

INDEPENDENT EXPERT REPORT ON RESERVES AND RESOURCES OF THE DIAMOND ASSETS OF THE ALROSA GROUP OF COMPANIES

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SUMMARY EXTRACT

1.0 SUMMARY

1.1 INTRODUCTION

This independent expert report (Report) has been prepared by Micon International Co Limited (Micon) and was commissioned by the Joint Stock Company ALROSA (ALROSA). The Report comprises an independent review and valuation of the ALROSA Group of Companies' principal diamond assets in the Russian Federation. These assets include operating mines and projects at various stages of development. Specifically, the Report includes an evaluation of the deposits developed by the Company's four principal divisions, the Udachny, Aikhal, Mirny and Nyurba mining and processing divisions (GOK's), and also by the subsidiary mining companies: OJSC Severalmaz, which includes the Lomonosov GOK operating facility; and OJSC Almazy Anabara. Excluded from this Report, by agreement with ALROSA, are the operations of Catoca Ltd. Mining Co. in Angola, in which ALROSA has a 32.8% interest, the recently acquired deposits of OJSC Nizhne-Lenskoe and a number of minor hard rock and placer diamond assets that were not subject to Micon's review.

Micon is an independent firm of geologists, mining engineers, metallurgists and environmental consultants, all of whom have extensive experience in the mining industry. The firm operates from integrated offices in Norwich and Cornwall, United Kingdom and Toronto and Vancouver, Canada.

The principal consultants responsible for the review of ALROSA's assets and preparation of this Report are listed below.

- Stanley Bartlett, P.Geo., Vice President, Senior Geologist and Managing Director of Micon's UK office;
- Chris Lattanzi, P.Eng., Director, Senior Mining Engineer, Micon;
- Jane Spooner, M.Sc., P.Geo., Vice President, Senior Mining Economist, Micon;
- Mark Dodds-Smith, Ph.D., Environment, Health and Safety Specialist, Associate Consultant, Micon;
- Michael Khoudine, M.Sc., Senior Mining Engineer, Micon;
- Bruce Pilcher, B.E., EurIng., C.Eng., FIMMM, FAusIMM(CP), Senior Mining Engineer, Micon;
- James Turner, B.Sc., A.C.S.M., M.Sc., C.Eng., Senior Mineral Processing Engineer, Micon;

- Beatrice Forét, M.Sc., Senior Geologist, Associate Consultant, Micon; and,
- Sandra Mahé, B.Sc., Geologist, Micon.

Members of the Micon project team visited the assets of ALROSA in June 2013. Information provided by ALROSA was reviewed during the period July 2013 to September 2013. The report includes actual production results and economic parameters achieved by the ALROSA Group companies for the full year of 2012 and provides a statement of the JORC Code-compliant mineral resources and ore reserves, as at 1st July 2013, for the assets reviewed during 2013.

Information used to compile the Report includes the following:

- Structured and informal interviews conducted during the site visits with the management and senior staff of ALROSA, its subsidiaries and associated organisations;
- Reports submitted by ALROSA to the regulatory authorities of the Russian Federation in accordance with routine statutory requirements;
- Exploration databases and reports prepared by ALROSA for use internally in the development and management of its operations;
- Periodic management production and cost reports prepared by ALROSA for use internally and/or distribution to shareholders and other interested parties;
- Feasibility study reports prepared either internally by ALROSA personnel, or externally by specialist organisations under contract to ALROSA;
- Corporate cash flow models prepared by ALROSA; and,
- ALROSA's 2012 to 2021 Long Term Development Plan as updated by additional data provided by ALROSA for 2013 through 2023 ("ALROSA Long Term Development Plan").

1.2 ALROSA GROUP OVERVIEW

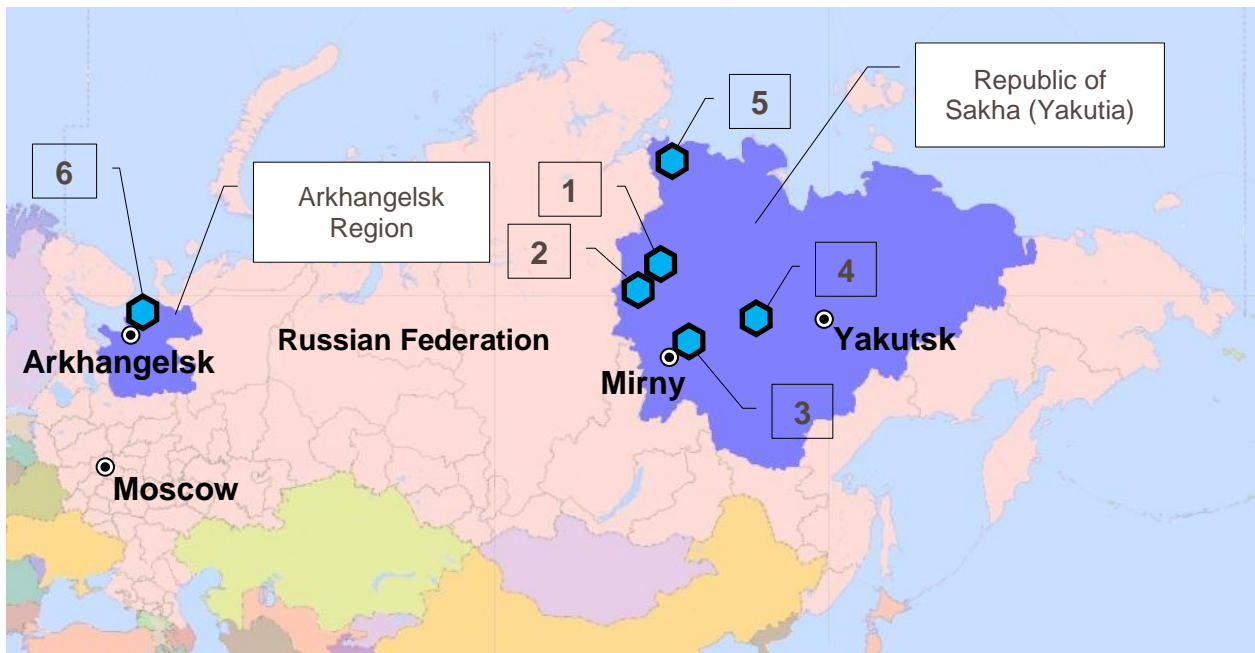
ALROSA was established pursuant to the decree of the President of the Russian Federation No. 158C of 19th February 1992, "On Establishment of Joint Stock Company Almazy Rossii – Sakha". The company became the legal successor to a number of organisations incorporated into its structure: Yakutalmaz Scientific and Production Association (the State-owned diamond mining company in the former USSR), some departments of the Committee for Precious Metals and Gems under the Ministry of Finance of the Russian Federation (involved in sorting, pre-sale preparation and sale of diamonds) and the Almazyvelirexport Foreign Trade Organisation.

The shareholders of ALROSA are: the Russian Federation represented by the Federal Agency for Management of State Property with 50.9256% of shares; the Republic of Sakha (Yakutia) represented by the Ministry of Property Relations of the Republic of Sakha (Yakutia) with 32.0002%; administrations of eight municipal districts (Uluses) of the Republic of Sakha (Yakutia) with 8.0003%; other legal entities and individuals with 9.0739%.

Within its structure, ALROSA incorporates all the technological elements and process components of diamond mining and beneficiation. The Joint Stock Company Almazly Rossiya – Sakha was established on 13th August 1992 in Mirny, the Republic of Sakha (Yakutia) (Resolution No. 554 of the Mirny District Administration). The company officially commenced mining activity on 1st January 1993.

The ALROSA asset portfolio includes primary hard-rock and placer diamond deposits located in both the Republic of Sakha (Yakutia) and the Arkhangelsk region of the Russian Federation, as shown in Figure 1.1. ALROSA also holds 32.8% of the shares of the Catoca Ltd. Mining Co., based in Angola, which exploits the Catoca diamond deposit – one of the largest kimberlite pipes in the world.

Figure 1.1: Location of Principal Mining Divisions



Source: Micon ALROSA Technical Report 2012

Notes:

- Moscow, Mirny – Head Offices,
- Yakutsk – Head Office of ‘Almazly Anabara’
- Arkhangelsk – Head Office of ‘Severalmaz’
- 1 – Udachny GOK
- 2 – Aikhal GOK
- 3 – Mirny GOK
- 4 – Nyurba GOK
- 5 – Deposits of ‘Almazly Anabara’ and ‘Nizhne-Lenskoe’
- 6 – M. V. Lomonosov Deposit

The data with respect to the individual diamond deposits currently being mined, or being planned for mining by ALROSA are summarised in Tables 1.1 and 1.2. Table 1.1 contains information for those deposits specifically covered by the assessment herein, and Table 1.2 contains the deposits outside the scope of this assessment. The deposits listed that are beyond the scope of Micon’s assessment represent approximately 10.5% of diamond production shown in the ALROSA Long Term Development Plan.

