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Vast Resources PLC  
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Vast Resources plc

("Vast" or the "Company")

Significant JORC Compliant Resource Upgrade Published for

Producing Manaila Polymetallic Mine, Romania

Vast Resources plc, the AIM-listed mining company with mining operations in Romania and Zimbabwe, is pleased to announce an update to the previously published JORC Compliant Mineral Resource Estimate for its 100% owned producing Manaila Polymetallic Mine ('Manaila' or 'MPM') in Romania following the completion of 19 surface diamond drill holes in 2017. This has been undertaken by Craig Harvey, Chief Operating Officer and newly appointed Director and is based upon the inclusion of the 19 surface diamond drill holes and the validation and subsequent inclusion of historical data.

To view a map showing the location of the drill holes, please click here  
<http://www.rns-pdf.londonstockexchange.com/rns/8409I-2018-3-25.pdf>

Overview

- Total **open pit** Mineral Resource (**Indicated & Inferred**) of **4.6Mt** (representing an overall increase of **78% to the July 2016 estimate**) at a grade of 0.97% copper ('Cu'), 0.32% lead ('Pb'), 0.68% zinc ('Zn'), 25.8g/t silver ('Ag') and 0.23g/t gold ('Au) at a 0.25% Cu cut-off

- o **Open pit** mineral resources in the **Measured and Indicated** category (all Indicated) of **3.589Mt** (representing an increase of **209%**)

- Total **underground** Mineral Resource (**Indicated & Inferred**) of **1.1Mt** (representing an overall increase of **249% to the July 2016 estimate**) at a grade of 1.58% Cu, 0.82% Pb, 0.88% Zn, 14.6g/t Ag and 0.15 Au at a 1.00% Cu cut-off

- o **Underground** mineral resources in the **Measured and Indicated category** (all Indicated) of **0.399Mt** (representing an increase of **299%**)

- Implied Mine Life in excess of 11 years based on open pit and underground Measured & Indicated Mineral Resources at a rate of 30,000 tonnes per month

- Exploration Target defined for:

- o Open pit of 1.1Mt-3.2Mt with grades ranging between 0.4-1.1% Cu, 0.1-0.4% Pb and 0.2-1.1% Zn

- o Underground of 7.9Mt-23.6Mt with grades ranging between 0.4-1.3% Cu, 0.2-0.7% Pb and 0.3-1.0% Zn

- Further potential upside to the Exploration Target, which does not include estimates for gold and silver mineralisation

Andrew Prelea, Chief Executive of Vast, commented:

"Today's significant upgrade to our internal JORC Compliant Mineral Resource statement further reinforces our confidence in the MPM operation. The increased Mineral Resource (particularly in the Indicated Resource category) will support technical studies going forward and will allow for the expansion at the Carlibaba Extension area at MPM, which will include the installation of a metallurgical processing facility planned to be funded by Tranche B of the Mercuria Pre-Payment Offtake Agreement, which was announced on 21 March 2018.

"When Vast acquired MPM in 2015 there was less than 400,000 metric tonnes (0.4Mt) of mineral resources left in the operating pit. Through the hard work and dedication of our executive and Romanian management teams we have built a mine that is now proving to be a significant asset for the Company and an integral asset that assisted in securing the recent US\$9.5 million financing Pre-Payment Offtake Agreement. With a life of mine exceeding original expectations and continuing improvements being made, we are confident that Manaila will be the basis for significant returns to shareholders for many years to come."

JORC Mineral Resource Estimate

A JORC Compliant Mineral Resource estimate has been compiled for the area delineated by the

138.6 hectares ('ha') exploration perimeter of MPM. Within this exploration licence perimeter, the current mining licence boundary is 27.2ha in extent.

A full geological model has been constructed, constraining the mineralised zone to widths and extents as defined by surface drilling, underground drilling and underground development. The mineral resource has been updated based upon the inclusion of 19 recently completed surface diamond drill holes. These holes were drilled to validate portions of the extensive historical data set at MPM and have confirmed similar grades, widths, geological continuity and spatial correlation between the new and historic data. As such portions of the historic data set were included for the new mineral resource estimate.

A combination of Ordinary Kriging ("OK") and Inverse Distance Squared ("ID<sup>2</sup>") was carried out, interpolating values for copper, lead, zinc, sulphur, gold and silver into a three-dimensional constrained geological block model. Density values from historical density measurements undertaken in Romania and from density measurements in use at the operating MPM mine were assigned to the block model for heavy and moderate weathering profiles and fresh material.

