

ASX ANNOUNCEMENT 13 September 2018

ORE RESERVE INCREASED BY 11% TO 1.1 MOZ GOLD

- Ore Reserve supports the completion of the Awak Mas Gold Project DFS (to be released late September)
- Long-life, low cost gold operation confirmed at 2.5 Mtpa processing rate, low strip ratio of 3.5 and good access to established power and transport infrastructure
- Nusantara expects to continue to grow the Awak Mas Gold Project reserves and resources to a globally significant quality and scale, with significant exploration potential still to be tested

Asia-Pacific gold development company Nusantara Resources Limited ('Nusantara', ASX: NUS), is pleased to announce an upgrade to the Ore Reserve of 1.1 million ounces contained gold for its 100%-owned Awak Mas Gold Project located in South Sulawesi, Indonesia.

The Awak Mas Gold Project Probable Reserve at 0.5 g/t Au cut-off using a US\$1250/oz gold price is 26.9 Mt at 1.32 g/t Au for 1.14M contained ounces. The Ore Reserve estimate (Table 1) is based on the Mineral Resource estimate reported for the Awak Mas and Salu Bulo deposits in May 2018¹ (Figure 1). The upgraded Ore Reserve represents an 11% increase in contained gold from the previous Ore Reserve and incorporates all drilling and mine planning completed as part of the Definitive Feasibility Study (DFS)².

Planning is underway for a program of further drilling to lift the resource category to 'Measured' status in the initial mining areas. This closer spaced drilling has the potential for an uplift in grade through the intersection of additional higher grade vertical zones that are pervasive through the Awak Mas and Salu Bulo deposits. In addition, extensions to the proposed Awak Mas, and Salu Bulo pits, and the possible inclusion of the Tarra deposit into the mine plan, represents a near term opportunity to extend the mine life by a further three years.³

"The 11% increase in the Ore Reserve will be incorporated in the Awak Mas Gold Project Definitive Feasibility Study, representing further value improvement in the project. The new Ore Reserve was based on the results of the completed resource drilling program, highlighting the potential upside in the project as exploration continues", commented Nusantara's Managing Director and CEO, Mike Spreadborough. "This Ore Reserve, combined with the exploration potential of the project, underpins the Company's confidence in delivering the proposed long-life, low cost, stand-alone gold project at Awak Mas. The DFS is undergoing final data verification and will be released in late September confirming that the project is technically and financially robust".

The Appendix 1 provides a technical summary of the project and also attached is the JORC Code, 2012 edition, Table 1.

¹ ASX Announcement released 8 May 2018

² ASX Announcement released 20 August 2018

³ Note that further resource drilling and technical studies are required to confirm inclusion of any grade uplift or mine life extension in the Ore Reserve.



Table 1: Awak Mas Gold Project Ore Reserve estimates (August 2018) by deposit.

	Classification	Tonnes (Mt)	Au Grade (g/t)	Contained Gold (Moz)
Awak Mas	Proved Probable	- 24.1	1.28	- 0.99
Salu Bulo	Sub-total Proved	24.1	1.28	0.99
Salu Bulo	Probable	2.8	1.67	0.15
	Sub-total	2.8	1.67	0.15
Total	Proved Probable	- 26.9	1.32	- 1.14
	Total	26.9	1.32	1.14

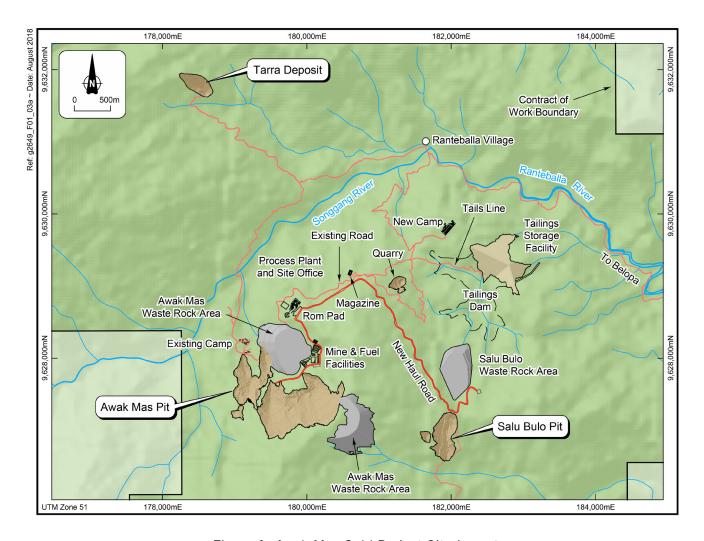


Figure 1: Awak Mas Gold Project Site Layout



APPENDIX 1: AWAK MAS GOLD PROJECT ORE RESERVES UPDATE — TECHNICAL SUMMARY

Note: This technical summary should be read in conjunction with the **JORC Code**, **2012 edition**, **Table 1** attached to this ASX Announcement.

BACKGROUND

The Awak Mas Gold Project, located in South Sulawesi, Indonesia covers an area of 14,390 ha, and is 100% owned through a 7th generation Contact of Work (CoW) with the Government of Indonesia (Gol). Exploration has led to the definition of Mineral Resources at the Awak Mas, Salu Bulo and Tarra deposits; collectively, the Awak Mas Gold Project (Project). The Project has been granted all environmental and construction approvals for continued development¹.

The CoW has recently been amended by mutual agreement to better align with the current Indonesian law². Nusantara's wholly-owned subsidiary, PT Masmindo Dwi Area (Masmindo), has sole rights to explore and exploit any mineral deposits within the Project area until 2050. In the 10th year after commercial production, Masmindo is required to offer at least 51% of its share capital to willing Indonesian participants at fair market value according to International valuation practice.

Nusantara has undertaken further mineral resource definition drilling, metallurgical evaluation, and mining studies to support this Ore Reserve Estimate (ORE) update. The DFS is nearing completion, will be released in late September 2018.