Table 1.1: ALROSA Group of Companies - List of Assets Covered by Micon's Assessment

| Asset | Company | | State of Development/Mining Method |
|---|--------------------------------|---------------------|--|
| | Operating | Holding | |
| Deposits Covered by Micon's Assessment | | | |
| Udachnaya Pipe | JSC ALROSA, Udachny GOK | JSC ALROSA | Open-Pit Mining/Construction of Underground Mine |
| Zarnitsa Pipe | JSC ALROSA, Udachny GOK | JSC ALROSA | Open-Pit Mining |
| Jubilee Pipe | JSC ALROSA, Aikhal GOK | JSC ALROSA | Open-Pit Mining |
| Aikhal Pipe | JSC ALROSA, Aikhal GOK | JSC ALROSA | Underground Mining |
| Komsomolskaya Pipe | JSC ALROSA, Aikhal GOK | JSC ALROSA | Open-Pit Mining |
| Mir Pipe | JSC ALROSA, Mirny GOK | JSC ALROSA | Underground Mining |
| International Pipe | JSC ALROSA, Mirny GOK | JSC ALROSA | Underground Mining |
| Solur-Vostochnaya Placer | JSC ALROSA, Mirny GOK | JSC ALROSA | Prepared for Development |
| Nyurbinskaya Pipe | JSC ALROSA, Nyurba GOK | OJSC ALROSA-NYURBA | Open-Pit Mining |
| Nyurbinskaya Placer | JSC ALROSA, Nyurba GOK | OJSC ALROSA-NYURBA | Open-Pit Mining |
| Botuobinskaya Pipe | JSC ALROSA, Nyurba GOK | OJSC ALROSA-NYURBA | Initial Waste Stripping |
| Botuobinskaya Placer | JSC ALROSA, Nyurba GOK | OJSC ALROSA-NYURBA | Initial Waste Stripping |
| Maiskoye Kimberlite Body | JSC ALROSA, Nyurba GOK | JSC ALROSA | Detailed Exploration |
| Arkhangelskaya Pipe, Lomonosov Deposit | OJSC Severalmaz, Lomonosov GOK | OJSC Severalmaz | Open-Pit Mining |
| Karpinskogo-1 Pipe, Lomonosov Deposit | OJSC Severalmaz, Lomonosov GOK | OJSC Severalmaz | Initial Waste Stripping |
| Ebelyakh and Gusiny Stream Placers | OJSC Almazy Anabara | OJSC Almazy Anabara | Prepared for Development |

Table 1.2: ALROSA Group of Companies - List of Assets Not Covered by Micon's Assessment

| Asset | Company | | State of Development/Mining Method | GKZ-Approved Mineral Reserves |
|--|--|--|------------------------------------|-------------------------------|
| | Operating | Holding | | |
| Deposits Not Covered by Micon's Assessment | | | | |
| Dalnaya Pipe | JSC ALROSA, Udachny GOK | JSC ALROSA | Development is Scheduled | Confirmed |
| Delyuvialnaya Placer | JSC ALROSA, Udachny GOK | JSC ALROSA | Development is Scheduled | No Data Provided |
| Kluch Piropovy Placer | JSC ALROSA, Udachny GOK | JSC ALROSA | Development is Scheduled | No Data Provided |
| Verkhne-Munskoe Deposit | JSC ALROSA, Udachny GOK | JSC ALROSA | Development is Scheduled | Confirmed |
| Zarya Pipe | JSC ALROSA, Aikhal GOK | JSC ALROSA | Development is Scheduled | Confirmed |
| Tailings Dump of Processing Plant No. 5 | JSC ALROSA, Mirny GOK | JSC ALROSA | Open-Pit Mining | Confirmed |
| Vodorazdelnye Galechniki Placer | JSC ALROSA, Mirny GOK | JSC ALROSA | Open-Pit Mining | Confirmed |
| Irelyakh Placer | JSC ALROSA, Mirny GOK | JSC ALROSA | Open-Pit Mining | Confirmed |
| Gornoye Placer | JSC ALROSA, Mirny GOK | JSC ALROSA | Open-Pit Mining, Dredging | Confirmed |
| Kurung Yuryakh Stream Placer | OJSC Almazy Anabara | OJSC Almazy Anabara | Open-Pit Mining | Confirmed |
| Stream 41 Placer | OJSC Almazy Anabara | OJSC Almazy Anabara | Open-Pit Mining | Confirmed |
| Morgogor Placer | OJSC Almazy Anabara | OJSC Almazy Anabara | Open-Pit Mining | Confirmed |
| Right Bank of Morgogor Placer | OJSC Almazy Anabara | OJSC Almazy Anabara | Open-Pit Mining | Confirmed |
| Istok Placer | OJSC Almazy Anabara | OJSC Almazy Anabara | Open-Pit Mining | Confirmed |
| Kholomolokh Placer | OJSC Almazy Anabara | OJSC Almazy Anabara | Open-Pit Mining | Confirmed |
| Khara-Mas Placer | OJSC Almazy Anabara | OJSC Almazy Anabara | Development is Scheduled | Confirmed |
| Molodo Placer | OJSC Nizhne-Lenskoe | OJSC Nizhne-Lenskoe | Open-Pit Mining | Confirmed |
| Billyakh Placer | OJSC Nizhne-Lenskoe | OJSC Nizhne-Lenskoe | Open-Pit Mining | Confirmed |
| Verkhny (Upper) Billyakh Placer | OJSC Nizhne-Lenskoe | OJSC Nizhne-Lenskoe | Open-Pit Mining | Confirmed |
| Talakhtakh Placer | OJSC Nizhne-Lenskoe | OJSC Nizhne-Lenskoe | Development is Scheduled | Confirmed |
| Tributaries of the Billyakh Stream Placer | OJSC Nizhne-Lenskoe | OJSC Nizhne-Lenskoe | Open-Pit Mining | Confirmed |
| Bolshaya Kuonamka | OJSC Nizhne-Lenskoe | OJSC Nizhne-Lenskoe | Development is Scheduled | Confirmed |
| Khara-Mas Placer ¹ | OJSC Almazy Anabara | OJSC Almazy Anabara | Open-Pit Mining | Confirmed |
| Vodorazdelnye Placer | OJSC Almazy Anabara | - | Development is Scheduled | No Data Provided |
| Levoberezhny Placer | OJSC Almazy Anabara | - | Development is Scheduled | No Data Provided |
| Bilirsky Placer | OJSC Almazy Anabara | - | Development is Scheduled | No Data Provided |
| Verkhneudzhinsky Placer | OJSC Almazy Anabara | - | Development is Scheduled | No Data Provided |
| Srednee (Middle) Molodo Placer | OJSC Almazy Anabara | - | Development is Scheduled | No Data Provided |
| Verkhnee (Upper) Molodo Placer (with Daldyn Tributary) | OJSC Almazy Anabara | - | Development is Scheduled | No Data Provided |
| Malaya Kuonamka Placer | OJSC Almazy Anabara | - | Development is Scheduled | No Data Provided |
| Catoca Pipe | Joint-stock venture "Catoca Ltd. Mining Co." | Joint-stock venture "Catoca Ltd. Mining Co." | Open-Pit Mining | |

¹Khara-Mas Placer licence belonging to Nizhne-Lenskoe is not the same area that is defined by the Khara-Mas Placer licence belonging to Almazy Anabara

1.3 MINERAL RESOURCES AND RESERVES

1.3.1 Russian Reserve Statements

All mineral resources and reserves in the Russian Federation are formally classified according to an established system developed and administered by the Russian State Commission for Mineral Reserves (Gosudarstvennaya Komissia po Zapasam - GKZ). The GKZ applies strict control over the estimation and reporting of mineral reserves and utilises a prescribed protocol for their calculation that is usually based upon standard sectional methods. The Russian reserves for each of the operations reviewed for this Report are provided within the body of the Report.

The aggregate of GKZ-approved reserves, estimated according to Russian requirements for the ALROSA deposits and included in the assessment conducted by Micon as at 1st July 2013, total **745,649 thousand tonnes** of ore and sands containing **950,610 thousand carats of diamonds**. These numbers include off-balance reserves of ore and sands. Total officially recognised reserves, estimated according to Russian requirements for all ALROSA deposits as at 1st July 2013, total **1,532,907 thousand tonnes** of ore and sands containing **1,180,837 thousand carats of diamonds**. This total includes GKZ-approved off-balance reserves of 157,401 thousand tonnes of ore and sands containing 27,177 thousand carats of diamonds.

These numbers are not compliant with the JORC Code, and are stated for informational purposes only.

1.3.2 JORC Code Mineral Resource and Ore Reserve Estimates

The mineral resources and ore reserves contained within this Report have been classified following the category definitions of the JORC Code (the Joint Ore Reserve Committee of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Minerals Council of Australia). Similar to the system followed by the GKZ, the JORC Code relies upon an increased level of geological knowledge and the application of mining and other modifying factors to elevate those categories of resources to reserves.

1.3.2.1 JORC Code-Compliant Mineral Resources

The estimate of JORC Code-compliant mineral resources for the ALROSA Group of Companies, subdivided by resource category, for each of the deposits, is summarised in Table 1.3.

All the mineral resources of the ALROSA Group of Companies included in the assessment, except for the resource of the Udachnaya pipe stockpile, were classified as Indicated and Inferred. The mineral resources were classified following the guidelines of the JORC Code with respect to the quantity, quality, spatial distribution of sampling data and the level of confidence of the resource tonnage and grade. The mineral resources were audited and subsequently categorised by Micon registered professional geologists, all of whom qualify as a Competent Person as defined by the JORC Code.

Table 1.3: ALROSA Group of Companies, Summary of JORC Code-Compliant Mineral Resources as at 1st July 2013

