

## **ASX RELEASE**



**For Immediate Release – 30 April 2019**

# **QUARTERLY REPORT**

## **Quarter Ended 31 March 2019**

### **Robust Pre-Feasibility Study Delivered for the Ovoot Early Development Project**

- **The Ovoot Early Development Project (OEDP) Pre-feasibility Study (PFS) was delivered during the quarter. The OEDP strategy is based on trucking up to 4Mtpa via a proposed coal haul road to the existing rail head at Erdenet prior to a future full rail connection to the Ovoot Coking Coal Project (Ovoot Project).**
- **This is a low cost, fast delivery production solution to meet a growing need for “fat” coking coal in China ahead of a rail connection from the Ovoot Project to Erdenet.**
- **The OEDP PFS results were outstanding with a Base Case NPV (before tax, 10%) of US\$586 million and IRR (before tax) of 43.7% and, with one further mine cutback, an Extended Case NPV (before tax, 10%) of US\$758 million and IRR (before tax) of 44.5%.**
  - **Capital Expenditure estimates of US\$110 million for the mine development and US\$165 million for road construction.**
  - **Negotiations on a final route for the haul road is ongoing with local soums (village administration centres) with detailed engineering completed on the more than 50% of the alignment route that has been approved.**
  - **China Gezhouba Group have provided a Letter of Interest to be the EPC contractor to build the Erdenet to Ovoot Road. This would be on the basis of working with a number of Mongolian subcontractors and sourcing up to 75% of the total US\$165m road building cost.**

### **Northern Railways LLC**

- **During the quarter the Aspire subsidiary, Northern Railways LLC, negotiated and executed an Engineering, Procurement and Construction Contract (EPC Contract) with construction joint venture parties, China Gezhouba International Engineering Co Ltd and China Railway 20 Bureau Group Corporation. The EPC Contract structure includes a maximum price lump sum turnkey cost of US\$1.58 billion including all contingencies and a mechanism to reduce this cost through negotiation once additional pre-development work has been completed.**

Aspire Mining Limited (ASX: AKM, **Aspire**, or the **Company**), focussed on the exploration and development of metallurgical coal assets in Mongolia and the rail infrastructure is pleased to present its Quarterly Activities Report for the quarter ending 31 March 2019.

The Company currently wholly owns 100% of the large scale, world class Ovoot Coking Coal Project (**Ovoot Project**) and a 90% interest in the Nuurstei Coking Coal Project (**Nuurstei Project**), both located in northern Mongolia.

During the Quarter the Company received, reviewed and accepted the Ovoot Early Development Project Pre-Feasibility Study and commenced a Definitive Feasibility Study.

## Overview of the OEDP and the Key PFS Outcomes

The 100% owned Ovoot Project, which has a granted mining lease, is located in northern Mongolia. The OEDP PFS confirms the technical and economic robustness of developing a steady state 4.0Mtpa operation supported by a special purpose haul road to connect into the existing Mongolian rail network to China and other key end markets.

The OEDP involves mining a relatively low ash and high yielding coal from a starter pit that sits within the Ovoot Project Reserve and construction of a new 560 kilometre special purpose haul road. The OEDP only mines 15% of the Ovoot Project Reserve. The OEDP is expected to evolve into a much larger project once rail access has been secured with the Erdenet to Ovoot rail connection. The OEDP PFS examined both a Base Case and an Extended Case which reflected an additional cutback.

Mining and process engineering designs for the OEDP PFS have been developed to support capital and operating estimates to an accuracy of +/- 25% and +/- 15% respectively.

Key assumptions on which the OEDP PFS is based and the outcomes are set out and annexed to the ASX announcements dated 28 February and 1 March 2019 and are summarised below in Table 1 and Figure 1. Aspire continues to conclude that it has a reasonable basis for providing the forward-looking statements in this report.