BASIS OF THE ORE RESERVE UPDATE

Resource drilling by Nusantara completed in 2017 and early 2018 resulted in an update of the Project's Mineral Resource estimate (MRE) in May 2018 through the inclusion of 54 diamond drill holes at Awak Mas and 14 diamond drill holes at Salu Bulo for a total 45.3 Mt at 1.4 g/t Au for 2.0 million contained ounces with 89% reporting to the Indicated Resource category. This MRE is used as the basis for the completion of the DFS. The Tarra deposit, which is included in the MRE, requires further resource drilling to bring to an Indicated Mineral Resource and for this reason it will not be included in the DFS and is not considered in this ORE.

LOCATION

The Project's location (Figure 1) near the east coast of South Sulawesi provides very good access to the established infrastructure and logistics networks, offering greater support and fewer constraints than many comparative projects in the Asia-Pacific region. The access point from the east coast of South Sulawesi to the Project is Belopa, the capital of the Luwu Regency (the Regency's population is ~ 350,000), located only 45 km by road from the Project.

Belopa has access to the other provincial centres including Makassar and Palopo City, via highway, coastal shipping and scheduled air services. Belopa is connected to Sulawesi's power supply grid and is the proposed connection point for the Project's power supply, via a 150kW transmission line, and communication network. A Memorandum of

¹ Nusantara's IPO Prospectus dated 15 June 2017 as lodged with the ASX on 1 August 2017

² ASX Announcement released 15 March 2018



Understanding (MOU) has been signed with the Indonesian power provider, Perusahaan Listrik Negara (PLN), for the construction of the power line from Belopa to site.

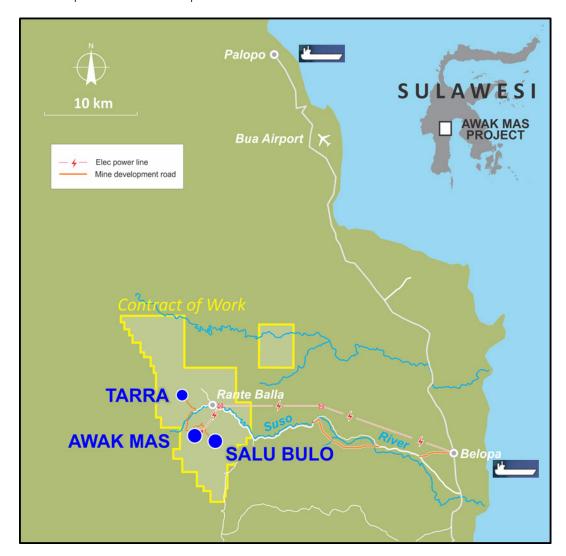


Figure 1: Awak Mas Gold Project Location, Sulawesi, Indonesia

MINING AND ORE RESERVES

AMC Consultants (AMC) has completed pit optimisation, mine design cost modelling, and scheduling for the two deposits. This together with other studies has allowed the design of the site layout including site haul roads, pit access roads, detailed pit stage development designs, waste dumps, topsoil stockpiles, mine workshops and run of mine (RoM) ore pads (Figure 2).



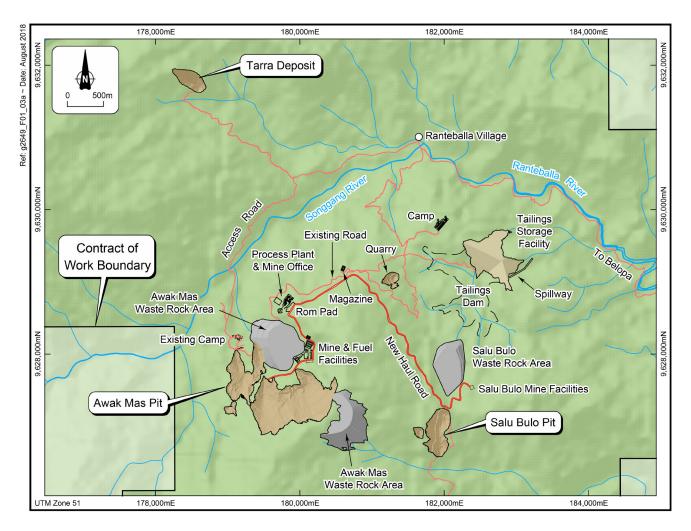


Figure 2: Awak Mas Site Layout

Table 1 outlines the basis and results of the mine design for the Awak Mas and Salu Bulo pits. The Awak Mas deposit open pit will be developed in stages to provide early access to ore supply and to manage waste and total material movements. The ORE (Table 2) demonstrates that the open pits (Figures 3 and 4) will support an ore processing rate of 2.5 Mtpa with a strip ratio of 3.5 over an eleven-year period³ (Figure 5). The mining operation assumes a mining contractor operation using 90 tonne excavators and 60 tonne articulated dump trucks. The mine plan and schedule allow for the project's steep terrain and tropical setting. Later in the mine life, waste is also dumped in mined out pits, associated with the Ongan and Mapacing domains.

³ The final processing schedule developed for the Project included 1.1Mt of Inferred mineral resource recovered contained within the open pit designs.



Table 1: Mine Design Criteria

Criteria	Units	Base Case	Source
Ore Throughput	Mtpa	2.5	Client
Mining method		Conventional truck and excavator	Assumed/typical
Drill and blast		5.0m benches with 102mm holes.	Assumed/typical
Major equipment		3 main loading excavators 23 dump trucks 3 blast hole drill rigs 3 front end loaders 5 dozers 2 graders Supporting equipment RC grade control drills	Site specific estimate
Physical Characteristics			
Ore Mined	Mt	28.0	Estimated
Waste mined	Mt	97.6	Estimated
Total material mined	Mt	125.6	Estimated
Strip ratio	t:t	3.5	Estimated
Maximum mining rate	Mtpa	16.0	Estimated
Mine life	years	11.5 including ramp up	Estimated
Operating costs			
Mine operating cost	\$/t	2.75	Estimated