| Deposit | Resource Category | Tonnage (kt) | Resource Grade (ct/t) | Contained Carats (kct) |
|---|-----------------------------|----------------|-----------------------|------------------------|
| Udachny GOK | | | | |
| Udachnaya Pipe ore stockpile | Measured | 4,820 | 1.52 | 7,329 |
| Udachnaya Pipe for underground mining | Indicated | 75,265 | 1.50 | 112,782 |
| | Inferred | 78,305 | 1.25 | 98,157 |
| Udachnaya Pipe for open pit mining | Indicated | 3,785 | 1.19 | 4,501 |
| Udachnaya Remnants above -280 m | Indicated | 3,247 | 1.54 | 4,995 |
| Zarnitsa Pipe | Indicated | 58,554 | 0.21 | 12,007 |
| Aikhal GOK | | | | |
| Jubilee Pipe | Indicated | 129,017 | 0.84 | 108,166 |
| | Inferred | 65,977 | 0.62 | 40,594 |
| | Potential | 8,431 | 0.32 | 2,734 |
| Aikhal Pipe | Indicated | 7,729 | 4.68 | 36,159 |
| | Inferred | 8,269 | 3.87 | 31,967 |
| Komsomolskaya Pipe | Indicated | 4,812 | 0.38 | 1,808 |
| Mirny GOK | | | | |
| Mir Pipe | Indicated | 29,211 | 3.55 | 103,782 |
| | Inferred | 10,913 | 3.11 | 33,940 |
| International Pipe | Indicated | 4,208 | 8.73 | 36,739 |
| | Inferred | 1,542 | 7.98 | 12,304 |
| Solur-Vostochnaya | | | | |
| Solur-Vostochnaya placer | Indicated | 7,527 | 0.78 | 5,903 |
| | Inferred | 1,198 | 0.72 | 865 |
| Nyurba GOK | | | | |
| Nyurbinskaya Pipe | Indicated | 12,264 | 4.13 | 50,661 |
| | Inferred | 1,192 | 5.42 | 6,465 |
| Botuobinskaya Pipe | Indicated | 13,679 | 5.19 | 71,044 |
| | Inferred | 2,685 | 5.14 | 13,790 |
| Nyurbinskaya Placer | Indicated | 6,176 | 1.91 | 11,814 |
| | Inferred | 6,407 | 1.66 | 10,638 |
| Botuobinskaya Placer | Inferred | 1,085 | 0.49 | 537 |
| Maiskoye Kimberlite Body | Inferred | 3,841 | 2.86 | 10,996 |
| Lomonosov GOK (OJSC Severalmaz) | | | | |
| Arkhangelskaya Pipe | Indicated | 56,226 | 0.77 | 43,406 |
| | Inferred | 39,408 | 0.98 | 38,623 |
| Karpinsky-1 Pipe | Indicated | 24,988 | 1.08 | 26,960 |
| | Inferred | 5,168 | 1.26 | 6,512 |
| OJSC 'Almazy Anabara' | | | | |
| Ebelyakh and Gusiny stream placer | Indicated | 30,508 | 0.88 | 26,749 |
| | Inferred | 6,308 | 0.45 | 2,848 |
| Total for JSC ALROSA | | | | |
| All Deposits covered by the Report | Measured | 4,820 | 1.52 | 7,329 |
| | Indicated | 467,197 | 1.41 | 657,477 |
| | Measured + Indicated | 472,017 | 1.41 | 664,806 |
| | Inferred | 232,298 | 1.33 | 308,235 |

Micon notes that there is excellent potential for the increase of JORC Code-compliant mineral resources at a number of ALROSA's deposits covered by this assessment. This growth can be achieved by further exploration of mineralised target areas with demonstrated potential to contain diamonds. Currently these targets are not sufficiently explored to be classified as resources or reserves in accordance with the JORC Code as of 1st July 2013.

The exploration results from potential targets owned by ALROSA were reviewed by Micon, but these targets were not classified following JORC Code guidelines. These targets are presented in Table 1.4.

Table 1.4: ALROSA Group of Companies - Summary of Exploration Results from Potential Targets as at 1st July 2013
(Not Classified as JORC Code-Compliant Resources or Reserves)

| Deposit | Description | Tonnage (kt) | Diamond Grade (ct/t) | Contained Diamonds (kct) |
|--------------------------|-----------------------|----------------|----------------------|--------------------------|
| Zarnitsa Pipe | Blocks 2 and 3 | 163,863 | 0.10 | 16,629 |
| Jubilee Pipe | Blocks 25 and 26 | 8,431 | 0.32 | 2,734 |
| International Pipe | Block 12 | 2,408 | 7.18 | 17,293 |
| Nyurbinskaya Pipe | Blocks 9 and 10 | 438 | 4.22 | 1,846 |
| Maiskoye Kimberlite Body | Elevations -35/-135 m | 2,174 | 2.46 | 5,347 |
| Karpinskogo-1 Pipe | Blocks K-1-P1 | 4,517 | 1.26 | 5,691 |
| Total | | 181,831 | 0.36 | 49,540 |

The mineral resource estimate provided in the Report covers ALROSA's principal assets; however it is not exhaustive, as illustrated by the information presented in Tables 1.1 and 1.2. The list of deposits presented in Table 1.2 includes the assets not covered by the present assessment.

1.3.2.2 JORC Code-Compliant Ore Reserves

The JORC Code-compliant ore reserve estimates for each of the deposits are summarised in Table 1.5. All of the reserves, except for the Proven reserves of the Udachnaya pipe ore stockpile, are classified as Probable ore reserves.

The ore reserve estimate is based on the mineral resources classified in accordance with the JORC Code, as stated in Table 1.3. The mineral resources are inclusive of ore reserves for all the deposits evaluated.

All the diamond reserves of the ALROSA Group of Companies, except the reserves of the Udachnaya pipe ore stockpile, were assigned to the Probable category. Under the JORC Code the classification of ore reserves is predetermined by the allocation of mineral resources. The mineral resources of the ALROSA Group of Companies were assigned to the Indicated and Inferred categories and therefore diamond reserves must be assigned to the Probable category. By definition Indicated mineral resources with demonstrated feasibility cannot be assigned to the higher category of Proven.

The confidence level attributed to the Probable category reserves is sufficiently high to conduct economic evaluations and to make decisions related to the development of the deposits.

Table 1.5: Summary of Proven and Probable Ore and Sands Reserves as at 1st July 2013

| Deposit | JORC Category | Tonnage (kt) | Diamond Grade (ct/t) | Contained Diamonds (kct) |
|---|-----------------|----------------|----------------------|--------------------------|
| Udachny GOK | | | | |
| Udachnaya Pipe for underground mining | Probable | 83,017 | 1.31 | 108,627 |
| Udachnaya Pipe for open-pit mining | Probable | 4,267 | 1.03 | 4,407 |
| Udachnaya Pipe ore stockpile | Proven | 4,820 | 1.52 | 7,329 |
| Zarnitsa Pipe | Probable | 58,538 | 0.20 | 11,995 |
| Aikhal GOK | | | | |
| Jubilee Pipe | Probable | 107,163 | 0.90 | 96,982 |
| Aikhal Pipe | Probable | 5,217 | 4.37 | 22,789 |
| Komsomolskaya Pipe | Probable | 4,847 | 0.37 | 1,807 |
| Mirny GOK | | | | |
| Mir Pipe | Probable | 29,586 | 3.29 | 97,230 |
| International Pipe | Probable | 4,555 | 8.09 | 36,585 |
| Solur-Vostochnaya | | | | |
| Solur-Vostochnaya Placer | Probable | 9,348 | 0.61 | 5,722 |
| Nyurba GOK | | | | |
| Nyurbinskaya Pipe | Probable | 9,875 | 4.09 | 40,394 |
| Botuobinskaya Pipe | Probable | 13,839 | 5.13 | 70,971 |
| Nyurbinskaya Placer | Probable | 6,373 | 1.85 | 11,813 |
| Lomonosov GOK (OJSC Severalmaz) | | | | |
| Arkhangelskaya Pipe | Probable | 57,087 | 0.76 | 43,189 |
| Karpinskogo-1 Pipe | Probable | 18,438 | 1.13 | 20,918 |
| OJSC Almazny Anabara | | | | |
| Ebelyakh and Gusiny Stream Placers | Probable | 36,319 | 0.74 | 26,749 |
| Total ALROSA Group of Companies | | | | |
| All Deposits covered by the Report | Proven | 4,820 | 1.52 | 7,329 |
| | Probable | 448,469 | 1.34 | 600,178 |
| | Total | 453,289 | 1.34 | 607,507 |

The mineral reserve estimate presented in the Report covers the principal ALROSA assets; however, it is not exhaustive. The list of deposits given in Table 1.5 does not include all of the ALROSA operations.

1.4 OPERATIONS AND PROJECTS

1.4.1 Udachny GOK

The Udachny Mining and Processing Division (Udachny GOK) is based in the town of Udachny, located some 550 km north of the city of Mirny. Currently, the Udachny GOK mines the Udachnaya and the Zarnitsa kimberlite pipes. Both deposits are mined by open-pit methods, with an underground mine for the Udachnaya pipe currently under construction.

Processing of ore from all the mining operations is currently undertaken at a central processing plant, Plant No. 12, which was commissioned in 1976. Ore from both mines is processed using the same flow sheet. The relatively long haulage distance from Zarnitsa to the plant (21 km) and the low grade of Zarnitsa ore, has given rise to plans for the construction of a ropeway for ore delivery from the Zarnitsa pit to Plant No. 12. This plan assumes an increase of the production rate from the Zarnitsa pit to 5 Mt/a.

The Udachnaya pipe is located in the Daldyn-Alakit diamondiferous district. It is traced as a consistent ore body to a depth of 250 m, below which it divides into Eastern and Western ore bodies separated by a block of Upper Cambrian sedimentary rocks.

The Udachny open pit started production in 1971 and the reserves are scheduled to be exhausted in 2014. The pit is currently 640 m deep.

Access to the reserves of the Udachnaya pipe below an elevation of -320 m will be provided by three vertical shafts located to the south of the open pit. The mining method is expected to be uphole longhole retreat stoping and bottom ore mucking. Diesel LHD units will be used on draw levels and electric units will be used on main haulage levels. A continuous miner will be used for the development mining in ore and a raise borer will be used for the development of raises between levels. The first phase of the Udachny underground mine is expected to yield some development ore in 2013 and 2014, with production at a rate of 1.475 Mt/a planned for 2015. It is estimated that the mine will reach its full capacity of 4.0 Mt/a by 2019.

The Zarnitsa pipe belongs to the same kimberlite field as the Udachnaya pipe and lies 18 km east of Udachny town. Commercial operations at the Zarnitsa open pit commenced in 1999 and ceased in 2010. Currently the pit is 90 m deep and there are plans in place to deepen the pit to a depth of 200 m. The open pit utilises conventional truck and shovel equipment and material is prepared for excavation by drilling and blasting. Production recommenced in 2011 at a rate of 1 Mt/a.

Ore from both the Udachny and Zarnitsa mines is processed at Plant No. 12, located in Udachny. Feed material includes ore from the Udachny pipe and the Zarnitsa pipe. The reduced throughput for 2012 is commensurate with the planned tonnage from the Udachny underground mine, which is currently in development, and completion of the Udachny open pit operations. The reduced tonnage includes the contribution from the Zarnitsa open pit. After 2016 it is planned that the feed will comprise up to 4 Mt/a from the Udachny underground mine and 5 Mt/a of ore from the Zarnitsa open pit.