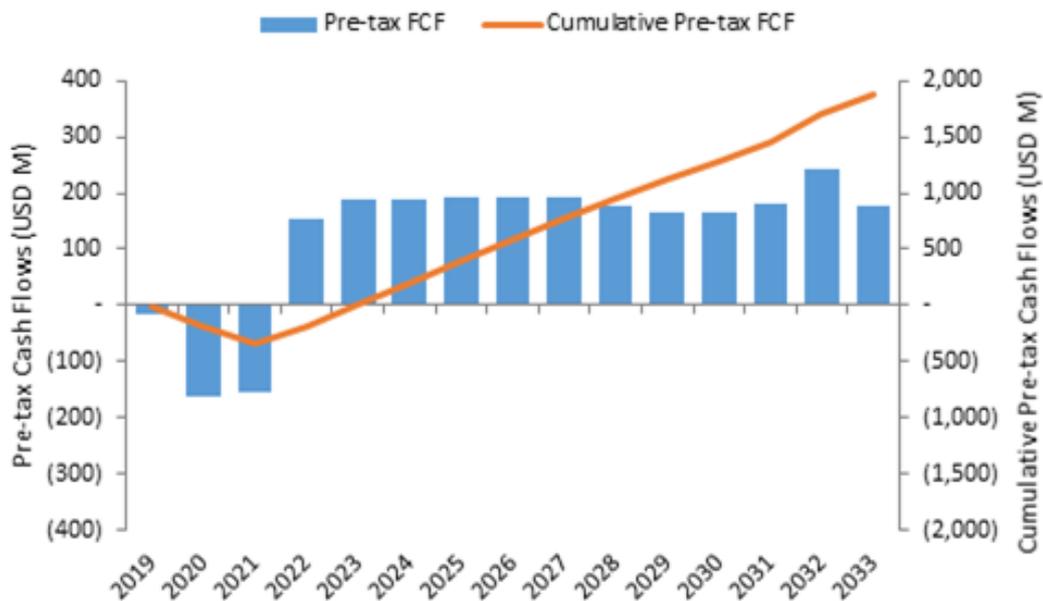
	Average Annual	OEDP Total	Total Extended Trucking Option
<b>Physicals</b>			
Waste Mined (M Bcm)	19.7	167.7	253.6
Strip Ratio (Bcm/t coal) (incl. pre-strip)		4.6	4.7
Coal Mined (Mt)	4.6	36.8	53.8
Average Yield (10% moisture)		88%	86%
Coal sold (net of 2% loss) (Mt)	4.0	31.6	45.2
Life of Mine		9.2 years	12.5 years
<b>Operating Costs</b>			
Mine \$/t		31	33
Trucking \$/t		32	32
Rail + Border Charges- \$/t		18	18
C1 Cash Costs 4/t		81	83
Total Cash Costs \$/t		100	102

<b>Financial Assumptions</b>			
Coking Coal Price (net received price to Erlian border)		150	150
Exchange Rates:	MNT:USD	2600	2600
	Rmb:USD	6.8	6.8
Royalties:	Mongolian	6.5%	6.5%
Marketing and China Border Cost US\$/t		8.6	8.6
EBITDA	\$172m	\$1.6bn	\$2.2bn
<b>Capital Investment</b>			
Mine:	Establishment	\$110m	\$110m
	Maintenance	\$1mpa	\$1mpa
Road:	Establishment	\$165m	\$165m
	Maintenance	\$2mpa	\$2mpa
Pre-tax net present value (10%)		\$586m	\$758m
Internal Rate of Return (Pre-tax)		43.7%	44.5%
Payback (commencing first full year of production)		24 months	24 months

**Table 1. Key OEDP PFS Outcomes**

For the purposes of the OEDP PFS, a flat price of US\$150/t Delivered at Place to the Erlian border for Ovoot “fat” coking coal has been used based on a detailed Chinese “fat” coking coal market report completed by Fenwei Energy Information Services Ltd announced on 16 January 2019.

The projected annual net pre-tax cash flows of the Extended OEDP are graphed in Figure 1.



**Figure 1. OEDP Extended Case Projected Annual and Cumulative Cashflow**

The purpose of the OEDP is to commence mining at the Ovoot Project while the Company's rail subsidiary, Northern Railways LLC, continues to pursue the required approvals and funding for the construction of a 547 km rail line from the existing rail head at Erdenet to Ovoot.

The low strip ratio and high yielding nature of the OEDP targeted area offsets the higher trucking transport costs to Erdenet.

### **Ovoot to Erdenet Road Project**

The feasibility study for the Ovoot to Erdenet road is currently being undertaken by ICT Sain. At present more than 50% of the 560 kilometre alignment has had detailed site investigation and engineering completed. The balance of the alignment is under negotiations with local soums (village administrations).

The Road Feasibility Study terms of reference including the road design specifications were reviewed and approved by the Ministry of Roads and Transport during the quarter. Once completed the Feasibility Study will be submitted to the Ministry for final review and approval against the agreed terms of reference.