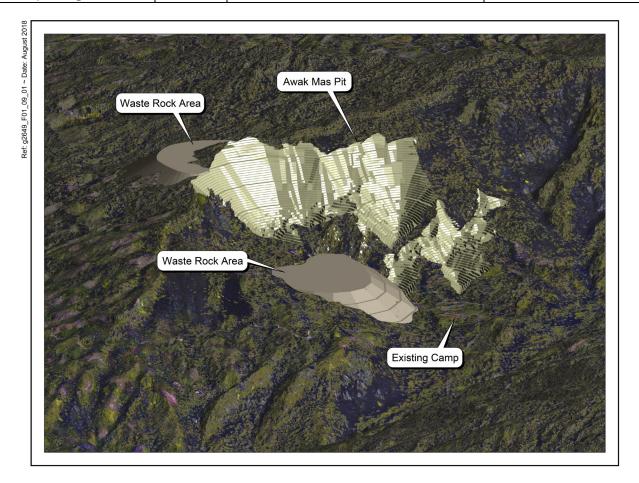


Figure 3: Awak Mas pit



AMC initially developed a diluted mining model based on the latest MRE⁴. The diluted mining model was used in Whittle pit optimization software to develop optimum mining shells.

The resource models were re-blocked to a 5m by x 5m by x 5m selective mining unit (SMU). The diluted Awak Mas model shows a 4% increase in tonnes and a 5% reduction in gold grade for a resultant 98% of contained gold (cut-off grade of 0.5 g/t).

The Salu Bulo diluted resource model presented no change in mineralized tonnes and a 1% reduction in gold grade for a resultant 99% of contained gold (cut-off grade of 0.5 g/t).

The ORE is that part of the Measured and Indicated Mineral Resource model located within the detailed pit designs for Awak Mas (Figure 3) and Salu Bulo (Figure 4).

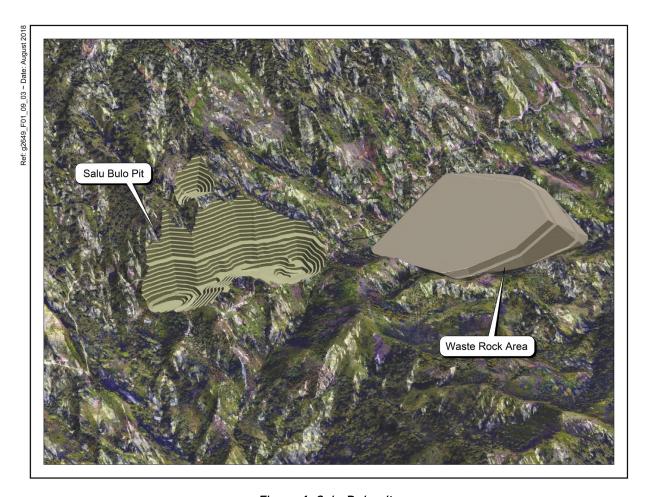


Figure 4: Salu Bulo pit

⁴ ASX Announcement released 8 May 2018.



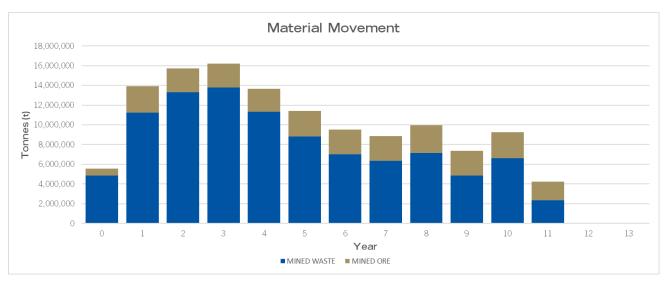


Figure 5: Project material movement schedule

The Probable Ore Reserves (Table 2) for the Project are 26.9 Mt at 1.32 g/t Au for 1.14M contained ounces. These Ore Reserves calculated at 0.5 g/t Au cut-off using a US\$1,250/oz gold price are for Awak Mas and Salu Bulo deposits:

- Awak Mas deposit 24.1 Mt at 1.28 g/t Au for 0.99 Moz, Strip Ratio of 3.1
- Salu Bulo deposit 2.8 Mt at 1.67 g/t Au for 0.15 Moz, Strip Ratio of 5.1

The 0.5 g/t Au cut-off grade reflects the low operating cost environment (low strip ratio, access to grid power, moderate bond index and good access to established infrastructure).

Table 2: Project Ore Reserves estimates (August 2018) by deposit

Deposit	Classification	Tonnes (Mt)	Au Grade (g/t)	Contained Gold (Moz)
Awak Mas	Proved	-	-	-
	Probable	24.1	1.28	0.99
	Sub-total	24.1	1.28	0.99
Salu Bulo	Proved	-	-	-
	Probable	2.8	1.67	0.15
	Sub-total	2.8	1.67	0.15
Total	Proved	-	-	-
	Probable	26.9	1.32	1.14
	Total	26.9	1.32	1.14

Reported at a 0.5 g/t cut-off grade



METALLURGY AND MINERAL PROCESSING

A flowsheet comprising gravity and leach extraction, Whole of Ore Leach (WOL), was selected as the basis for the DFS (Figure 6). This followed a review of extensive historical comminution testwork, historical gravity and leach testwork and the DFS Phase 1 test work program⁵. This testwork for this process suggested recoveries in the range of 85% to 91%.

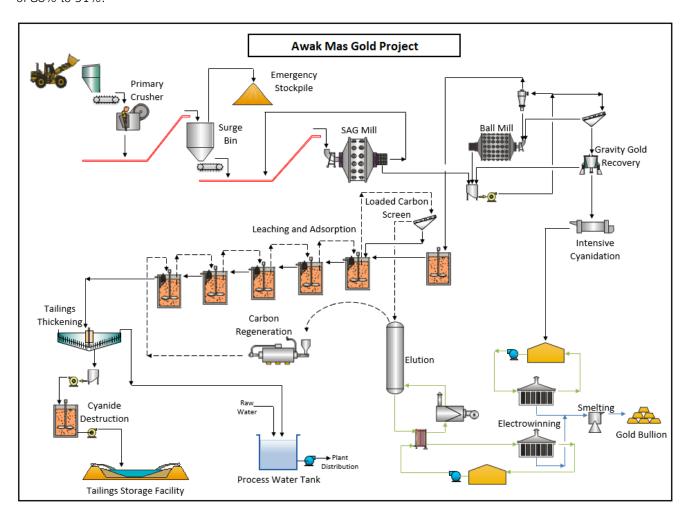


Figure 6: Process Flowsheet

The key process plant design criteria for the WOL flowsheet, derived from available and reviewed testwork, is summarised in Table 3.