1.4.2 Aikhal GOK

The Aikhal mining and processing division (Aikhal GOK) is based close to the town of Aikhal, 65 km south-west of Udachny and some 485 km north of the city of Mirny. Aikhal GOK was established in 1986 and currently mines the Jubilee, Aikhal, and Komsomolskaya pipes. The Aikhal pipe has been mined by underground methods since 1997. The Jubilee and Komsomolskaya pipes are mined via open pits. Processing of ore from the Aikhal and Komsomolsky operations is currently undertaken at a central processing plant, Plant No. 8, located close to the Aikhal mine and some 17.6 km from the Komsomolskaya pipe. Since 1996, ore from the Jubilee pit has been processed at Plant No. 14, located 4.5 km to the north-east.

The Jubilee kimberlite pipe is located in the Daldyn-Alakit diamondiferous district. Morphologically the Jubilee pipe is close to a classical funnel-shaped pipe with a well-preserved conical mouth in the upper levels. The internal structure of the pipe is complex due to the multiphase intrusion of kimberlites. The pipe is composed of three ore shoots: central, western and eastern.

The open pit is currently being worked to a depth of 320 m and the current mine design gives an ultimate pit depth of 720 m. Throughout its life, the open pit has utilised traditional mining technology including drilling, blasting, loading ore and waste by shovels, hauling by dump trucks to dumps located at the surface. The open pit produced 10.4 Mt of ore in 2012.

The Jubilee open pit has sufficient reserves to maintain target production levels up to 2021 and for approximately seven additional years at current production rates. There is potential to identify additional reserves to extend the mine life beyond this period.

The Aikhal pipe is situated in a zone underlain by Lower Palaeozoic carbonate rocks, the main part of which is overlain by Upper Palaeozoic terrigenous formations clad within trappean rocks. In form it is an inclined dyke composed of three ore shoots, each having its own feeder.

Open-pit mining of the Aikhal pipe began in 1961 and by 1997 had reached the bottom of the design level at elevation +230 m, ending open-pit mining at the deposit. Underground mining first commenced in 1997 with the mine reaching the full design capacity of 0.5 Mt/a in 2012. The underground mine utilises the cut and fill mining method with backfilling. The current design document determines access and extraction of reserves down to an elevation of -100 m via two inclined and one vertical shaft.

Mine management is currently assessing a new mining method in order to reduce costs and improve productivity. One of the methods being proposed is long-hole open stoping with backfilling. The mining blocks are estimated to be 20 m to 25 m high, 15 m wide and 120 m long. Trials on this method started in 2012 and are continuing in 2013. No decision has been made to apply this method in the future.

The Komsomolskaya kimberlite pipe lies within the Alakit-Markha kimberlite field. It is a dyke-shaped ore body with a north-easterly orientation. It is intruded by a dolerite dyke that separates two major blocks from the main ore body. The Komsomolskaya pipe is composed of autolith kimberlite breccia and porphyritic kimberlite differing in their textural and structural properties, material compositions and mineral grade. The central part of the diatreme (the central ore shoot) is a typical volcanic pipe decreasing in width with depth and comprised of autolith kimberlite breccia. The eastern and western flanks of the pipe (dyke-shaped parts of the body) are both made up of porphyritic kimberlite.

The open pit at the Komsomolskaya pipe deposit has been in production since 1992. The final depth of the pit is currently at an elevation of -460 m and uses conventional mining including drilling, blasting, loading, hauling, and dumping the material with use of trucks and shovels. There is no ore mining indicated by the 2013 annual plan. Currently waste stripping is in progress for the last pushback to enable depletion of the remaining reserves.

Processing Plant No. 8 was rebuilt in 1980 for processing ore from the Sytykan open pit, although production from this mine ceased in 2001, the same year that production from Komsomolskaya pipe commenced. Ores from the Aikhal underground mine and Komsomolskaya pipe are processed separately. The annual processing capacity of Plant No. 8 is 1.7 Mt/a. Plant No. 14 was designed in 1989 with an annual capacity of 10 Mt/a.

1.4.3 Mirny GOK

The Mirny Mining and Processing Division (Mirny GOK) is based in the city of Mirny and was founded in 1957 as the base for exploration of the Mir kimberlite pipe. Mirny GOK currently mines the hard rock deposits of the Mir and International pipes, the Vodorazdelnye Galechniki, Gornoye and Irelyakh placer deposits, and historic tailings from Plant No. 5.

The processing of ore from all mining operations is currently undertaken at a central processing plant, Plant No. 3.

The Mir pipe is located in the Malo-Botuobinsky diamondiferous district. The pipe is near vertical and conical in shape to a depth of 300 m (elevation +30 m). The cross-sectional area of the pipe rapidly decreases below that to 900 m depth where it evolves into a dyke. The kimberlite formed as the result of three phases of intrusion, although the rocks of the different phases do not show significant variation in their physical and mechanical properties or diamond grade.

Petroleum, bitumen and gas occurrences are associated with highly porous layers within the surrounding carbonate strata and, to a lesser degree in the kimberlite, resulting in a 'hazardous' categorisation for the mine. Driving of underground workings into thick carbonate strata is always preceded by the drilling of advance degassing holes.

The Mir open pit closed in 2001 and underground mining operations started in 2009. The mining method used is mechanised cut and fill. In 2012, the mine production totalled 497 kt, in 2013 the output is planned to increase to 750 kt/a and in 2014 to 1 Mt/a. Drifts are mined with continuous miners and hauled by LHD from the mining areas to one of two ore passes that feed to a haulage level at -310 m. The development of the Mir underground mine is well underway to provide for the increase in the annual production to the designed level. The designed production of 1 Mt/a is sustainable, depending on water management.

The International pipe is also located within the Malo-Botuobinsky diamondiferous district. The pipe is funnel-shaped down to a depth of 125 m. At lower levels it evolves into a near cylindrical body dipping steeply south-eastwards. The ore body is composed of autolithic kimberlite breccia and porphyritic kimberlite. Both types of rock are similar in terms of diamond grade, although the average grade is slightly higher in the porphyritic kimberlite. The average diamond grade decreases with depth.

The International mine reached its full production rate of 500 kt/a in 2002. Open-pit mining ceased at the mine in 2011 when the pit bottom elevation reached +85 m. The target for the first phase of underground mining production is between elevations -200 m and -560 m. The second phase is targeted to provide extraction of reserves under the pit bottom between elevations +85 m and -200 m and at deeper levels of the pipe between elevations of -560 m to -820 m. Currently, the first phase of production is in progress. There are two shafts, which provide access to the reserves of the first phase of mining production down to an elevation of -560 m.

The mining method used is mechanised cut and fill. Drifts are driven with continuous miners. Ore is hauled by LHD to ore passes and transferred by train along the haulage level to a second ore pass that feeds the production shaft for hoisting to the surface. Backfill is

placed on retreat in the drifts and is delivered from the surface through two pipelines in the skip shaft to the -200 m elevation and then on to the production stope.

A rebuild of Processing Plant No. 3 is currently taking place which, when complete, will allow the plant to operate at a capacity of 2 Mt/a. The installation of high pressure grinding rolls (HPGR) and two 150 t/h dense medium separation (DMS) plants has been completed. The final rebuilding stage includes installation of a mineral sizer and rotating scrubber, together with upgrading of plant automation, the fines recovery circuit and the final recovery section.

1.4.4 Solur-Vostochnaya Placer Deposit

The Solur-Vostochnaya placer deposit is comprised of two spatially separated buried deposits, the Solur and the Vostochnaya, and is located 25 km north-west of Mirny, between the Irelyakh and Chuonalyr Rivers. The deposit lies within the Mirny Ulus (District) in the Republic of Sakha (Yakutia), which covers the Malo-Botuobinsky diamondiferous district. At present this deposit has not been developed. It is planned that Mirny GOK will exploit this deposit.

The Vostochnaya deposit is proluvial in origin and is planned to be mined over a distance of 4.6 km. The thickness of the economic layer varies from 0.1 m to 1.9 m and averages 0.68 m. The Solur deposit is diluvial-proluvial with a thickness ranging from 0.5 m to 5.1 m, averaging 2.35 m.

The thickness of the formations overlying the Vostochnaya deposit varies from 12 m to 58 m, with an average of 47.7 m. Above the Solur deposit this varies from 5 m to 54 m, with an average of 41.7 m.

The current mining design proposes to exploit the Solur-Vostochnaya deposit using underground mining methods. The three mines planned to exploit the deposit will provide a total mining production of 400,000 m³/a. A processing plant is also planned and a camp and other infrastructure facilities will support the operation.

1.4.5 Nyurba GOK

The principal offices of Nyurba Mining and Processing Division (Nyurba GOK) are in the city of Mirny, although the operations are based around the drive-in/drive-out settlement of Nakyn, some 200 km north-west of Nyurba and 320 km north-east of Mirny. Nakyn was established in 2000 as a base for the development of the Nakyn kimberlite field deposits.

The Nyurbinskaya pipe and placer deposits are currently being mined and the development of the Botuobinskaya pipe commenced recently.

Processing of ore from all mining operations is currently undertaken at central processing plants, Plant No. 15 and Plant No. 16, which were commissioned in 1999 and 2003 respectively.

The Nyurbinskaya and Botuobinskaya pipes and their associated placer deposits are located in the Sredne-Markhinsky Region of the Nakynsky kimberlite field. The stratigraphic profile of the area includes Upper Cambrian and Lower Ordovician rocks that host the kimberlite bodies, as well as overlying Triassic, Lower and Middle Jurassic sediments.

The Nyurbinskaya pipe stretches north-eastwards and in plan view it is a rounded-ellipsoid in shape. The cross-sectional area of the Nyurbinskaya pipe decreases significantly with depth and, at 280 m to 320 m, the pipe separates into two ore bodies divided by a basite intrusion. Three kimberlite varieties have been detected at the Nyurbinskaya pipe deposit - autolith kimberlite breccias, kimberlite breccias, and porphyritic kimberlite. The main part of the pipe is composed of autolith kimberlite breccia and kimberlite breccia, whereas porphyritic kimberlites are traced at deeper levels.