During recent meetings with China Gezhouba Group (CGGC), the Company discussed the potential involvement of CGGC in the construction and financing of the road. CGGC has now provided the Company with a Letter of Interest to act as an EPC Contractor and to assist with the sourcing of financing. The EPC model would enable the Company to contract with a single counterparty who can provide the necessary completion guarantees while subcontracting to a number of Mongolian road construction companies. Funding structures with up to 75% of the estimated US\$165 million construction cost have been discussed.

### **Community Relations**

The Company significantly expanded its community relations (CR) activities during the Quarter to support OEDP development. These activities focused on the Tsetserleg Soum where the Ovoot Project is located and Murun, the capital of Khuvsgul.

Open day events were held with 450 attendees at Tsetserleg (10% of the population) and 400 attendees at Murun. In addition, the CR teams made nearly 1,000 visits to households through the Tsetserleg soum area to provide direct information on the Company's activities and strategies.



**Figure 2: Open day event in Tsetserleg Soum**

The main interest is to see the creation of jobs in the region while promoting good environmental management practices.

## Coking Coal Markets

Coking coal is an essential ingredient to make coke which is added to iron ore in a blast furnace to reduce the oxygen in the iron ore with carbon to make steel. Put simply, the industrialised and developing world needs steel for housing, infrastructure, industrial development, consumer goods etc. There is currently no substitute for a blast furnace other than high energy consuming electric arc furnaces that use steel scrap but which produce significant pollutants.

China is the world's largest producer of steel producing 832Mt of steel in 2017. This steel production required 531Mt of coking coal of which approximately 450Mt was mined domestically and 75Mt was imported.

According to the Mongolia's Mineral Resources and Petroleum Statistics 2018, Mongolia exported a total of 31Mt of coking coal but only 5.5Mt had been washed and the majority of these tonnes came from Mongolian Mining Corporation's UHG Mine. With the full implementation of the OEDP, Aspire will become the second largest exporter of Mongolian washed coking coal into China.

The OEDP will produce a mid volatile, medium ash and sulphur fat coking coal with the following attributes.

Moisture	Ash (adb)	Volatiles (adb)	Sulphur %	G Index	Y Index	Ro Max
9%	10%	25%	1.2%	95	26	1.2

**Table 2: OEDP Coking Coal Product Properties**

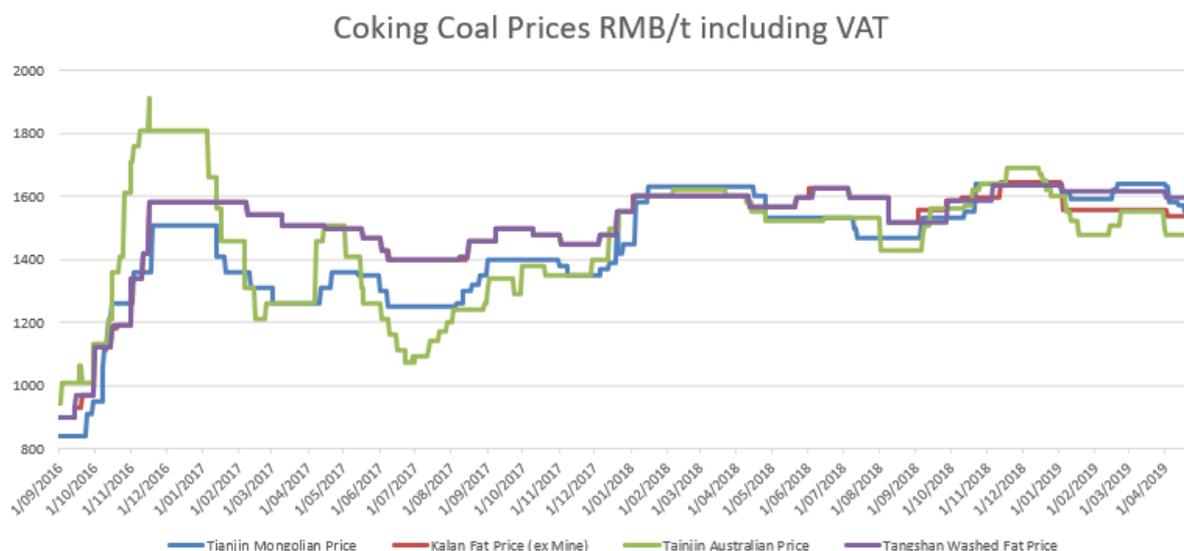
On 16 January 2019, the Company reported on a study prepared by Fenwei Energy Information Services Ltd to support the price assumptions regarding the OEDP product in the Chinese market.