The WOL process plant will have a design capacity of 2.5 Mtpa and designed for an average head grade of 1.40 g/t Au and a gold recovery of 91.1%. The process plant comprises primary crushing, wet grinding in a SAG and ball milling circuit (SAB circuit), gravity gold recovery, cyanide carbon in leach gold recovery and elution, reagents, air and water services. CIL tailings would be thickened and cyanide detoxified prior to disposal in the Tailings Storage Facility. The process plant would produce a gold doré product.

⁵ ASX Announcement released 10 October 2017



Table 3: Process Plant Design Criteria Summary

Criteria	Units	Base Case	Source
Ore Throughput	Mtpa	2.5	Client
Crushing Plant Utilisation	%	75.0	Assumed/Typical
Wet Plant Utilisation	%	91.3	Assumed/Typical
Head Grade	Au g/t	1.40	Feb 2018 US\$1,200/oz pit shell Mineral Resource Estimate
	%S	0.84	Testwork
Physical Characteristics			
BWi	kWh/t	12.8	Testwork
RWi	kWh/t	17.9	Testwork
Ai	g	0.35	Testwork
JK Axb	-	60.8	Testwork
Gold Recovery			
Gravity	%	40.0	Testwork
CIL	%	85.2	Testwork
Overall Gold Recovery	%	91.1	Testwork
Primary Grind Size P80	μm	75	Testwork
Leach and Adsorption			
CIL Feed Rate	t/h	313	Calculated
Residence Time	h	24	Testwork/Engineer
Cyanide Consumption	kg/t CIL Feed	0.40	Calculated/Testwork

TAILINGS STORAGE FACILITY

Golder Associates completed a preliminary geotechnical investigation, tailings characterisation and TSF design for the Project's PFS in 2013. Further geotechnical investigation and seismic study work was completed in 2017/18 to progress a preliminary design of the TSF for the DFS.

The Kandeapi Valley, approximately 3 km east of the proposed process plant site, is considered to be the most suitable location for the TSF (Figure 2). The proposed TSF embankment is aligned east-west across the Kandeapi Valley, with a saddle dam extension to the south-east.

A conventional downstream embankment configuration has been selected as most appropriate for a potentially seismic environment. For the PFS, the design slopes adopted were 1:2.5 (V:H) downstream and 1:3 (V:H) upstream These are unchanged in the DFS. After the construction of the initial TSF embankment to start operations, the embankment is raised in stages during the life of the operation.

SITE INFRASTRUCTURE AND FACILITIES

The proposed site infrastructure supports both mine operations and the processing of ore, through the provision of power, water, logistics, administration, and other necessary support services.

A support facilities complex will be located at Belopa comprising a main administration office, warehouse and core yard (including core process and storage) and are designed to accommodate the local administrative and logistics operations as well as providing an area for core analysis and storage over the life of the Project. This office



coordinates all freight to, and from, the site and arriving at the Belopa Port or by truck from Palopo Port, Makassar Port or other sources.

Makassar will be the base for support services; procurement, finance, human resources and a small corporate office will be located in Jakarta focused on national level government relations.



JORC Code, 2012 Edition - Table 1

Section 4 Estimation and Reporting of Ore Reserves (Criteria in this section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code (2012) Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Mineral Resource estimate used as the basis of this Ore Reserve for the Awak Mas Gold Project ("Project"), is comprised of the Awak Mas and Salu Bulo deposits. This Mineral Resource estimate was compiled by Principal Geologist Mr. Adrian Shepherd of Cube Consulting, who is the Competent Person for these Mineral Resources. The estimate is based on assay data from 158 historic Reverse Circulation (RC) holes, 864 historic diamond holes and 68 recently drilled Nusantara diamond holes. The data set, geological interpretation and model was validated using Nusantara's internal Quality Assurance and Quality Control (QAQC) processes and reviewed by an independent external consultant. The grade estimation approach used a combined Localised Uniform Conditioning ("LUC") and Ordinary Kriging ("OK") technique to estimate the Indicated and Inferred components of the resource. Ordinary Kriging was only applied to the narrow, steep dipping sub-vertical domains. LUC is a recoverable estimation technique typically used for estimation into small blocks using wider spaced resource definition drilling. The technique was considered appropriate given high short-scale grade variability and the uncertainty associated with the estimation of the local grade tonnage distribution. The LUC panel was set at 20m x 20m x 5m (XYZ) with a block size for local estimation to a SMU size of 5m x 5m x 2.5m (XYZ).
	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resources are reported inclusive of the Ore Reserve (refer ASX announcement 08 May 2018).
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person conducted a Site visit in October 2017. The following activities were completed:
	If no site visits have been undertaken indicate why this is the case.	 Gained general familiarization with the site including likely mining conditions, proposed pit location, waste dump location, site drainage and site access
		 Assessed proposed locations of mining related infrastructure relative to the designed open pit
		Observed resource drilling activities