Mineral resource categorisation was undertaken whereby modelled mineralised zones, which could be defined from historical drilling but lacking sufficient assay data, were assigned to the Exploration Target category and these are reported separately. These zones were interpolated utilising ID<sup>2</sup>.

Mineralised zones, which contained sufficient data from surface drilling, underground drilling and underground channel sampling, were typically modelled with OK. The mineral resources within these mineralised zones were categorised based on the number of samples within various search volumes, statistical measures such as slope of regression and kriging efficiency, together with a geological confidence applied to each mineralised zone.

The mineral resource estimate has been subdivided into an open pit mineral resource and an underground mineral resource classification. The cut-off point between open pit and underground mining was determined by running a Lerch-Grossman ("LG") pit optimisation based on the prevailing metal prices and the current operational efficiencies being achieved at MPM. The depth of LG pit shells extended to 125 metres below the topographic surface.

Open pit mineral resources were subsequently defined down to a depth of 125 metres below surface and are reported at an in-situ mining grade cut-off of 0.25% Cu. Copper is deemed the main mineral of interest and all mineral resources are based on cut-off grades applied to copper only. Table 1 provides the mineral resources determined to be fresh sulphide open pit mineral resources.

Table 1: Open Pit Mineral Resource Estimate for the Manaila Polymetallic Mine, February 2018.

Category (Open Pit)	Cu % cut-off	Tonnes (Kt)	Cu Metal (Kt)	Pb Metal (Kt)	Zn Metal (Kt)	Au Metal (Koz)	Ag Metal (Koz)	Cu %	Pb %	Zn %	Au g/t	Ag g/t
Measured	0.25%	-	-	-	-	-	-	-	-	-	-	-
Indicated	0.25%	3,589	33.3	10.5	22.6	27	2,867	0.93	0.29	0.63	0.23	24.9
Meas + Ind	0.25%	3,589	33.3	10.5	22.6	27	2,867	0.93	0.29	0.63	0.23	24.9
Inferred	0.25%	1,045	11.5	4.2	8.8	8	981	1.10	0.40	0.84	0.24	29.2
Meas + Inferred	0.25%	4,634	44.9	4.7	1.4	35	3,848	0.97	0.32	0.68	0.23	25.8

Ind + Inf

*\*as at 28 February 2018 (topographic surface)*

\* to a maximum depth of 125m below topographic surface

\* @ 0.25% Cu cut-off grade

\* Rounding may cause minor differences

As VAST holds a 100% interest, the above figures are both gross and net attributable to VAST, which is the operator.

Underground mineral resources were subsequently defined from below a depth of 125 metres below surface to the limits of the mineralised zones or the licence perimeter and are reported at an in-situ mining grade cut-off of 1.00% Cu. Copper is deemed the main mineral of interest and all mineral resources are based on cut-off grades applied to copper only. Table 2 provides the mineral resources determined to be underground mineral resources.

Table 2: Underground Mineral Resource Estimate for the Manaila Polymetallic Mine, February 2018.

Category (Underground)	Cu % cut-off	Tonnes (Kt)	Cu Metal (Kt)	Pb Metal (Kt)	Zn Metal (Kt)	Au Metal (Koz)	Ag Metal (Koz)	Cu %	Pb %	Zn %	Au g/t	Ag g/t
Measured	1.00%	-	-	-	-	-	-	-	-	-	-	-
Indicated	1.00%	399	6.3	3.1	3.3	2	188	1.58	0.78	0.83	0.13	14.60
Meas + Ind	1.00%	399	6.3	3.1	3.3	2	188	1.58	0.78	0.83	0.13	14.60
Inferred	1.00%	683	10.7	5.7	6.1	4	321	1.57	0.84	0.90	0.17	14.60
Meas + Ind + Inf	1.00%	1,081	17.0	8.8	9.4	5	509	1.58	0.82	0.88	0.15	14.60

*\*as at 28 February 2018 (topographic surface)*

\* from a depth of 125m below topographic surface

\* @ 1.00% Cu cut-off grade

\* Rounding may cause minor differences

As VAST holds a 100% interest, the above figures are both gross and net attributable to VAST, which is the operator.

An exploration target has been defined over the remainder of the exploration perimeter. There is sufficient information available, from existing surface drill holes to literature regarding the development of sulphide mineralisation in the area surrounding MPM to warrant the development of a staged exploration programme to advance these areas into a mineral resource category in the

future. Table 3 provides the exploration target potential for open pit exploration targets and Table 4 for underground exploration targets. All exploration targets are reported with no cut-off grade applied.