Fenwei noted in its report that the market in China for "fat" coking coal is approximately 75Mt and that with forecast declining domestic production, a deficit of between 16Mt and 22Mt was observable over the medium term. Ovoot's OEDP coking coal will be feeding into this segment of the market.

Fenwei estimated delivered prices for OEDP coking coal into these markets would achieve prices of between US\$191/t to US\$180/t using an existing branded coal as a benchmark on a delivered to customer gate basis. By adding back Chinese trucking costs, an equivalent price at the Mongolian\China border at Erlian can be established. This calculated net back forecast price at Erlian is between US\$156/t down to US\$145/t.

Current pricing for four brands of coking coal in the Tianjin\Hebei area is shown below. These brands include the coals used by Fenwei to benchmark Ovoot.

Once converted for current exchange rates and net of VAT, these prices confirm an equivalent pricing in this market of approximately US\$200/t which would net back to a price at the border at Erlian of between US\$165 and US\$170/t



**Figure 3: Coking Coal Prices in Tianjin China**

## Northern Railways LLC

During the quarter, the Company continued to progress the Erdenet to Ovoot Northern Rail Project.

Negotiations progressed on an Engineering, Procurement and Construction Contract (EPC Contract) with construction joint venture parties, China Gezhouba International Engineering Co Ltd and China Railway 20 Bureau Group Corporation. The EPC Contract was executed by the parties on 25 and 26 April 2019. It is based on amended FIDIC (1999) terms and is conditional on finance and completion of all conditions precedent required by the Erdenet to Ovoot Rail Concession Agreement by the 20 February 2020 (see announcement dated 30 April 2019). The signing of the EPC Contract marks the completion of Northern Railway's commitments under an October 2017 agreement whereby CGGC agreed to fund and complete a Feasibility Study for the Rail Project.

On 2 April 2019 Russia's TASS News Agency reported that the rail line construction between Kyzyl and Kuragino had been reallocated to Russian Railways JSC as the EPC Contractor with a revised completion target of late 2024. In a related interview with the Governor of Russia's Tyuva Republic, the importance for economic growth and trade from both the rail construction from the capital Kyzyl to Kuragino and the eventual connection to Northern Railway's Erdenet to Ovoot Railway was confirmed (refer: <https://tass.ru/ekonomika>)

## Corporate

### Cash Position

At 31 March 2019, the Aspire Group had A\$13.5 million cash at bank with no borrowings.

### Capital Structure

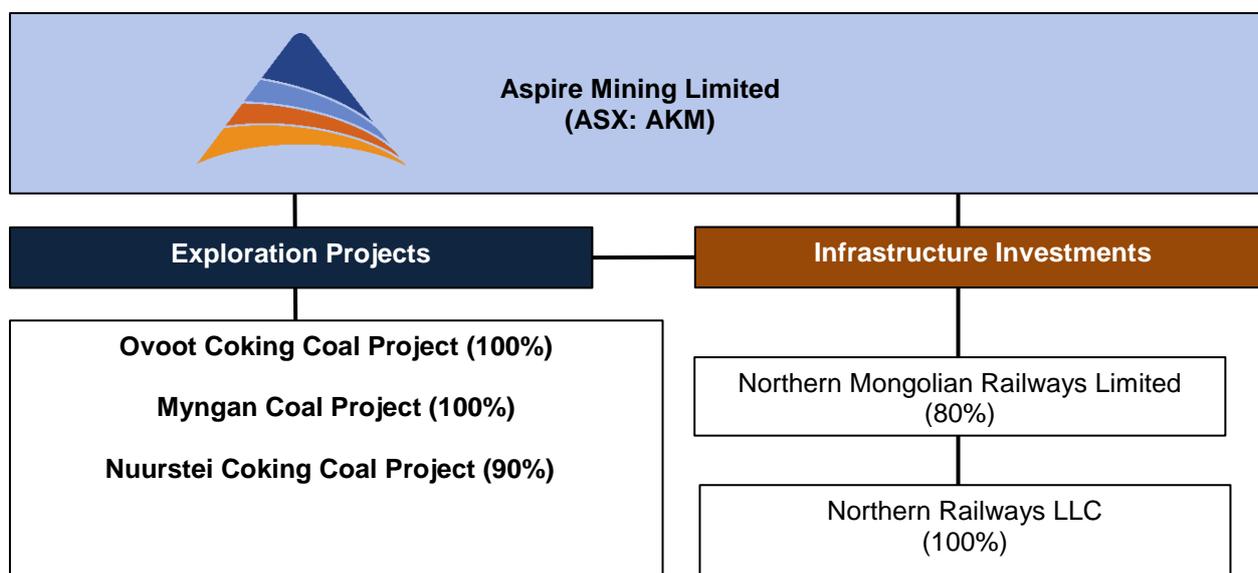
The securities on issue at 31 March 2019 are:

Security	No. on issue
Quoted Ordinary Shares	3,326,541,075
Unlisted Performance Rights	167,749,996
Listed Options (1.8c expiring 11 December 2019)	700,722,235

## Interests in mining and exploration tenements at 31 March 2019

Tenement	Location	Attributable Equity
<b>Ovoot</b> MV017098	Mongolia	100%
<b>Hurimt</b> 14510X	Mongolia	100%
<b>Myngan</b> 17922X	Mongolia	100%
<b>Nuurstei</b> MV-020941	Mongolia	90%

## Group Investment Structure



## JORC 2012 Reserves and Resources

### Ovoot Coal Resources

JORC Resource	Ovoot Open Pit	Ovoot Underground	Total (Mt)
Measured	197.0	0.0	197.0
Indicated	46.9	25.4	72.3
Inferred	9.2	2.6	11.8
<b>Total</b>	<b>253.1</b>	<b>27.9</b>	<b>281.0</b>

## Ovoot Coal Reserves

JORC Reserves	Probable (Mt) (Arb, 2% moisture)	Total (Mt)	Marketable (Mt) (Arb, 9.5% moisture)
Open Pit	247	247	182
Underground	8	8	6
Total	255	255	188

The technical information and competent persons statements for the Ovoot Coal Reserves and Resources are reported in the Company's ASX announcements dated 2 November 2012, 31 July 2013 and 30 January 2013 (December 2013 Quarterly Activities Report) which are available to view on the Company's website and the ASX Announcements platform. The Company confirms that it is not aware of any new information or data that materially affects the information included in the announcements, and that all material assumptions underpinning the estimates continue to apply and have not materially changed.

## Ovoot OEDP Reserves

The OEDP Reserves have been confirmed as:

Category	Coal Reserve (adb) ROM Mt	Coal Reserve Total Moisture 2.0% arb ROM Mt	ROM Coal adb Ash Content %	ROM Coal adb CSN%
Probable Ore Reserve Ore Open Pit OEDP	36.8	37.6	17.2	7.9
Probable Ore Reserve Open Pit OEDP Plus OEDP Extension	53.8	54.9	18.0	8.5

Category	Marketable Coal Reserve Total Moisture 10% arb Mt	Product Specification adb Ash Content %	Product Specification adb CSN%
Probable Product Reserve Ore Open Pit OEDP	32.2	10.5	8.5
Probable Product Reserve Open Pit OEDP Plus OEDP Extension	46.2	10.5	8.5

The technical information and competent persons statements for the OEDP Reserves are reported in the Company's ASX announcements dated 28 February and 1 March 2019 which are available to view on the Company's website and the ASX Announcements platform. The Company confirms that it is not aware of any new information or data that materially affects the information included in the announcements, and that all material assumptions underpinning the estimates continue to apply and have not materially changed.

## Nuurstei Coal Resources

JORC Resources	Mt
Indicated	4.75
Inferred	8.1
Total (Mt)	12.85

The technical information and competent persons statements for the Nuurstei Coal Resources is taken from the Company's ASX announcement dated 13 April 2016 which is available to view on the Company's website and the ASX Announcements platform. The Company confirms that it is not aware of any new information or data that materially affects the information included in the announcement, and that all material assumptions underpinning the estimates continue to apply and have not materially changed.

**- Ends -**

### Forward Looking Statements

This report contains forward-looking information which is based on the assumptions, estimates, analysis and opinions of management and engaged consultants made in light of experience and perception of trends, current conditions and expected developments, as well as other factors believed to be relevant and reasonable in the circumstances at the date that such statements are made, but which may prove to be incorrect.