Criteria	JORC Code (2012) Explanation	Commentary
		 Inspected core drill hole sites to get an understanding of the variations in weathering profiles across the deposit Viewed diamond drill core from selected holes. Other key contributors to the Feasibility study have also visited the site.
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	The Ore Reserve estimate is the result of the preparation of a Definitive Feasibility Study (DFS) completed by a team consisting of Nusantara personnel and independent external consultants. This Ore Reserve Estimate is an update of a previous estimate (Refer ASX announcement 18 April 2018). The significant change from the previous Ore Reserve Estimate is due to additional ore definition drilling resulting in an increase in the underlying Mineral Resource Estimate. The DFS draws on work completed for an Optimisation Study and a pre-feasibility study on the two deposits, Awak Mas and Salu Bulo. The major contributors to the DFS include consultants from AMC Consultants, Cube Consulting, Golder, Minnovo, Lorax, and Resindo Resources & Energy (Resindo). The proposed mine plan supporting the Ore Reserve Estimate is technically achievable. All technical proposals made for the operational phase involve the application of conventional open pit mining, gold processing and tailings disposal technology which is widely utilised in gold mining operations in Indonesia. Financial modelling completed as part of the DFS shows that the project is economically viable under current assumptions. Material Modifying Factors (mining, processing, infrastructure, environmental, legal, social and commercial) have been considered during the Ore Reserve
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	estimation process. Variable economic cut-off grades have been applied in estimating the Ore Reserve and were rounded up to 0.5 g/t gold for reporting. Cut-off grade is calculated in consideration of the following parameters: • Gold price • Operating costs • Process recovery • Transport and refining costs • General and administrative cost • Royalty costs.



Criteria	JORC Code (2012) Explanation	Commentary
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	The current deposits associated with the Awak Mas Gold Project will be mined by open pit mining methods utilising conventional mining equipment. Pit designs and waste dump designs were completed as part of the DFS. The estimated inventory within the pit designs is the basis of the Ore Reserve estimates. The selected mining method, design and extraction sequence are tailored to suit the local setting in Indonesia, waste rock removal and storage, orebody characteristics, minimise dilution and ore loss. The sequence is designed to defer waste movement and capital expenditure, utilise proposed process plant capacity and expedite free cash generation in a safe and environmentally sustainable manner. Mining operating and capital costs were estimated from first principles as part of the DES and referenced against centrester budget quetoe.
	The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling.	Geotechnical modelling has been commenced by AMC Consultants and is based on a review of the geotechnical work completed as part of previous studies, supported by a site visit, additional testing, dewatering test pumping, and inspection of diamond drill core samples and three-dimensional slope stability analysis. The analysis considered static and dynamic (earthquake) loading and derived satisfactory safety factors. The recommended geotechnical design parameters are matched to the pit designs and assume dry slopes on the basis of adequate dewatering ahead of mining. A dewatering plan is developed and costed. A geotechnical management plan is developed. Conventional drill and blast mining methods will be employed at Awak Mas and Salu Bulo with blast-hole (BH) sampling utilised as the primary procedure for grade control. In addition, reverse circulation (RC) drilling will be used specifically to determine where ore/waste boundaries exist and for updating the mine planning process for future mining.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	Shallow trenching across benches will be used selectively to assist with ore mark-out by determining both visually and quantitatively (by sampling) the position of contact boundaries. Floor mapping will assist with creation of digblocks which, when coupled with the blast-hole sampling and 3D modelled RC drilling, will give a level of GC necessary to support selective mining where appropriate. The DFS includes provision of an on-site laboratory for assaying. Mining dilution and recovery modifying factors were simulated by modelling to a Selective Mining Unit (SMU) of 5x5x5m and regularizing the Mineral



Criteria	JORC Code (2012) Explanation	Commentary
	The mining dilution factors used. The mining recovery factors used. Any minimum mining widths used.	Resource block model to that SMU. The selected SMU is matched to the proposed mining equipment and methodology. The modelling yielded the following results: • Mining tonnage dilution factor of 14% for Awak Mas and 5% for Salu Bulo • A net mining recovery factor of 104% of tonnes and 98% contained gold for Awak Mas and net mining recovery factor of 96% of tonnes and 96% contained gold for Salu Bulo.
	The manner in which Inferred Mineral Resources are utilized in mining studies and the sensitivity of the outcome to their inclusion.	The mining schedule is based on supplying suitable material to the processing plant with a name plate capacity of 2.5 Mtpa. The plant feed included a mix of oxide and fresh material from Awak Mas and Salu Bulo.
		The mining schedule is based on realistic mining productivity and equipment utilisation estimates, and considered the pit development requirements, the selected mining fleet productivity and the vertical rate of mining development. Inferred Mineral Resources were considered as waste during the pit optimisation process. Minor quantities of Inferred Mineralization are included in the production schedule but do not report to Ore Reserves the project financial result is not sensitive to the inclusion of the Inferred mineralization in the schedule.
	The infrastructure requirements of the selected mining methods.	The proposed mine layout includes designs for a processing plant, tailings storage facility, open pits, waste rock dumps, a ROM pad, a quarry, surface water diversion channels, sediment control structures, surface dewatering bores, light and heavy vehicle workshop facilities, explosives storage and supply facilities, security, technical services and administration facilities, site access roads, power supply, water supply and employee accommodation. Waste material from mining activities will be disposed of as follows: • Topsoil will be disposed of at designated stockpiles for application in on-going rehabilitation activities;
		 Some waste rock may be utilised to construct the Run of Mine (ROM) pad and other site infrastructure such as roads; Some selected waste rock may be utilised to construct on-going TSF embankment lifts; Excess waste rock will be disposed of at designated engineered waste rock dumps.