The Nyurbinskaya placer deposit is located close to the Nyurbinskaya kimberlite pipe which is the source of the diamond-bearing material.

Open-pit mining operations on the Nyurbinskaya pipe commenced in 2000. The open pit mines both the ore of the Nyurbinskaya pipe and the overlying sands of the Nyurbinskaya placer deposit. The pit is approximately 260 m deep and has a design depth of 450 m, although future plans could involve further extensions to a depth of 570 m.

The Botuobinskaya pipe is located within the Nakyn kimberlite field approximately 3 km south-west of the Nyurbinskaya pipe. It has an irregular, elongated shape and gradually tapers out at depth. Porphyritic kimberlites represent the first phase of intrusion, and autolith kimberlite breccias, kimberlite breccias and kimberlite tuff-breccias represent the second phase. The Botuobinskaya placer deposit is closely associated with the kimberlite pipe and adjoins it on the south-western flank.

The Botuobinskaya pipe deposit and the associated placer deposit are presently being prepared for operation and development. Overburden is currently being removed and production will commence in 2015. The design capacity is 300 kt/a ore.

Processing Plant No. 15 was constructed adjacent to the Botuobinskaya and Nyurbinskaya kimberlite pipes as a pilot bulk sampling facility for the Botuobinskaya pipe ore and operates on a seasonal basis.

Processing Plant No. 16 was commissioned in 2003 at a design capacity of 1.4 Mt/a ore. The flow sheet includes HGPR and DMS separation and is a very modern plant.

1.4.6 Lomonosov GOK

Lomonosovsky Mining and Processing Division (Lomonosov GOK) is an operating facility of the ALROSA subsidiary company, OJSC Severalmaz. It was created in 1992 to develop the M.V. Lomonosov deposit, which is the largest hard-rock diamond deposit in Europe, and is headquartered in the city of Arkhangelsk. The deposit is 100 km north-east of the city.

Two of the six kimberlite pipes in the area are currently mined, the Arkhangelskaya and Karpinskogo-1. Processing of ore from all mining operations is currently undertaken at the centralised processing facilities comprising Processing Plant No. 1 (Pilot Plant) and the adjacent Processing Plant No. 2, which is currently under construction.

The Karpinskogo-1 pipe is located approximately 2 km north-west of the Arkhangelskaya pipe and the geological and mining conditions are similar.

Open-pit mining at the Arkhangelskaya pipe has been underway since 2005. As of July 2013 the depth of the open pit had extended to a depth of 110 m. The mining method is conventional truck and shovel open pit mining without drilling and blasting. Ore and waste are loaded using tracked shovels and trucks are used for haulage.

Production at Lomonosov GOK for 2012 was approximately 1.4 Mt. The total capacity is scheduled to increase to 4 Mt/a by 2015, with an equal proportion of tonnage to come from the Arkhangelskaya and Karpinskogo-1 mines.

Overburden stripping commenced at the Karpinskogo-1 mine in 2009 and the open pit is not yet in full production. The mining method and production parameters will be similar to those employed at the Arkhangelsky mine.

A comprehensive dewatering system has been designed around both pits. Although 50% of the dewatering holes have been drilled, the current pumping capacity is dealing with the ground water inflows. When the dewatering system is complete it will have the capacity to adequately dewater both pits, even at peak times of the year.

Plant No. 1, has a capacity of 1 Mt/a and has processed ore since 2005. Plant No. 2, currently under construction, is scheduled to be commissioned in 2013 and achieve the design capacity of 3 Mt/a in 2015.

1.4.7 Ebelyakh River and Gusiny Stream Placer Deposits

The Ebelyakh River and the Gusiny Stream placer deposits are located in the north-western part of the Republic of Sakha (Yakutia), 115 km south of the local administrative centre of Saskylakh, Anabarsky National (Dolgano-Nenets) Ulus (District).

No permanent settlements are located in close proximity to the deposits. OJSC Almazy Anabara holds licences for geological exploration and exploitation of a number of placer deposits close to the Ebelyakh River deposit and has been operating in this territory since 1999. The Ebelyakh River deposit development plans to use the Mayat drive-in/drive-out settlement and existing mining and infrastructure facilities of OJSC Almazy Anabara.

The deposit forms a large placer with a commercial envelope comprising of river bed sediments, lower and upper plains, four terraces above the flood plains and re-deposited parts of the weathered surface layers. The length of the commercial portion of the placer is 82 km. The width varies between 50 m and 345 m, with an average width of 78.6 m.

The Gusiny Stream placer is alluvial in origin. Within the valley, the economic diamond content is found in the Upper Quaternary and Neogenic to Lower Quaternary sediments and re-deposited weathered surface layers. The commercial part of the deposit extends over a distance of 8.7 km, with a width that varies from 41.7 m to 261.8 m, averaging 128.1 m.

Development of the deposits is based on the expertise of OJSC Almazy Anabara. Open-pit mining is used to exploit the deposits. Overburden stripping and mining operations are performed by bulldozers during the cold seasons. After stripping, the frozen sands are loosened, and loaded to dump trucks and then transported to stockpiles (thawing areas) located at the mobile sorting and processing complexes for further treatment during the summer period.

Primary treatment of sands is performed at the sorting unit and DMS unit. The concentrate is transported to the Seasonal Processing Plant for final diamond recovery. Two sorting and processing complexes are planned to be used at the Ebelyakh River and one complex will be used at the Gusiny Stream. Their total production will be 1.8 Mm³/a.

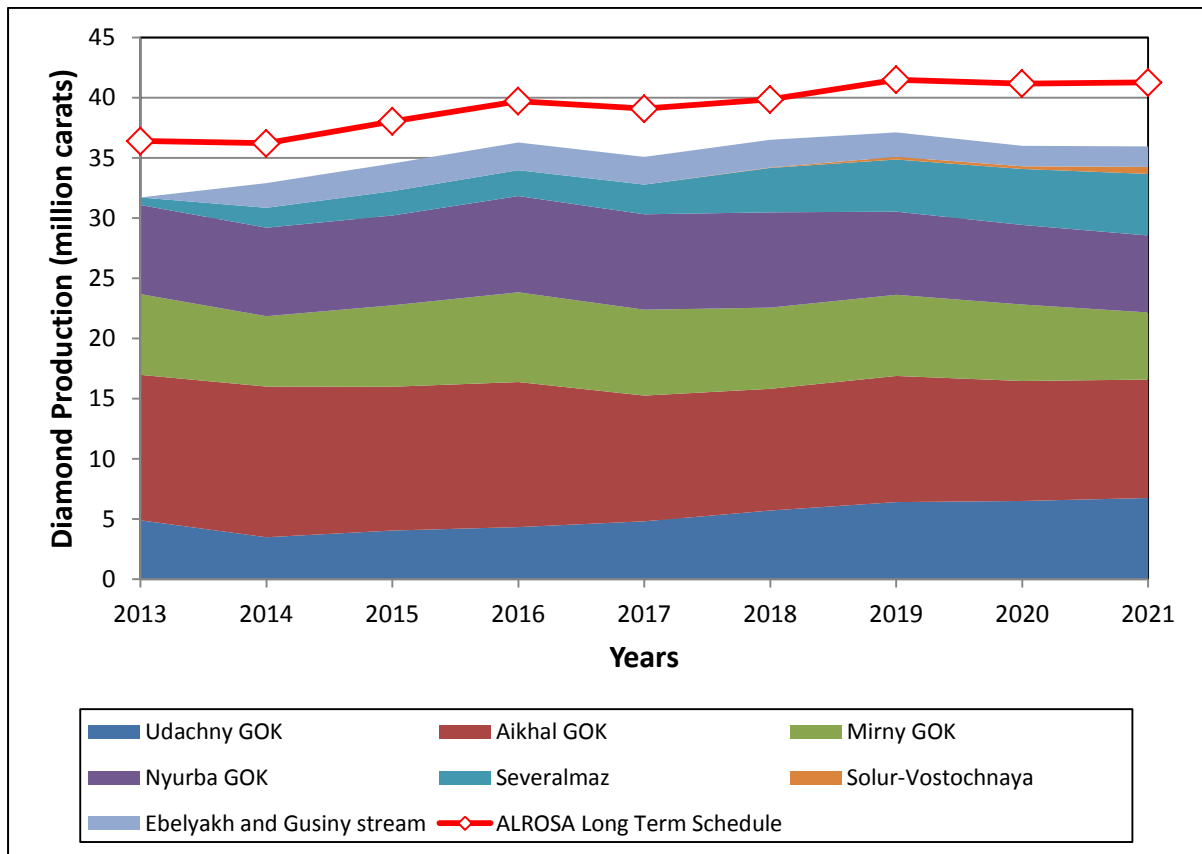
1.5 PRODUCTION SCHEDULE

Using the data and documents provided by ALROSA, Micon has compiled mining and processing production schedules for each of the company’s deposits included herein for the period from 2013 to 2021, as summarised in Table 1.6. These schedules are to the maximum possible extent, in line with ALROSA’s actual production plans. Targets for diamond production by year according to ALROSA’s plans are presented in Table 1.7.

Production schedules compiled by Micon reflect the parameters and limitations imposed by the resulting assessment of the quality and quantity of ore reserves at each of the deposits in compliance with the JORC Code. The period considered is related to the date of reporting the reserves, as well as the availability of forecasts of macroeconomic parameters, prices and planned capital costs related to the development and sustainment of production as provided by ALROSA.

Figure 1.2 represents the dynamics of diamond production from all operations of the company included in the analysis, as per the production schedule Micon has used as the basis for the assessment. The plot reflects the dynamics of aggregate diamond production assumed by ALROSA’s Long Term Development Plan.