Assumptions have been made by the Company regarding, among other things: the price of coking coal, the timely receipt of required governmental approvals, the accuracy of capital and operating cost estimates, the completion of a feasibility studies on its exploration and development activities, the ability of the Company to operate in a safe, efficient and effective manner and the ability of the Company to obtain financing as and when required and on reasonable terms. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used by the Company.

Although management believes that the assumptions made and the expectations represented by such information are reasonable, there can be no assurance that the forward-looking information will prove to be accurate.

Forward-looking information involves known and unknown risks, uncertainties, and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any anticipated future results, performance or achievements expressed or implied by such forward-looking information. Such factors include, among others, the actual market price of coking coal, the actual results of current exploration, the actual results of future exploration, changes in project parameters as plans continue to be evaluated, as well as those factors disclosed in the Company's publicly filed documents. Readers should not place undue reliance on forward-looking information.

## **About Aspire Mining Limited**

Aspire Mining Limited is on the ASX (ASX: AKM) and is the largest coal tenement holder in Mongolia's Northern provinces and is focused on identifying, exploring and developing quality coking coal assets.

Aspire is the 100% owner of the world class Ovoot Coking Coal Project (Ovoot Project) which is the second largest coking coal project by reserves in Mongolia.

Aspire is targeting early production of washed coking coal from the Ovoot Project via a truck and rail operation to end markets within 12 to 15 months of final operational and Board approvals (the Ovoot Early Development Plan). Operational expansion can occur following the construction of the Erdenet to Ovoot Railway being progressed by Aspire's subsidiary, Northern Railways LLC (Northern Railways).

Aspire has a 90% interest in Nuurstei Coking Coal Project (Nuurstei Project) located in northern Mongolia.

The proximity of the Nuurstei Project to existing infrastructure (town, road, rail and services) also provides an excellent opportunity to assess the economics of a road-based operation prior to the construction of the Erdenet to Ovoot Railway. However, that assessment is currently on hold with the focus on the Ovoot Early Development Plan.

Dependent on that further analysis of the results of an additional drilling program, future positive economic studies, funding and the grant of necessary approvals and licenses, the Nuurstei Project could commence a road-based production operation and then later have access to the new Erdenet to Ovoot Railway two years from commencement of the rail construction.

## **About Northern Railways LLC**

Northern Railways LLC (Northern Railways) is a Mongolian registered rail infrastructure Company, and mandated to pursue the development of the Erdenet to Ovoot Railway, is supported by a consortium consisting of Aspire Mining, and subsidiaries of Fortune 500 listed China Railway Construction Corporation Limited – China Railway 20 Bureau Group Corporation and China Railway First Survey & Design Institute Group Co Ltd.

The Erdenet to Ovoot Railway extends 547km between the town of Erdenet to Aspire's Ovoot Project, which connects northern Mongolia to China and international markets. In accordance with Mongolian National Rail Policy, the Erdenet to Ovoot Railway is a multi-user rail line and will be available for the transport of bulk materials, agricultural and general freight from the region to export markets including China, Russia and seaborne markets.

The Erdenet to Ovoot Railway will play an important part in the establishment of the Northern Rail Corridor through Mongolia, the subject of a trilateral program agreed by the Presidents of China, Russia and Mongolia. The Northern Rail Corridor through Mongolia is primarily aimed at improving trade by reducing regulation, improving capacity at borders and improving road and rail infrastructure to meet this increased demand for transport services. The Northern Rail Corridor through Mongolia links closely with Chinese policies to establish a New Silk Road to improve Euro-Asian trade, and Russia's policy of establishing a Euro-Asian economic zone.

In August 2015, Northern Railways was granted an exclusive 30 years concession by the Mongolian Government to build and operate the Erdenet to Ovoot Railway. Northern Railways is now progressing funding negotiations for the completion of the concession conditions

precedent, other studies to support applications for licenses, permits and approvals, the EPC contract and railway construction.

In October 2017 Northern Railways entered into a binding contract with China Gezhouba Group (CGGC) to complete the Bankable Feasibility Study for the Erdenet to Ovoot Railway and provide CGGC with an opportunity to fund Northern Railways LLC to complete the rail concession and funding conditions precedent for additional equity in Northern Railways LLC. The Feasibility Study has been completed (refer ASX announcements 22 March 2018 and 4 June 2018). A capacity guarantee from the operators of the Mongolian railway network is required by CGGC to progress further funding.

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