Limited



Commentary
 Waste dumps will be geotechnical designed for stability Waste dumps will be designed to allow for water management and sediment runoff control.
runoff control. and the estyle of identification, mechanical and electrical design were all developed to Australian standards and conform to Indonesian standards. well-tested A single stage primary crushing, Semi Autogenous Grinding and Ball Milling comminution circuit followed by a conventional gravity, carbon in leach (CIL) and cyanide destruction process is proposed. This process is considered appropriate for the Awak Mas and Salu Bulo ore types. The proposed metallurgical process is commonly used in the Indonesian and international gold mining industry and is considered to be well-tested and proven technology. Significant comminution testing has been carried out on diamond drill core samples. These tests have been carried out on oxide, transitional, and fresh ore types which were obtained across the deposits. These comminution parameters have been applied to process design and equipment selection. An average gravity and whole ore leach gold recovery value of 91.1% has been estimated based on historical gravity and whole ore leach test data (completed between 1994 to 2014) and the recent Phase 1 gravity and leach testwork managed by Minnovo in 2017. Gold recovery was estimated for each ore type based on the average testwork conducted to date for each ore type, weighted by the individual ore domain tonnage proportions from the February 2018 Mineral Resource Estimate. The majority of historical whole ore leach test data (completed between 1994 to 2014) was completed on the Rante, Tanjung and Lematik ore domains. Only a single whole ore leach test was completed for Mapacing, Ongan and Salu Bulo and no historical whole ore leach testwork was been completed on Tarra (Note: the Tarra resource has not been studied in the DFS). Much of the historical whole ore leach testwork was conducted with a different grind size) and these historical results have been adjusted to reflect the current plant design and grind size. The 2017 Phase 1 testwork program replicated the proposed process flowsheet on a single composi
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JORC Code (2012) Explanation	Commentary
	Tanjung, Lematik, Ongan, Mapacing, Salu Bulo and Tarra). Excellent results were produced from the recent Phase 1 gravity and leach testwork, with gold recoveries ranging from 92 – 98% after 24 hours of leach.
	The average gold recovery of 91.1% used for the Study is generally lower than achieved in the recent Phase 1 testwork but higher than achieved in the historical testwork. It is thought some of the historical tests were affected by preg-robbing and/or lack of cyanide addition, which are thought to have been addressed by the addition of carbon and extra cyanide to the recent Phase 1 testwork.
	Gold recovery will be evaluated in more detail as a part of the DFS Phase 2 metallurgical testwork program (underway), where more extensive variability testwork and cyanide destruction testwork will be conducted across the various ore types.
	No deleterious elements of significance have been determined from metallurgical testwork and mineralogy investigations.
The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	Extensive environmental baseline studies have been conducted at the Awak Mas Gold Project site from 2013 to 2017. The studies have established a seasonal database for key environmental components, which include: meteorology, hydrology, terrestrial ecology (flora and fauna); aquatic ecology (algae, plankton, benthic invertebrates, nekton and biota tissue metal contents); hydrogeology; surface water quality; stream/river sediment quality; soils, air quality and noise.
	Baseline studies have been considered in the environmental and social impact assessment (ESIA) for the Awak Mas project. The ESIA (AMDAL in Indonesian) determined the significant impacts of the projects and environmental management plans have been developed to eliminate, and where not possible, mitigate negative environmental impacts associated with mining and processing operations. Monitoring of key environmental components will be continued during the construction, operations and closure phases of the project as stipulated in the approved AMDAL/Environmental Permit, April 2017, for the project. The monitoring data will form the basis for assessment of the efficacy of environmental management plans and continual improvement in environmental management practices for the Project. Geochemical characterization test work on ore/tailings and waste rock have been completed to assess the potential for acid rock drainage/metal leaching
	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue



Criteria	JORC Code (2012) Explanation	Commentary
		potential for ARD and kinetic tests to provide an assessment of the long-term drainage chemistry from waste rock and tailings. Majority of the waste rock samples analysed were non-acid forming (NAF) with only 15% to 20% of the waste rock samples being categorized as potentially acid forming (PAF). Given the relatively small proportion of PAF materials, standard ARD/ML management strategies such as segregation and encapsulation of PAF in NAF in waste dumps or blending would be employed to reduce the risk of ARD/ML from waste rock storage facilities. Tailings samples were classified as PAF or Uncertain. Tailings will be deposited to maintain saturated conditions in the lined tailings storage facility (TSF) to mitigate the risk of potential acid generation from the tailings. The kinetic geochemical test work demonstrated that both the waste rock and tailings have a low risk of metal leaching. Locations for engineered waste rock and tailings storage facilities have been selected based on geographical, geotechnical, hydrological, economic and environmental considerations.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	The project site is within economic distances of existing infrastructure of the South Sulawesi province. Existing roads into and from Belopa, the capital of the Luwu Regency, to Site provide for delivery services and consumable supplies. Belopa is some 45km to the east, on the coast, with access to coastal shipping facilities. Nusantara would work with the Regency Government on proposals to upgrade sections of the road that provide access to Site as part of the early works for the Project. An upgraded electricity supply lateral from Sulawesi's power supply grid would
		be built from Belopa to Site to supply electric power on Site. The mine workforce will be a mix of personnel from within the Luwu Regency and Fly In-Fly Out (FIFO) based at a camp on Site during rostered days on. There is a regional airport at Bua, north of Belopa, which has daily scheduled flights to Makassar, the provincial capital for South Sulawesi. Makassar is a regional hub for the area and has a large port and international airport, which provides connection to south east Asia and Australia. Hydrological studies indicate that there is sufficient water available in the river systems adjacent to the Project to service the needs of the Project for the life of mine. The water from the Songgang River would be pumped to a raw water pond at the process plant. The AMDAL allows for the extraction of water for these purposes.



Criteria	JORC Code (2012) Explanation	Commentary
		Development of a quarry within the Contract of Work (CoW) is proposed to provide rock, which is of sufficient quality for construction of TFS embankment supplemented by mined waste, sediment catchment embankments, haul roads, other infrastructure and to provide feed for the production of aggregates for construction and operation of the mine.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study	
		 A mining schedule developed on a monthly basis for the first 2 years and then annually A contingency allowance on capital cost items calculated to reflect the relevant level of confidence in the estimate
		Processing and processing infrastructure development capital costs have been estimated by Resindo using a combination of inputs from Resindo and Minnovo. The basis of the estimate is:



Criteria	JORC Code (2012) Explanation	Commentary
		 Earthworks quantities determined from detailed site inspections by a competent civil engineer Concrete and structural quantities developed from site layouts and similar designs from other projects A mechanical equipment list developed from the recommended process design criteria Budget pricing from local and international suppliers Contingency allowances calculated on a line by line basis relevant to the source and confidence in market rates
	The methodology used to estimate operating costs.	The operating cost estimate accuracy is +/-15%.
	The methodology used to estimate operating costs.	Other support capital costs for accommodation camp facilities, administration office, security facilities, heavy equipment workshop, logistics warehouse at Belopa, access road from Belopa, explosives magazine, etc were estimated by Resindo.
		Operating costs assume a mix of employees from the within the Luwu Regency and a FIFO scenario with various rosters on Site. A specialist HR consultant advised on the salary scales applicable to all roles envisaged for the project.
		Mining operating costs have been estimated by AMC on the basis of scheduled material movement and mining rates for a contractor mining scenario with technical services supplied by employees of Nusantara and its wholly owned subsidiary, PT Masmindo Dwi Area (Masmindo) (principally Indonesian Nationals). Mine design and schedules were prepared by competent mining engineers. Process and process plant infrastructure operating costs have been estimated by Minnovo using:
		 Reagent and grinding media consumption rates derived from testwork and budget quotations
		A load list for power consumption Industry standards
		 Industry standards The Minnovo operating costs are based on the assumption that:
		A primary crush, conventional SAB circuit, gravity and leach and cyanide destruction process plant will be utilised to treat ore at a rate of 2.5 Mtpa
		 Primary crusher utilisation of 75% and wet plant utilisation of 91.3%

Limited



Criteria	JORC Code (2012) Explanation	Commentary			
		 Grid power is available through PLN Reagent delivery will be to the Belopa warehouse for storage, prior to consolidation for delivery to Site The process plant will be operated by Nusantara employees The operating cost estimate is considered to be appropriate for the current market in Indonesia. 			
	Allowances made for the content of deleterious elements.	No allowance is made for deleterious elements since testwork to date on ore from Awak Mas and Salu Bulo has not shown the presence of deleterious elements.			
	The source of exchange rates used in the study.	Capital Costs for process plant and infrastructure are estimated in 2018 United States dollars. Foreign currency exchange rates were derived as tabled below.			
				1	
		Currencies	Code	1 Native = USD	1 USD = Native
		US Dollar	USD	1.0000	1.0000
		Indonesian Rupiah	IDR	0.0001	14,135
		Australian Dollar	AUD	0.74	1.35
		Euro	EUR	1.16	0.86
		Japanese Yen	JPY	0.01	111.5
		Singapore Dollar	SGD	0.74	1.36
		Korean Won	KRW	0.001	1,119
		Chinese Yuan Renminbi	CNY	0.15	6.82
	The derivation of, or assumptions made, regarding projected capital costs in the study. Derivation of transportation charges.	Transport charges - Gold bullion transportation charges are derived on the basis on information provided from a leading Indonesian bullion shipment organisation.			
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.				

Limited



Criteria	JORC Code (2012) Explanation	Commentary	
	The allowances made for royalties payable, both Government and private.	An allowance has been made for all royalties, including an allowance of 3.75% of revenue for royalties payable to the Government of Indonesia and an allowance for other royalties payable to private parties.	
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	The mined ore head grades are estimated utilising industry accepted geostatistical techniques with the application of relevant mining modifying factors. Gold price and exchange rates have been determined by an external financial expert group on the basis of current market trends. A Life-of-mine (LOM) gold price forecast of US\$1,250/oz (Real 2018) is applied in the financial modelling for the project supporting the Ore Reserve calculation process. This price forecast was established by Nusantara on the basis of review of US\$ gold price forecasts and gold price inputs for Ore Reserves by peer projects. The peer information reviewed supported a range between US\$1,200/oz and US\$1,300/oz with Nusantara adopting US\$1,250/oz.	
Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	There is a transparent market for the sale of gold.	
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs.	to evaluate the economic performance of the Ore Reserve. Key value driver inputs into the financial model included: • Gold price at US\$1,250/oz based on forecast long term pricings	



Criteria	JORC Code (2012) Explanation	Commentary
		that the project economics that support the statement of the Ore Reserves retains a profit margin against reasonable future commodity price movements.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	Nusantara and previous owners through a wholly owned subsidiary, PT Masmindo Dwi Area (Masmindo), have occupied the site for over a decade and has worked harmoniously with the local community over that period. There has been extensive and ongoing community engagement over a number of years, including specialist studies as part of an Environmental and Social Impact Assessment. Masmindo enjoys a strong relationship with the communities around Awak Mas and are committed to working with these communities to ensure the project benefits extend beyond direct employment.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	The Project is held under a 7th Generation Contract of Work (CoW) signed with the Indonesian Government (GOI) in 1998 and is owned 100% by Masmindo. The CoW grants Masmindo the sole right to explore and develop the Awak Mas Gold Project. In March 2018 Masmindo signed an amendment with the GOI which reaffirms Masmindo as the legal holder of the CoW with the sole rights to explore and exploit minerals within the CoW area until 2050 with the option of two ten-year extensions under the IUPK mining licence regime. The Amendment more closely aligned the CoW to prevailing laws and regulations. All major environmentally-related approvals/permits for the Awak Mas project are in place, specifically these are: • Government of Indonesia Feasibility Study (GOI FS) – Approval of the technical and economic components was granted by Ministry of Energy and Mineral Resources (MEMR) on June 17, 2015 and approval of the complete GOI FS (including environmental components) was granted on May 17, 2017 (subsequent to the approval of the AMDAL in mid-2017) • AMDAL and Environmental Permit — Approval of the AMDAL and issuance of the Environmental Permit was granted by the Government of South Sulawesi on April 12, 2017 • Construction Permit — MEMR issued the Construction Permit for the Awak Mas project on June 20, 2017 followed by a Minister's Decree on January 16, 2018 regarding change from Construction to Production/Operations Phase (which includes construction) for the Awak Mas Project, which is valid until June 19, 2050



