitration, particularly an overview of terms and conditions of the licenses entered into in the last three years with the Requesting Party, to appoint experts and to examine them at the hearing, and to establish the facts by all appropriate means. The Arbitral Tribunal is also entitled to ask for assistance by the Trustee in all stages of the procedure if the Parties to the Arbitration agree.
61. The Arbitral Tribunal shall not disclose confidential information and shall apply the standards attributable to confidential information under the Merger Regulation. The Arbitral Tribunal may take measures necessary for protecting confidential information in particular by restricting access to confidential information to the Arbitral Tribunal, the Trustee, and outside counsel and experts of the opposing party.
62. The burden of proof in any dispute under these Rules shall be borne as follows: (i) the Requesting Party must produce evidence of a *prima facie* case and (ii) if the Requesting Party produces evidence of a *prima facie* case, subject to paragraph 65 below, the Arbitral Tribunal must find in favour of the Requesting Party unless Evraz can produce evidence to the contrary.

Involvement of the Commission

63. The Commission shall be allowed and enabled to participate in all stages of the procedure by
 - (a) Receiving all written submissions (including documents and reports, *etc.*) made by the Parties to the Arbitration;

- (b) Receiving all orders, interim and final awards and other documents exchanged by the Arbitral Tribunal with the Parties to the Arbitration (including Terms of Reference and procedural timetable);
- (c) Giving the Commission the opportunity to file *amicus curiae* briefs; and
- (d) Being present at the hearing(s) and being allowed to ask questions to parties, witnesses and experts.

The Arbitral Tribunal shall forward, or shall order the Parties to the Arbitration to forward, the documents mentioned to the Commission without delay.

- 64. In the event of disagreement between the Parties to the Arbitration regarding the interpretation of the Commitments, the Arbitral Tribunal may seek the Commission's interpretation of the Commitments before finding in favour of any Party to the Arbitration and shall be bound by the interpretation.

Decisions of the Arbitral Tribunal

- 65. The Arbitral Tribunal shall decide the dispute on the basis of the Commitment and the Decision. Issues not covered by the Commitment and the Decision shall be decided (in the order as stated) by reference to the Merger Regulation, EU law and the laws applicable to the contract with the Requesting Party without reference to the respective rules of conflicts of law; and the arbitrators shall not act in amicable composition. Each Party to the Arbitration shall submit a single proposal for the terms of the supply contract to be disclosed to an arbitration panel. The Arbitral Tribunal shall take all decisions by majority vote. This Arbitral Tribunal can select one of the two submitted proposals in its entirety; provided, however, that the Arbitral Tribunal may, if it determines that the proposal to be selected contains one or more unreasonable clauses, impose alternatives to such clauses. With respect to the price to be paid, the price can be the one proposed by either party or any price in between. This selection must be made by majority decision or, if there is no majority, by the chairman alone.
- 66. The Arbitral Tribunal shall in the award specify the action, if any, to be taken by Evraz in order to comply with the Commitments vis-à-vis the Requesting Party (*e.g.*, specify a contract including all relevant terms and conditions in accordance with paragraph 65 above). The award shall be final and binding on the Parties to the Arbitration and shall resolve the Dispute and determine any and all claims, motions or requests submitted to the Arbitral Tribunal. The costs associated with any arbitration (including arbitration fees and the fees and expenses of counsel to the successful party) will be borne by the losing party, as determined by majority decision or, if there is no majority, by the chairman alone.
- 67. The award shall, as a rule, be rendered within one month after the adoption of the Terms of Reference; provided, however that if both Parties to the Arbitration agree, the award may be rendered not more than three months thereafter. The timeframe shall, in any case, be extended by the time required for the Commission to submit an interpretation of the Commitment if so requested by the Arbitral Tribunal.

68. The Parties to the Arbitration shall prepare a non-confidential version of the award, without business secrets. The Commission may publish the non-confidential version of the award.
69. Nothing in the arbitration procedure shall affect the power to the Commission to take decisions in relation to the Commitment in accordance with its powers under the Merger Regulation.

Duly authorized for and on behalf of

EVRAZ GROUP S.A.

By:
Title:

SCHEDULE A

1. The Divestment Business as operated to date has the following legal and functional structure:

The Vanchem Operations are owned and operated by Highveld. The Vanchem Operations is a division of Highveld and is not incorporated separately.

The Divestment Business includes Highveld's production facilities and related assets located at the Vanchem site in Witbank, Republic of South Africa (the Vanchem Operations), including the vanadium extraction and vanadium oxide production facilities and vanadium chemicals plant, and Highveld's ferrovanadium smelter located at the site of Highveld's iron and steel operations in Witbank, Republic of South Africa. A map showing the location of the Vanchem extraction, oxide and chemical production facilities is attached as Annex 1. A map showing the location of Highveld's ferrovanadium smelter is attached as Annex 2.

2. Following paragraph 4 of these Commitments, the Divestment Business includes:

- (a) the following main tangible assets:

[The vanadium extraction and oxides facilities, chemical plant and Highveld's ferrovanadium smelter].

There are no assets, including machinery, equipment or other tangible or intangible assets required to ensure the viability of the Vanchem Operations as a stand alone business, that are not located at the Vanchem site or in Highveld's ferrovanadium smelter.

- (b) all tangible assets used in the development, production, servicing, and sale of the products manufactured by the Highveld Vanadium Operations, including [...]
- (c) all intangible assets that have been used exclusively or primarily in the development, production, servicing, and sale of the products manufactured at the Vanchem site and at Highveld's ferrovanadium smelter, including [...]
- (e) a non-exclusive, non-transferable, royalty-free license(s) for use of any intangible asset that has been used by both the Divestment Business and any of Highveld's non-divested businesses, provided that such license(s) may be transferable to any future purchaser of the Divestment Business, and provided further that such license(s) shall be provided on commercially reasonable terms;
- (f) all research data concerning historic and current research and development efforts conducted at or for the Divestment Business, including [...]
- (g) [...]

(h) Key Personnel.

- [...]
- [...]
- [...]
- [...]
- [...]
- [...]
- [...]
- [...]
- [...]

3. Evraz specifically commits to procure the transfer of the following agreements:

- (a) [...]
- (b) [...]

For avoidance of doubt, all tangible and intangible assets, together with personnel currently employed at or working for the Vanchem Operations will be part of the divestiture, subject to South African law. This will guarantee that the Divested Business will remain a viable stand-alone business. The Divested Business is currently equipped with all necessary facilities, machinery and other tangible and intangible assets needed for the extraction of vanadium and the production of vanadium products and has access to the necessary workforce to ensure its daily operation.

SCHEDULE B

1. The Divestment Shareholding is Highveld's entire shareholding in South Africa Japan Vanadium (Proprietary) Limited ("SAJV"), with its corporate seat at P.O. Box 111, Witbank, South Africa.
2. SAJV is a joint venture between Highveld, Nippon Denko Co. Limited, Mitsui & Co., Ltd., with Highveld holding 50% of the shares in SAJV, Nippon Denko Co. Limited holding [...], and Mitsui & Co., Ltd. holding [...]. Highveld, Nippon Denko Co. Limited and Mitsui & Co., Ltd. concluded a shareholders' agreement in [...], which describes the rights and obligations of each of the shareholders in SAJV.
3. [...].
4. [...].

[CONFIDENTIAL]

[CONFIDENTIAL]