Figure 1.2: Micon and ALROSA Diamond Production Schedules 2013 to 2021



**Table 1.6: Key Indicators of the 2013 to 2021 Production Schedule for ALROSA Operations Assessed by Micon
(Based on JORC Code-Compliant Ore Reserves)**

| Company Operation/Deposit under Development | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Total |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Ore-Sands Processing (kt) | | | | | | | | | | |
| Udachny GOK | 6,055 | 5,232 | 4,009 | 3,766 | 7,680 | 8,380 | 9,080 | 9,080 | 9,080 | 62,362 |
| Aikhal GOK | 9,823 | 8,684 | 8,906 | 9,821 | 8,888 | 8,452 | 9,142 | 8,453 | 8,216 | 80,385 |
| Mirny GOK | 1,260 | 1,100 | 1,250 | 1,400 | 1,500 | 1,450 | 1,450 | 1,400 | 1,300 | 12,110 |
| Nyurba GOK | 1,780 | 1,619 | 1,847 | 1,978 | 1,732 | 1,726 | 1,775 | 1,785 | 2,096 | 16,336 |
| Lomonosov GOK | 1,500 | 3,250 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 32,750 |
| Solur-Vostochnaya Placer | 0 | 0 | 0 | 0 | 0 | 71 | 482 | 357 | 882 | 1,792 |
| Ebelyakh River and Gusiny Stream Placers | 0 | 2,912 | 3,211 | 3,211 | 3,220 | 3,220 | 2,552 | 2,300 | 2,300 | 22,925 |
| Total | 20,418 | 22,797 | 23,222 | 24,175 | 27,020 | 27,300 | 28,481 | 27,375 | 27,874 | 228,661 |
| Diamonds Contained in the Processed Ore-Sands (ct/t)² | | | | | | | | | | |
| Udachny GOK | 0.81 | 0.68 | 1.03 | 1.18 | 0.63 | 0.68 | 0.71 | 0.72 | 0.75 | 0.76 |
| Aikhal GOK | 1.12 | 1.31 | 1.22 | 1.12 | 1.05 | 1.07 | 1.02 | 1.05 | 1.06 | 1.11 |
| Mirny GOK | 5.30 | 5.32 | 5.43 | 5.35 | 4.75 | 4.64 | 4.64 | 4.53 | 4.28 | 4.90 |
| Nyurba GOK | 3.46 | 3.73 | 3.32 | 3.33 | 4.07 | 4.08 | 3.53 | 3.38 | 2.86 | 3.51 |
| Lomonosov GOK | 0.41 | 0.49 | 0.48 | 0.51 | 0.59 | 0.88 | 1.03 | 1.11 | 1.22 | 0.78 |
| Solur-Vostochnaya Placer | - | - | - | - | - | 0.54 | 0.47 | 0.66 | 0.69 | 0.62 |
| Ebelyakh River and Gusiny Stream Placers | - | 0.73 | 0.75 | 0.75 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.76 |
| Total | 1.44 | 1.34 | 1.39 | 1.40 | 1.23 | 1.27 | 1.23 | 1.25 | 1.23 | 1.30 |
| Diamonds Recovered (kct)³ | | | | | | | | | | |
| Udachny GOK | 4,890 | 3,482 | 4,041 | 4,326 | 4,807 | 5,703 | 6,403 | 6,495 | 6,744 | 46,891 |
| Aikhal GOK | 12,080 | 12,515 | 11,943 | 12,047 | 10,441 | 10,106 | 10,475 | 9,964 | 9,836 | 99,407 |
| Mirny GOK | 6,707 | 5,844 | 6,762 | 7,455 | 7,135 | 6,745 | 6,745 | 6,354 | 5,572 | 59,319 |
| Nyurba GOK | 7,400 | 7,350 | 7,460 | 7,993 | 7,922 | 7,916 | 6,903 | 6,609 | 6,395 | 65,948 |
| Lomonosov GOK | 630 | 1,656 | 2,020 | 2,148 | 2,466 | 3,687 | 4,332 | 4,647 | 5,111 | 26,697 |
| Solur-Vostochnaya Placer | 0 | 0 | 0 | 0 | 0 | 37 | 219 | 225 | 584 | 1,065 |
| Ebelyakh River and Gusiny Stream Placers | 0 | 2,051 | 2,300 | 2,300 | 2,300 | 2,300 | 2,033 | 1,700 | 1,700 | 16,683 |
| Total | 31,707 | 32,898 | 34,525 | 36,268 | 35,071 | 36,494 | 37,108 | 35,994 | 35,942 | 316,011 |

² This grade represents diamonds of sizes meeting established cut-off criteria.

³ This weight represents diamonds of all sizes. Totals may vary due to rounding.

Table 1.7: Production Targets from the 2013 to 2021 ALROSA Long Term Development Plan

| Company Operation/Deposit under Development | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Total |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Diamonds Recovered - Assets of ALROSA Covered by Present Assessment (kct)⁴ | | | | | | | | | | |
| Udachny GOK | 4,890 | 3,482 | 4,041 | 4,326 | 4,807 | 5,703 | 6,403 | 6,495 | 6,744 | 46,891 |
| Aikhal GOK | 12,080 | 12,515 | 11,943 | 12,047 | 10,441 | 10,106 | 10,207 | 9,964 | 9,836 | 99,139 |
| Mirny GOK | 6,707 | 5,844 | 6,762 | 7,455 | 7,135 | 6,745 | 6,745 | 6,354 | 5,572 | 59,319 |
| Nyurba GOK | 7,400 | 7,350 | 7,460 | 7,993 | 7,922 | 7,916 | 6,903 | 6,609 | 6,395 | 65,948 |
| Lomonosov GOK | 630 | 1,656 | 2,020 | 2,148 | 2,466 | 3,687 | 4,332 | 4,647 | 5,111 | 26,697 |
| Solur-Vostochnaya Placer | 0 | 0 | 0 | 0 | 0 | 37 | 219 | 225 | 584 | 1,065 |
| Ebelyakh River and Gusiny Stream Placers | 0 | 2,052 | 2,300 | 2,300 | 2,300 | 2,300 | 2,300 | 1,700 | 1,700 | 16,952 |
| Total | 31,707 | 32,899 | 34,526 | 36,269 | 35,072 | 36,494 | 37,109 | 35,994 | 35,941 | 316,011 |
| Diamonds Recovered - Assets of ALROSA Not Covered by Present Assessment (kct)⁵ | | | | | | | | | | |
| Udachny GOK | 0 | 0 | 227 | 227 | 259 | 650 | 1,653 | 1,513 | 1,513 | 6,043 |
| Aikhal GOK | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 264 | 383 |
| Mirny GOK | 653 | 617 | 634 | 578 | 516 | 421 | 439 | 440 | 433 | 4,731 |
| Almazy Anabara | 2,300 | 900 | 700 | 1,232 | 1,987 | 2,288 | 2,279 | 3,102 | 3,102 | 17,887 |
| Nizhne-Lenskoe | 1,731 | 1,795 | 1,945 | 1,403 | 1,248 | 0 | 0 | 0 | 0 | 8,121 |
| Total | 4,684 | 3,312 | 3,506 | 3,439 | 4,010 | 3,358 | 4,371 | 5,174 | 5,312 | 37,165 |
| Diamonds Recovered - Total for ALROSA | | | | | | | | | | |
| Total | 36,391 | 36,211 | 38,032 | 39,708 | 39,082 | 39,852 | 41,480 | 41,168 | 41,253 | 353,176 |

⁴ This weight represents diamonds of all sizes.

⁵ Includes production derived from reserves not compliant with the JORC Code. Includes production for certain deposits for which Micon has not been provided GKZ-approved reserves and certain deposits for which ALROSA does not hold all licences required for production.

It should be emphasised that the production schedule compiled and used by Micon includes lower volumes of mined and processed material compared to the ALROSA Long Term Development Plan. The discrepancy is explained by the fact that Micon’s assessment does not cover all the deposits operated or planned to be operated by ALROSA. Due to the relatively small size of certain individual assets they were excluded from Micon’s reserve audit and assessment. The projects included in the ALROSA Long Term Development Plan that were not included in the Micon assessment contribute approximately 10.5% of the total diamond production.

It is evident for approximately two-thirds of the projects included in the ALROSA Long Term Development Plan that have not been reviewed by Micon, that there is a sufficient resource base and adequate development of production capacities, and economic indicators to support the ALROSA Long Term Development Plan. However, for one-third of the projects ALROSA has not formally secured the licences and consequently was not able to provide mineral reserve data to review. The Company believes that it will be able to obtain the necessary exploration and production licenses as planned. These 12 projects represent approximately 3.7% of the diamond production planned in the ALROSA Long Term Development Plan for the period 2013 to 2021. Given the lack of information on these projects Micon cannot confirm this portion of the production proposed in the ALROSA Long Term Development Plan.

The major deposits operated by ALROSA and covered by Micon’s assessment will not be fully depleted by 2021. Micon has not been provided with the data that would have enabled reliable and accurate forecasts of production over the entire period until the complete depletion of these assets.

The total production of diamonds included in ALROSA’s Long Term Development Plan is derived from different types of mining operations. Table 1.8 demonstrates the distribution of diamond production by operation type in the ALROSA Long Term Development Plan for the period 2013 to 2021.

Table 1.8: Production Targets from the 2013 to 2021 ALROSA Long Term Development Plan

| Type of Operation | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Open Pit Kimberlite Ore (%) | 58.45 | 54.97 | 47.05 | 44.44 | 46.76 | 48.73 | 48.62 | 48.02 | 45.16 |
| Underground Kimberlite Ore (%) | 27.20 | 23.91 | 29.52 | 32.46 | 31.00 | 31.56 | 32.18 | 31.97 | 30.66 |
| Open Pit Placers (%) | 13.65 | 20.30 | 22.66 | 22.36 | 21.52 | 18.91 | 17.97 | 18.83 | 22.18 |
| Underground Placers (%) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.50 | 0.53 | 1.36 |
| Dredging (%) | 0.70 | 0.82 | 0.77 | 0.74 | 0.72 | 0.71 | 0.73 | 0.65 | 0.64 |
| Total (%) | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

It is evident that the contribution of open-pit ore mining to diamond production will diminish in the future. Open-pit production will be replaced by an increase in underground mining production and production from placer deposits.