Criteria	JORC Code (2012) Explanation	Commentary
		There will be a requirement to submit amendments to the existing approved GOI FS and AMDAL. The Project location is classified as "land for other uses" and does not have a forestry designation. Therefore, a Forestry 'borrow and use' (Pinjam Pakai) Permit is not required for the Awak Mas project. In addition to the major permits listed above, several minor permits are required for the operation phase of the project. Examples include TSF dam safety permit, tailings permit, explosive permit, water use permit, hazardous waste storage permit, etc. These permits will need to be secured during construction and operations.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	The main basis of classification of Ore Reserves is the underlying Mineral Resource classification. All Probable Ore Reserves derive from Indicated Mineral Resources in accordance with JORC Code (2012) guidelines. The results of the Ore Reserve estimate reflect the Competent Person's view of the deposit. No Probable Ore Reserves are derived from Measured Mineral Resources. No Inferred Mineral Resource is included in the Ore Reserves.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	 The testwork and models, which form the basis of the Ore Reserve estimate was subjected to various reviews and audits: Metallurgical testwork was reviewed by Nusantara metallurgists and process engineers and confirmed to be adequate for a PFS level study Geotechnical inputs were prepared by AMC Open pit designs, production schedules and mining cost models were reviewed through AMC's internal peer review system The basis of design for the process plant and infrastructure was reviewed by Nusantara metallurgists and process engineers and was deemed appropriate for the study The financial model applied for project valuation was reviewed by Nusantara financial accountants and was considered to be appropriate for the study
Discussion of relative	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the	The Awak Mas DFS resulted in a technically robust and economically viable business case for a greenfield gold mining operation located in Indonesia. This is deemed to be an appropriate basis for the Ore Reserves estimate.



Criteria	JORC Code (2012) Explanation	Commentary
accuracy/ confidence	Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	In the opinion of the Competent Person, cost assumptions and modifying factors applied in the process of estimating are reasonable and to a level of accuracy supporting the statement of Probable Ore Reserves. Gold price and exchange rate assumptions were set out by Nusantara and are subject to market forces and present an area of uncertainty. In the opinion of the Competent Person, there are reasonable prospects to anticipate that all relevant legal, environmental and social approvals to operate will be granted within the project timeframe.



About Nusantara Resources

Nusantara is an ASX-listed gold development company with its flagship project comprising the 1.14 million-ounce Ore Reserve and 2.0 million-ounce Mineral Resource Awak Mas Gold Project located in South Sulawesi, Indonesia. Discovered in 1988, the Project has over 135 km of drilling completed in over 1,100 holes.

The Project is 100%-owned through a 7th Generation Contract of Work (CoW) with the Government of Indonesia (GoI). The CoW was secured prior to the current Mining Law and has recently been amended by mutual agreement to align with the current law.

PT Masmindo Dwi Area (Masmindo), a wholly-owned subsidiary of Nusantara, has sole rights to explore and exploit any mineral deposits within the project area until 2050. After this period, the operations under the CoW may be extended in the form of a special mining business license (IUPK) in accordance with prevailing laws and regulations, which currently allows for an extension of 10 years and a further extension of 10 years.

In the 10th year after commercial production, Masmindo is required to offer at least 51% of its share capital to willing Indonesian participants at fair market value according to international practice.

Nusantara's development strategy is for construction of a modern, low strip ratio open pit operation with ore processed by standard carbon-in-leach (CIL) processing delivering high gold recoveries. Environmental approval has already been received for the Project, which is favourably located in non-forestry land close to established roads, ports and grid power, enabling the Project to quickly advance towards development upon completion of the DFS by Q3 2018.

Nusantara's second strategy is to grow the resource base and support a mining operation beyond the initial targeted life of 10 years. Multiple drill-ready targets have already been outlined extending from the three main deposits and in other areas of the 140km² CoW.

Website: www.nusantararesources.com

LinkedIn: https://au.linkedin.com/company/nusantararesources

Twitter: https://twitter.com/Nusantara_ASX



Competent Persons Statements

The information in this announcement that relates to the Ore Reserves of Nusantara Resources is summarised from publicly available reports as released to the ASX of the respective companies. The results are duly referenced in the text of this report and the source documents noted above.

Exploration and Resource Targets

Any discussion in relation to the potential quantity and grade of Exploration Targets is only conceptual in nature. While Nusantara Resources may report additional JORC compliant resources for the Awak Mas Gold Project, there has been insufficient exploration to define mineral resources in addition to the current JORC compliant Mineral Resource inventory and it is uncertain if further exploration will result in the determination of additional JORC compliant Mineral Resources.

Mineral Resources

The information in this report that relates to the Mineral Resource Estimation for the Awak Mas Gold Project is based on and fairly represents information compiled by Mr Adrian Shepherd, Senior Geologist, (BSc), MAusIMM CP, for Cube Consulting Pty Ltd. Mr Shepherd is an employee of Cube Consulting Pty Ltd and is a Chartered Professional geologist and a current Member of the Australian Institute of Mining and Metallurgy (AusIMM No: 211818).

Mr Shepherd 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 Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Shepherd consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Ore Reserves

The information in this report that relates to the Ore Reserves Estimation for the Awak Mas Gold Project is based on and fairly represents information compiled by Mr David Varcoe, Principal Mining Engineer, for AMC Consulting Pty Ltd. Mr Varcoe is an employee of AMC Consulting Pty Ltd and is a current Fellow of the Australian Institute of Mining and Metallurgy (AusIMM No: 105971).

Mr Varcoe 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 Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Varcoe consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Metallurgy

The information in this report that relates to metallurgy and metallurgical test work and findings for Awak Mas Gold Project is based, and fairly represents information compiled by Mr John Fleay, Manager Metallurgy, FAusIMM, for Minnovo Pty Ltd. Mr Fleay is an employee of Minnovo Pty Ltd and is a current Member of the Australian Institute of Mining and Metallurgy (AusIMM No: 320872). Mr Fleay 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 Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Fleay consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

New Information or Data

Nusantara Resources confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources and Ore Reserves, which all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not materially changed from the original market announcement.

For more information regarding this release, please contact:

Mike Spreadborough

Managing Director / Chief Executive Officer

Nusantara Resources Limited

M: +61 (0)419 329 687

E: info@nusantararesources.com