Table 3: Open Pit Exploration Target at Manaila Polymetallic Mine, February 2018.

OPEN PIT Exploration Target	Tonnes (Kt)		Grade					
	Minimum	Maximum	Cu%		Pb%		Zn%	
			Min	Max	Min	Max	Min	Max
Range	1,063	3,190	0.4	1.1	0.1	0.4	0.2	0.6
Total	1,063	3,190	0.4	1.1	0.1	0.4	0.2	0.6

*\*as at 28 February 2018 (topographic surface)*

\* to a maximum depth of 125m below topographic surface

Table 4: Underground Exploration Target at the Manaila Polymetallic Mine, February 2018.

UNDERGROUND Exploration Target	Tonnes (Kt)		Grade					
	Minimum	Maximum	Cu%		Pb%		Zn%	
			Min	Max	Min	Max	Min	Max
Range	7,861	23,583	0.4	1.3	0.2	0.7	0.3	1.1
Total	7,861	23,583	0.4	1.3	0.2	0.7	0.3	1.1

*\*as at 28 February 2018 (topographic surface)*

\* from a depth of 125m below topographic surface

The JORC compliant mineral resource report will be available on the Company's website at <http://www.vastresourcesplc.com/operation/manaila-polymetallic-mine/>.

## Competent Person

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Craig Harvey, the Chief Operating Officer for Vast and a full-time employee and Director of the Company. Mr Harvey is a Competent Person who is a Member of the Australian Institute of Geoscientists and of the Geological Society of South Africa, a Recognised Professional Organisation included in a list that is posted on the ASX website from time to time.

Mr Harvey has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results,

Mineral Resources and Ore Reserves'. Mr Harvey consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Glossary

Assay	The chemical analysis of rock or ore samples to determine the proportions of metals.
Cut-off grade	Lowest grade of mineralised material considered to be economically viable to extract.
Exploration Target	An Exploration Target is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade (or quality), relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource.
g/t	Gram per tonne
Grade orebody.	The relative quantity or percentage of ore mineral content in an
Hectare	A measure of surface area equalling 10 000m <sup>2</sup> .
Indicated Resource	An 'Indicated Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.
Inferred Resource	An 'Inferred Mineral Resource' is that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability.

Inverse Distance <sup>2</sup> Is a [deterministic method](#) for [multivariate interpolation](#) with a known scattered set of points. The assigned values to unknown points are calculated with a [weighted average](#) of the values available at the known points

Interpolate In the [mathematical](#) field of [numerical analysis](#), interpolation is a method of estimating new data points within the range of a [discrete set](#) of known data points.

JORC Code Australasian Code for Reporting of Mineral Resources and Ore Reserves prepared by the Joint Ore Reserves Committee of the Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Mineral Council of Australia, as amended.

Koz A thousand troy ounces

Kt A thousand metric tonnes

Kriging Best linear unbiased estimate. Kriging employs the variogram model as the weighting function. Because of this kriging weights are assigned in a way that reflects the spatial correlation of the grades themselves.

Kriging Efficiency An expression of the ratio of the kriging variance against the local block variance. Used as a measure to determine the effectiveness of the kriging matrix.

Lerch-Grossman A method of precise pit optimization commonly used in the mining industry is the Lerch Grossmann method. The technique, founded in 3-dimensional graph theory, relies on a regular system of blocks which defines the value (profit, loss) and type (ore, waste) of material contained in the blocks.

Measured Resource A 'Measured Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.

**Mineralisation**                    The process or processes by which a mineral or group of minerals are introduced to a host rock.

**Mineral Reserve**                Is the economically mineable material derived from a Measured and/or Indicated Mineral Resource.

**Mineral Resource**                A 'Mineral Resource' is a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

**Mt**                                      One million metric tonnes

**Ore**                                      The naturally occurring material from which a mineral(s) can be extracted at a reasonable profit.

**Orebody**                              A continuous well-defined mass of material to sufficient ore content to make extraction economically feasible.

**Slope of Regression**            A means of examining the relationship between two variables such as a true and an estimated value

**\*\*ENDS\*\***

For further information, visit [www.vastresourcesplc.com](http://www.vastresourcesplc.com) or please contact:

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The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulations (EU) No. 596/2014 ("MAR").

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