1.6 CAPITAL COST

Micon's assessment is based on the ALROSA 2012 to 2021 capital costs schedule. According to existing practices the schedule includes the following categories of capital costs:

- Investments in the main production of the company. Total investments belonging to this category are distributed by the GOKs and dependent companies of the Group and further broken down by categories for each division:
 - Construction projects (mines, processing facilities)
 - Sustaining capital (equipment replacement)
- Other projects and capital costs linked with the main production;
- Reserve for main production projects;
- Equipment for construction;
- Other industrial investment projects, not in the main production area:
 - Construction projects (mines, processing facilities)
 - Sustaining capital (equipment replacement)
- Investments in non-industrial, social projects.

The assessment completed by Micon is conducted by production divisions of the company and when assessing assets of individual GOKs Micon used only the investment costs of the main production envisaged by the capital cost schedule for this GOK. Micon's assessment includes only the capital costs directly related to the development and sustainment of the company's principal production capacities. From this amount Micon further subtracted costs of projects associated with production from deposits not covered by Micon's estimate of JORC-compliant reserves.

In all cases Micon considers the capital costs planned by ALROSA adequate, considering the current state of GOK facilities and proposed programme of their development.

When assessing the Solur-Vostochnaya project Micon has used capital cost estimates suggested by the TEO report (feasibility study) for development of this deposit. The TEO capital cost schedule is different from the approved capital costs schedule of the company.

Micon's assessment did not include the capital costs of any other categories envisaged by the actual approved capital costs schedule. Table 1.9 presents the balance of capital costs used in Micon's estimate in reconciliation with the capital costs of all categories from ALROSA's plan for the divisions of the company within the perimeter of Micon's estimate and also planned capital costs for deposits not evaluated by Micon. All capital cost values presented in the table are in nominal terms.

It is Micon's conclusion that the Company's plan of capital investments for development and sustainment of the company's principal production capacities is sound and well justified for all divisions of the Company reviewed by Micon. Micon has no reason to support or dispute the schedule of capital cost expenditure for the other categories of capital costs listed above, or for all categories of capital costs for deposits not covered by Micon's assessment.

Table 1.9: Capital Costs Used in Micon's Estimate and ALROSA's Plan

| | | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|--|-------|--------|--------|--------|-------|-------|--------|-------|-------|
| Investments in the main production of the company Year-by-Year Breakdown (million RUB) | | | | | | | | | | |
| Udachny GOK | Micon's model for deposits within estimate | 7,034 | 9,907 | 8,812 | 5,137 | 3,553 | 2,511 | 3,018 | 4,576 | 2,088 |
| | Alrosa's investment plan for deposits outside estimate | 124 | 479 | 1,344 | 5,774 | 5,025 | 1,222 | 0 | 0 | 0 |
| | Micon's model + Alrosa's plan for outstanding assets | 7,159 | 10,386 | 10,156 | 10,911 | 8,578 | 3,733 | 3,018 | 4,576 | 2,088 |
| | Alrosa's plan for UGOK | 7,159 | 10,386 | 10,156 | 10,911 | 8,578 | 3,733 | 3,018 | 4,576 | 2,088 |
| | Difference | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aikhal GOK | Alrosa's plan for AGOK | 3,423 | 3,259 | 4,382 | 4,639 | 4,123 | 3,496 | 3,446 | 1,142 | 1,865 |
| | Micon's model for deposits within estimate | 3,410 | 3,110 | 3,101 | 2,848 | 1,995 | 1,515 | 1,489 | 1,142 | 1,865 |
| | Alrosa's investment plan for deposits outside estimate | 13 | 149 | 1,281 | 1,792 | 2,127 | 1,981 | 1,958 | 0 | 0 |
| | Micon's model + Alrosa's plan for outstanding assets | 3,423 | 3,259 | 4,382 | 4,639 | 4,123 | 3,496 | 3,446 | 1,142 | 1,865 |
| | Difference | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nyurba GOK | Alrosa's plan for NGOK | 4,677 | 2,846 | 721 | 565.4 | 1,571 | 1,995 | 2,614 | 2,552 | 1,716 |
| | Micon's model for deposits within estimate | 4,677 | 2,846 | 701 | 545 | 1,551 | 475 | 1,123 | 997 | 1,716 |
| | Alrosa's investment plan for deposits not in Micon's plan | 0 | 0 | 20 | 20 | 20 | 1,520 | 1,491 | 1,555 | 0 |
| | Micon's model + Alrosa's plan for outstanding assets | 4,677 | 2,846 | 721 | 565 | 1,571 | 1,995 | 2,614 | 2,552 | 1,716 |
| | Difference | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mirny GOK | Alrosa's plan for MGOK | 3,718 | 6,811 | 4,827 | 2,747 | 3,090 | 5,425 | 5,862 | 4,108 | 3,088 |
| | Micon's model for deposits within estimate | 3,478 | 6,811 | 4,827 | 2,747 | 2,325 | 2,970 | 2,975 | 3,923 | 3,087 |
| | Alrosa's investment plan for deposits outside estimate (Solur) | 241 | 0 | 0 | 0 | 765 | 2,455 | 2,887 | 186 | 1 |
| | Alrosa's plan for MGOK minus Solur | 3,478 | 6,811 | 4,827 | 2,747 | 2,325 | 2,970 | 2,975 | 3,923 | 3,087 |
| | Difference | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Solur | Alrosa's plan for Solur | 241 | 0 | 0.00 | 0.00 | 765 | 2,455 | 2,887 | 186 | 1 |
| | Micon's model | 0 | 0 | 0 | 0 | 1,047 | 3,142 | 1,047 | 50 | 50 |
| | Difference | -241 | 0 | 0 | 0 | 282 | 687 | -1,840 | -136 | 49 |

Table 1.9: Capital Costs Used in Micon's Estimate and ALROSA's Plan (cont.)

| | | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Investments in the main production of the company Year-by-Year Breakdown (million RUB) | | | | | | | | | | |
| Severalmaz | Alrosa's plan for Severalmaz | 5,024 | 2,645 | 1,984 | 387.7 | 970 | 524 | 1,181 | 2,356 | 1,500 |
| | Micon's model | 5,024 | 2,645 | 1,984 | 388 | 970 | 524 | 1,181 | 2,356 | 1,500 |
| | Difference | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Almazy Anabara (including Nizhne- Lenskoe) | Alrosa's plan for AA, total capital construction | 717 | 2,193 | 1,523 | 1,228 | 329 | 326 | 668 | 547 | 80 |
| | Alrosa's plan for AA, total sustaining capital | 1,241 | 1,330 | 1,007 | 1,044 | 1,233 | 991 | 2,128 | 1,666 | 1,330 |
| | Micon's plan, construction for all deposits of AA | 717 | 2,193 | 1,523 | 1,228 | 329 | 326 | 668 | 547 | 80 |
| | Micon's plan, sustaining capital for all deposits of AA | 1,241 | 1,330 | 1,007 | 1,044 | 1,233 | 991 | 2,128 | 1,666 | 1,330 |
| | Difference, construction | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Difference, sustaining | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other capital costs of main production, Alrosa's plan | | 40 | 251 | 187 | 65 | 35 | 41 | 60 | 63 | 58 |
| Reserve, Alrosa's plan | | | | | | | | | | 3,000 |
| Equipment for construction, Alrosa's plan | | 1,140 | 704 | 759 | 73 | 142 | 44 | 312 | 325 | 528 |
| Alrosa's Plan - Total for Main Production | | 27,139 | 30,426 | 25,545 | 21,661 | 20,070 | 16,575 | 19,290 | 17,334 | 15,253 |
| Micon's Model plus Alrosa's Plan outside Micon's Scope | | 26,898 | 30,426 | 25,545 | 21,661 | 20,353 | 17,262 | 17,450 | 17,199 | 15,302 |
| Other Costs - Year-by-Year Breakdown (million RUB) | | | | | | | | | | |
| Other industrial investment projects | | 5,914 | 7,307 | 9,494 | 7,027 | 5,058 | 5,055 | 6,008 | 6,719 | 7,395 |
| Investments in non-industrial, social projects | | 310 | 736 | 545.3 | 356 | 228 | 128 | 494 | 85 | 85 |
| Total Investments - ALROSA's plan | | 33,363 | 38,469 | 35,584 | 29,044 | 25,357 | 21,758 | 25,792 | 24,138 | 22,733 |
| Total Investments - Micon's Model plus ALROSA's Plan outside Micon's Scope | | 33,122 | 38,469 | 35,584 | 29,044 | 25,639 | 22,445 | 23,952 | 24,003 | 22,782 |

1.7 OJSC NIZHNE LENSKOE

The total State balance reserves of all the deposits held by the Nizhne-Lenskoe Company, as at 1st January 2013, are presented in Table 1.10.

Table 1.10: Total Balance Reserves of OJSC Nizhne-Lenskoe as at 1st January 2013

| Category | Balance Reserves | | | Off-Balance Reserves | | |
|--|------------------------------|--|--------------------------------|------------------------------|--|--------------------------------|
| | Sands (k m ³) | Diamond Grade (ct/m ³) | Contained Diamonds (kct) | Sands (k m ³) | Diamond Grade (ct/m ³) | Contained Diamonds (kct) |
| Anabar Diamondiferous District | | | | | | |
| B | 1,296 | 1.00 | 1,295 | 97 | 0.51 | 50 |
| C ₁ | 669 | 0.87 | 580 | 420 | 0.55 | 230 |
| B+C ₁ | 1,965 | 0.95 | 1,875 | 517 | 0.54 | 279 |
| C ₂ | 1,540 | 0.66 | 1,021 | 433 | 0.52 | 226 |
| Prilensky Diamondiferous District | | | | | | |
| C ₁ | 2,134 | 0.70 | 1,494 | 387 | 0.38 | 147 |
| C ₂ | 1,855 | 0.67 | 1,241 | 301 | 0.43 | 131 |

1.8 ALROSA RESOURCE AND RESERVE CLASSIFICATION

All mineral resources and reserves in Russia are formally classified according to an established system developed and administered by the Russian State Commission for Mineral Reserves (Gosudarstvennaya Komissia po Zapasam - GKZ). The GKZ applies strict control over the estimation and reporting of mineral reserves and utilises a prescribed protocol for their calculation that is usually based upon standard sectional methods.

Preliminary mineral reserve estimates, as completed by the licence-holder, are submitted to the GKZ for approval in the form of a TEO, which justifies the cut-off grade criteria. The approved cut-off criteria are used to generate the mineral reserves that are submitted to the GKZ for approval.

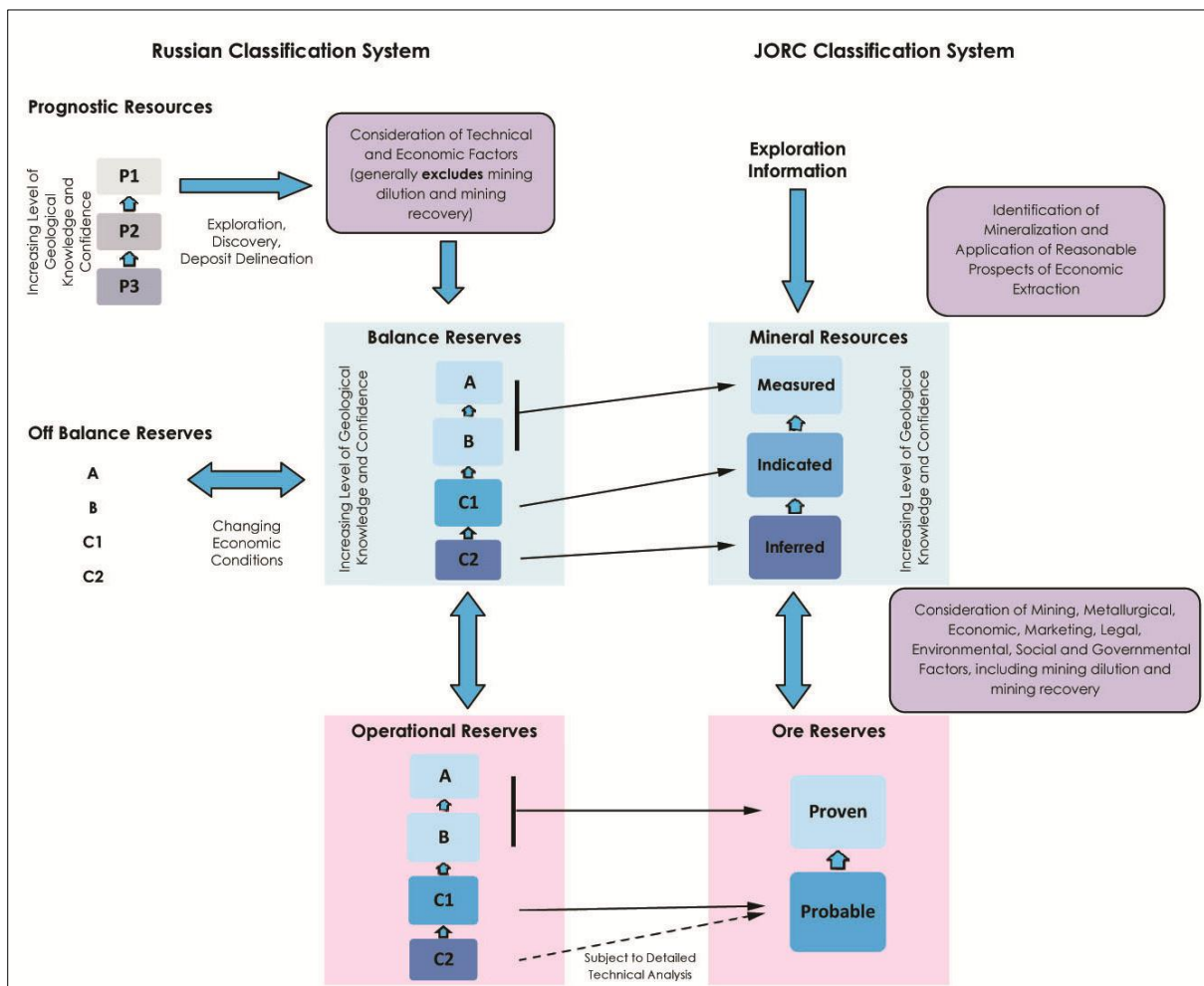
In many respects the system is similar to western classification systems, essentially measuring the level of confidence in quantity and quality information that is used to define the mineral resources or reserves. The system most commonly adhered to in western countries is the JORC Code (the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Ore Reserve Committee of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Minerals Council of Australia), which was released in 1989 and updated effective of December 2004.

In Micon's experience, the level of detail required to support a submission of mineral reserves to the GKZ is more systematic and comprehensive than is required under the JORC Code in almost all respects. The data submitted for approval to the GKZ are subject to rigorous review, including consideration of the geological complexity of the deposit, the distribution and complexity of the ore mineralogy, the degree of knowledge obtained from exploration activities such as the density of drilling, the extent of any underground

development, the computation of resource estimates, cut-off grades, as well as numerous other economic, technological, mining and metallurgical characteristics. The GKZ analyses the approach undertaken for calculations as well as mineral resources and cut-off grade estimates.

The JORC Code and GKZ reserve reporting systems share a very important fundamental principle, which is that the economic viability of a reserve base must be demonstrated. For this reason, both systems utilise a similar set of geological, economical and technical factors within a sequential classification scheme, which reflects the increasing degree of knowledge and confidence in the integrity of the reserves. Figure 1.11 illustrates Micon’s understanding of the correlation between the two systems.

Figure 1.11: Comparison of the GKZ and JORC Code Resource/Reserve Classification



Using the GKZ system, mineral resources and reserves are recognised as either prognosticated resources, which include those resources that are of an inferred, potential or speculative nature, or mineral reserves, which can be effectively subdivided into those that demonstrate economic significance (balance mineral reserves) and those with only potential economic significance (off-balance mineral reserves).

Balance mineral reserves comprise that part of the mineralisation that has been demonstrated to a sufficient level of confidence to contain a metal or commodity whose economic viability

has been approved by the GKZ. They may not however, include adjustment for technical and economic matters such as mining dilution and losses.

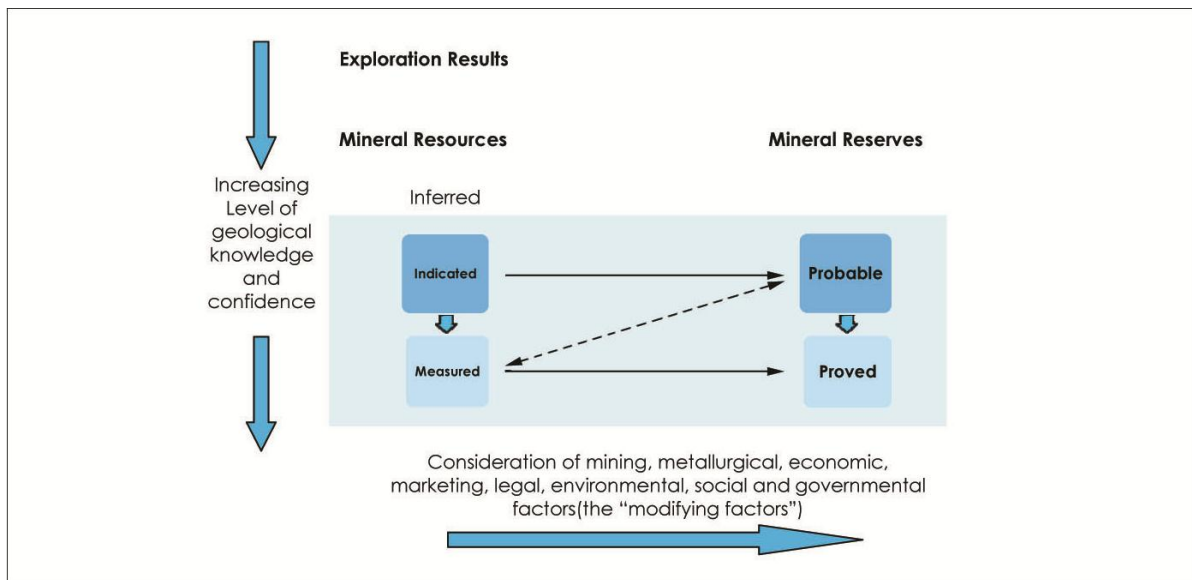
The GKZ categories for balance mineral reserves (A, B, C₁ and C₂) can be correlated by definition with mineral resources as defined under the JORC Code. Categories A and B are generally reported as Measured resources, whilst category C₁ generally constitutes Indicated mineral resources, with C₂ category as Inferred mineral resources. Under the GKZ system, C₂ category mineral reserves can be included in mine-planning studies, but it should be noted that under the terms and conditions of reporting public documents to Western standards, Inferred mineral resources cannot be included as ‘ore reserves’ or used for formal valuation purposes.

By contrast, the classification of prognosticated resources (P₁, P₂, and P₃) refers to mineral resources that range from Inferred mineral resources, to potential and speculative resources. These are not generally recognised as quantifiable in Western terms and can only be regarded as indicators of the mineral potential of an area or region. Such resources may be subsequently upgraded to recognised categories of reserves and resources by successful exploration work, or excluded if the work is unsuccessful.

1.9 MICON APPROACH TO RESOURCE AND RESERVE CLASSIFICATION

The classification of the mineral resources and reserves contained within this Report has been considered according to the category definitions of the JORC Code. Similar to the system followed by the GKZ, the JORC Code relies upon an increased level of geological knowledge and the application of mining and other modifying factors to elevate those categories of resources to reserves as summarised in Figure 1.12.

Figure 1.12: Exploration Results, Mineral Resources and Ore Reserves as Defined by the JORC Code



The JORC Code is similar in most respects to those systems adopted in North America and in Europe, in particular the system of resource definition established by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) and recognised under the guidelines of Canadian National Instrument (NI) 43-101.